



OIL INDIA LIMITED
(A Govt. of India Enterprise)
P.O. DULIAJAN, DIST - DIBRUGARH
ASSAM, INDIA, PIN-786602

CONTRACTS DEPARTMENT
TEL: (91) 374-2800548
E-mail: contracts@oilindia.in
Website: www.oil-india.com
FAX: (91) 374-2803549

FORWARDING LETTER

Sub: IFB No. CDO3622P20 – Hiring of Services for Operation and Maintenance of ITF-Tengakhat for a period of 06 (six) years with a provision for extension by another 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 Services for Operation and Maintenance of ITF-Tengakhat for a period of 06 (six) years with a provision for extension by another 01 (one) year**. One complete set of Bid Document 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.	:	CDO3622P20
(ii)	Type of Bid	:	Open Indigenous E-Tender, Single Stage Two Bid System
(iii)	Bid Closing Date & Time	:	As mentioned in the E-procurement portal.
(iv)	Technical Bid Opening Date & Time	:	As mentioned in the E-procurement portal.
(v)	Price Bid Opening Date & Time	:	As mentioned in the E-procurement portal.
(vi)	Bid Submission Mode	:	Bids must be uploaded online in OIL’s E-Procurement Portal.
(vii)	Bid Opening Place	:	Office of CGM-Contracts (HoD) Contracts Department, Oil India Limited, Duliajan-786602, Assam, India.
(viii)	Bid Validity	:	Minimum 120 (One Hundred Twenty) days

			<p>from Original Bid Closing Date.</p> <p>Note: 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.</p>
(ix)	Mobilization Period	:	30 (Thirty) days from the date of issue of LOA
(x)	Bid Security/EMD Amount	:	<p>Rs. 48,92,000.00 (Rupees Forty Eight Lakh Ninety Two Thousand only)</p> <p>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.</p> <p>b. Alternately, Bid Security can also be paid through the online payment gateway against this tender.</p> <p>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 <u>CGM-CONTRACTS (HoD)</u> on or before 12.45 PM (IST) on the bid closing/opening date otherwise bid will be rejected.</p> <p>d. A scanned copy of Bid Security document should also be uploaded along with the Un-priced Techno-Commercial Bid documents.</p> <p>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.</p> <p>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.</p> <p>Notes:</p> <p>Bidders claiming waiver of Bid Security shall upload supporting documents as mentioned in Para. No. 4.0 below.</p>

			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.
(xi)	Bid Security/EMD Validity	:	As mentioned in the E-procurement portal. (Minimum 150 days from original bid closing date).
(xii)	Original Bid Security to be submitted	:	Office of CGM-CONTRACTS (HoD), CONTRACTS DEPARTMENT, OIL INDIA LIMITED, DULIAJAN, ASSAM-786602, INDIA
(xiii)	Amount of Performance Security	:	10% of annualized Contract value. 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) or in the form of Demand Draft . b. Performance Security Money shall not earn any interest.
(xiv)	Validity of Performance Security	:	90 (Ninety) days beyond the contract period/duration.
(xv)	Location of job		ITF, Tengakhat
(xvi)	Duration of the Contract	:	06 (six) years with a provision for extension by another 01 (one) year.
(xvii)	Quantum of Liquidated Damage for Default in Timely Mobilization/ Completion	:	Refer clause No. 28 of General Conditions of Contract.
(xviii)	Bids to be addressed to	:	CGM-Contracts (HoD), Contracts Department, Oil India Limited, Duliajan-786602, Assam, India.
(xix)	Pre-Bid conference	:	Not Applicable
(xx)	Last Date of receipt of Queries	:	Not Applicable

Note:

- a. The Bank Guarantee issuing Bank branch must ensure the following:

The Bank Guarantee issued by the Bank must be routed through SFMS platform as per 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 HDFC Bank, Duliajan Branch, IFS Code – HDFC0002118; SWIFT Code – HDFCINBBCAL. Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.

b. Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

3.0 GUIDELINES FOR PARTICIPATING IN OIL'S E-PROCUREMENT

3.1 Bids are to be submitted online through OIL's E-Procurement Portal with digital signature. 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 then the bidder changes his Digital Signature Certificate, then the 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. In case of loss of the certificate, OIL INDIA LTD. is not responsible.

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 its proper usage by their employee.

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

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the Bidder/Bidding company to bind the Bidder/Bidding company to the contract.

3.2 For participation, applicants already having User ID & Password for OIL's E-Procurement Portal need to register against the IFB. 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.

3.2.1 Bidders without having E-Tender Login ID and password should complete their online registration at least 07 (Seven) days prior to the scheduled Bid Closing Date and time of the

tender. For online registration, bidder may visit OIL's E-Tender site <https://etender.srm.oilindia.in/irj/portal>.

3.2.2 Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.

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 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 EXEMPTION FROM BID SECURITY PAYEMENT: In case any bidder is exempted from paying the Bid security, they should request OIL with supporting documents. The detailed guidelines for exemption of the Bid security are given below.

- a) MSEs Units (manufacturers/Service Providers only and not their dealers/ distributors) who are already registered with District Industry Centres or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts & Handloom or any other body specified by Ministry of MSME are exempted from payment of Bid Security (EMD) irrespective of monetary limit mentioned in their registration.
- b) Central Government Departments and Central Public Sector Undertakings (CPSUs) are also exempted from submitting bid security.
- c) 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.
- d) Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority.

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.

7.0 The tender is invited under **OPEN E-TENDER SINGLE STAGE TWO BID 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 BIDDING DOCUMENTS:

12.1 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) BEC/BRC
- c) General Conditions of Contract (GCC): **Part-I**
- d) Schedule of Work, Unit, Quantities (SOQ): **Part- II**
- e) Special Conditions of Contract (SCC): **Part-III**
- f) Schedule of Company's Plants, Materials and Equipments (SCPME): **Part-IV**
[Not applicable for this Tender]
- g) Safety Measures (SM): **Part-V**
- h) Integrity Pact (IP): **Part-VI**
- i) Price Bidding Format (Attached under "**Notes and Attachments**" tab in the main bidding engine of OIL's E-Tender portal)
- j) Proformas and Annexures
- k) Technical Evaluation Sheet for BEC-BRC & others

12.2 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.

SPECIAL NOTE: Please note that all tender forms (Forwarding Letter, (BEC-BRC) Bid Evaluation Criteria & Bid Rejection Criteria, Part-I: (GCC) General Conditions of Contract, Part-II: (SOQ) Schedule of Work, Unit and Quantity, Part-III: (SCC) Special Conditions of Contract, Part-V: (SM) Safety Measures, Part-VI: (IP) Integrity Pact, Price Bidding Format, Technical Evaluation Sheet for BEC-BRC & others) 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 The CGM-Contracts (HoD), 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 Un-priced 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 (HoD) office at Duliajan **on or before 12.45 PM (IST) on the 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 Rudhra Gangadharan, IAS (Retd.) and Shri Jagmohan Garg, Ex-Vigilance Commissioner as Independent External 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 Integrity Pact at the following addresses:

- a. Shri Rajiv Mathur, IPS(Retd.), Former Director, IB, Govt. of India;
E-mail id: rajivmathur23@gmail.com
- b. Shri Rudhra Gangadharan, IAS (Retd.), Ex-Secretary, Ministry of Agriculture
E-mail id : rudhra.gangadharan@gmail.com
- c. Shri Jagmohan Garg, Ex-Vigilance Commissioner, CVC
E-Mail id: jagmohan.garg@gmail.com

14.0 PREPARATION OF BIDS:

14.1 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

official and notarized English translated version, which shall govern for the purpose of bid interpretation.

14.2 DOCUMENTS COMPRISING THE BID:**(I) 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 p.m. (IST) 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 p.m. (IST) on the bid closing date failing which the bid shall be rejected.**

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

(II) 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.

15.0 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.

16.0 TRANSFERABILITY OF BID DOCUMENTS:

16.1 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.

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

17.0 FORMAT AND SIGNING OF BID:

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.

18.0 AMENDMENT OF BIDDING DOCUMENTS:

18.1 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.

18.2 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.**

19.0 SUBMISSION OF BIDS:

19.1 The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidder to bind the Bidder to the contract.

19.2 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.

19.3 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.

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

19.5 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.

20.0 SCREEN SHOTS

RFx Response Number 60037504 RFx Number TESTARUP Status In Process Submission Deadline 15.04.2017 11:00:00 INDIA Opening Date 15.04.2009 00:00:00 INDIA

RFx Response Version Number Active Version RFx Version Number 1

RFx Information Items Notes and Attachments Conditions Summary Track

Basic Data Questions Technical Attachments

Go to this Tab "Notes and Attachments" for Uploading "Price Bid"

Go to this Tab "Technical Attachment" for Uploading "Technical Bid".

▼ Notes

Clear

Category

Conditions of Participation

Bid Invitation/Auction Text

Bidder's Remarks

Purchaser's Remarks

▼ Attachments

▼ cFolder Attachments

Add Attachment Delete Verify Signature

cFolder Name	Category	Description	File Name	Version	Processor	Che
The table does not contain any data						

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.

21.0 Maintenance of Total bid value in the Response: For convenience of the Bidders and to improve transparency, the rates/costs quoted by bidders against the E-tender shall be available for online viewing after price bid opening to those bidders whose price bids have been opened in the system. For tenders where **Detailed Price Information under RFx Information Tab is “No price”**, the Price Bid is invited through attachment form under “Notes & Attachment”. As per the existing process, Bidders must upload their pricing as per the “Price Bidding Format” under “**Notes & Attachment**”. Additionally the bidders must fill up the **on-line field “Total Bid Value”** under Tab Page “**RFx Information**” with the Total Cost (Including the GST component) as per the amount of the Price Bid in attachment form.

The screenshot shows the 'Create RFx Response' form. At the top, there are tabs: Submit, Read Only, Print Preview, Check, Technical RFx Response, and Close. Below these, the form displays 'RFx Response Number 60038748', 'RFx Number', 'RFx Owner BHARALI', and 'Total Value 0.00 INR'. The main section is divided into three tabs: RFx Information, Items, and Notes and Attachments. Under the 'RFx Information' tab, there are sub-tabs: Basic Data, Questions, and Technical Attachments. The 'Event Parameters' section includes a 'Currency' dropdown menu set to 'Indian Rupee', a 'Detailed Price Information' dropdown set to 'No Price', and a 'Terms of Payment' field. A red box highlights the 'Total Bid Value' field, which is currently empty. Three callout boxes provide instructions: 1. 'Bidder to select the currency of the Response' points to the 'Currency' dropdown. 2. '“Total Bid Value” is mandatory in “No Price” RFx only' points to the 'Detailed Price Information' dropdown. 3. '“Total Bid Value” considering all the taxes & duties.' points to the 'Total Bid Value' field.

The “Total Bid Value” as entered by the Bidder in the on-line response shall be displayed in the e-tender portal amongst the Techno-Commercially qualified bidders and Company will not take any responsibility whatsoever towards incorrect information furnished by the bidders in the “Total Bid Value” field.

It is to be noted that Amount mentioned in the “Total Bid Value” field will not be considered for bid evaluation and evaluation will be purely based on the “Price bidding Format”.

22.0 DEADLINE FOR SUBMISSION OF BIDS:

22.1 Bids should be submitted on-line up to **11.00 a.m. (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 25.0 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.

22.2 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.

22.3 The documents in physical form must be received by Company at the address specified in the "Forwarding Letter" on or before **12:45 p.m. (IST) on the bid closing date**. Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

23.0 LATE BIDS: 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.

24.0 MODIFICATION AND WITHDRAWAL OF BIDS:

24.1 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 bid. 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.

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

24.3 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 debar from participation in future tenders, at the sole discretion of the company.

25.0 EXTENSION OF BID SUBMISSION DATE: 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.

26.0 BID OPENING AND EVALUATION:

26.1.1 The 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.

26.1.2 In case of two bid system, after the evaluation of the Technical Bids, the Price Bids of only the techno-commercially acceptable Bidders will be opened. The opening Date and Time will be intimated to the techno-commercially qualified Bidders in due course. Price bids will be opened in the same procedure as mentioned in Para 26.1.1 above.

26.2 In case it happens to be a bandh/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).

26.3 Bids which have been withdrawn pursuant to Clause 24.0 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.

26.4 OIL shall prepare, for its own records, minutes of bid opening including the information disclosed to those present in accordance with the sub-clause 26.3.

26.5 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.

26.6 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 substantial way the scope, quality, or performance of work, or which limits in any substantial way, in-consistent way with the bidding documents, the Company's right or the bidder's obligations under the contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantial responsive bids. OIL's determination of bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

26.7 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.

26.8 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.

27.0 EVALUATION AND COMPARISON OF BIDS:

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

27.2 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.

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

27.4 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.

28.0 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.

29.0 CONTACTING THE COMPANY:

29.1 Except as otherwise provided in Clause 27.0 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 26.5.

29.2 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.

30.0 AWARD CRITERIA: 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.

31.0 OIL' S RIGHT TO ACCEPT OR REJECT ANY BID: 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.

32.0 NOTIFICATION OF AWARD: 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.

33.0 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.

34.0 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.

35.0 BACKING OUT BY L1 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.

36.0 FURNISHING FRAUDULENT INFORMATION/DOCUMENT: 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. The bidder has to submit an undertaking in this regard as per attached **Proforma-IX**.

37.0 MOBILISATION ADVANCE PAYMENT:

37.1 Request for advance payment shall not be normally considered. However, depending on the merit and at the discretion of the Company, advance against mobilization charge may be given at an interest rate of 1% above the prevailing Bank rate (CC rate) of SBI, CAG Branch, Kolkata from the date of payment of the advance till recovery/refund.

37.2 Advance payment agreed to by the Company shall be paid only against submission of an acceptable bank guarantee whose value should be equivalent to the amount of advance plus the amount of interest covering the period of advance. Bank guarantee shall be valid for 02 months beyond completion of mobilization and the same may be invoked in the event of Contractor's failure to mobilize as per agreement.

37.3 In the event of any extension to the mobilization period, Contractor shall have to enhance the value of the bank guarantee to cover the interest for the extended period and also to extend the validity of bank guarantee accordingly.

38.0 PROVISION FOR ACTION IN CASE OF 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.

39.0 SIGNING OF CONTRACT:

39.1 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)".

39.2 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) or in the form of Demand Draft favouring "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.

39.3 This Performance Security must be valid for 90 (Ninety) days after the date of expiry of the contract period. 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.

39.4 The "Performance Security" will be refunded to the contractor after 90 (Ninety) days 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.

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

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

42.0 Failure of the successful bidders to comply with the conditions as specified in Para 39.2 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.

43.0 OIL now looks forward to your active participation in the IFB.

Thanking you,

Yours faithfully,

OIL INDIA LIMITED

(KAUSHIK DAS)

SENIOR CONTRACTS OFFICER (OPERATIONS)

For **CGM-CONTRACTS (HoD)**

For **RESIDENT CHIEF EXECUTIVE**

Date: 25.01.2020

BID EVALUATION CRITERIA (BEC)/BID REJECTION CRITERIA (BRC)**1.0 BID EVALUATION CRITERIA (BEC)**

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 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. 4,40,24,800.00 (Rupees Four Crore Forty Lakh Twenty Four Thousand Eight Hundred only)**.

1.1.2 Net worth of the bidder must be Positive for the preceding financial/accounting year.

Note: The Net worth to be considered against Clause 1.1.2 above, should be read in conjunction with the definition of Net worth as mentioned in Section 2 (57) of the Companies Act, 2013.

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**.

Note: Mention of UDIN (Unique Document Identification Number) is mandatory for all Certificates issued w.e.f. February 1, 2019 by Chartered Accountant in Practice.

- 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 undertaking in support of the same along with their technical bid as per **Proforma-X**.

- 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.
- d. In case the bidder is a Government Department, they are exempted from submission of document mentioned under para **a.** and **b.** above.
- e. Bid will be rejected if not accompanied with adequate documentary proof in support of Annual turnover and Net worth as mentioned in Para 1.1.1 & 1.1.2.

1.2 TECHNICAL CRITERIA

The bidder shall have experience in successfully executing/completing at least one 'SIMILAR WORK' under single contract during the last 07 (seven) years reckoned from the original bid closing date in Central Govt./State Govt./Public Sector Undertaking/State Govt. Enterprise/Any E&P company or Downstream Oil and/or Gas Company.

Notes to BEC Clause 1.2 above:

a. "Similar Work" mentioned in Para 1.2 above means Operation & Maintenance of following:

i. Handling of Production Facility/Process Facility/Tank Farm with a minimum work experience of Rs. 4,40,24,800.00 (Rupees Four Crore Forty Lakh Twenty Four Thousand Eight Hundred only) for a minimum period of 03 (Three) years.

OR

ii. Handling of Natural Gas-Production/Gathering/Processing/ Compression facility with a minimum work experience of 01 (One) MMSCUMD or more for a minimum period of 03 (Three) years.

OR

iii. Handling of Petroleum Production facility for a minimum production of 300 m³ per day.

OR

iv. Handling of "Crude Oil"/"Petroleum Products" of Tank Farm with minimum storage capacity of 25,000 cubic meters.

b. For proof of requisite Experience (refer Clause No. 1.2), the following documents/ photocopy (self-attested/attested) must be submitted along with the bid:

- I. **In case work experience is against OIL's Contract:** Bidder must submit Job Completion Certificate issued by the company indicating the following:
 - A. Work order no./Contract no.
 - B. Gross value/quantity of job done

C. Period of Service

D. Nature of Service

II. **In case work experience is not against OIL's Contract:** Bidder must submit the following:

A. Contract document showing details of work,

AND

B. Job Completion Certificate showing:

- (i) Gross value/quantity of job done
- (ii) Nature of job done and Work order no./Contract no.
- (iii) Contract period and date of completion

OR

C. SES (Service Entry Sheet)/Certificate of Payment (COP) issued by the company indicating the following:

- (i) Work order no./Contract no.
- (ii) Gross value/quantity of jobs done
- (iii) Period of Service
- (iv) Nature of Service

c. Only Letter of Intent (LOI)/Letter of Award (LOA) or Work Order(s) are not acceptable as evidence.

d. Mere award of contract(s) will not be counted towards experience. Successful completion of the awarded contract(s) to the extent of volume & value, as stipulated respectively under Clause Nos. 1.2 will only be treated as acceptable experience.

e. Following work experience will also be taken into consideration:

- (i) If the prospective bidder has executed contract in which similar work is also a component of the contract.
- (ii) In case the start date of the requisite experience is beyond the prescribed 07(seven) years reckoned from the original bid closing date but completion is within the prescribed 07(seven) years reckoned from the original bid closing date.
- (iii) If the prospective bidder is executing similar work which is still running and the contract value/quantity executed prior to original bid closing date is equal to or more than the minimum prescribed value in the BEC.

Proof of work experience against Para e. (i) and (ii) above, to satisfy a) similar work b) minimum prescribed value/qty/period c) prescribed period of 07 years, to be submitted as below:

I. **In case requisite experience is against OIL's Contract:** Bidder must submit the breakup of similar work and its value/quantity/period mentioning SES No. and copies of all relevant SES.

II. **In case requisite experience is not against OIL's Contract:** Bidder must submit the breakup of similar work and its value/quantity/period executed within the prescribed period of 07 (seven) years reckoned from the original bid closing date. The breakup must be certified by the end

user or a certificate issued by a practicing Chartered/Cost Accountant Firm (with Membership Number & Firm Registration Number).

Proof of work experience against Para **e. (iii)** above, to satisfy a) similar work b) minimum prescribed value/qty/period c) prescribed period of 07 years, to be submitted as below:

- I. **In case requisite experience is against OIL's Contract:** Bidder must submit the following:
 - A. Breakup of similar work
 - B. SES (Service Entry Sheet)/Certificate of Payment (COP) issued by the company indicating the following:
 - (i) Work order no./Contract no.
 - (ii) Gross value/quantity of job done
 - (iii) Period of Service
 - (iv) Nature of Service
 - II. **In case requisite experience is not against OIL's Contract:** Bidder must submit the following:
 - A. Breakup of similar work
 - B. Contract document showing details of work.
 - C. LOA/LOI/Work order showing:
 - (i) Gross value/quantity of job awarded
 - (ii) Nature of job awarded
 - (iii) Contract no./Work order no.
 - (iv) Contract period
 - D. Certificate of Payment (COP)/SES (Service Entry Sheet) up to the previous month of the original bid closing date of this tender issued by the company indicating the following:
 - (i) Work order no./Contract no.
 - (ii) Gross value/quantity of job done
 - (iii) Period of Work done
 - (iv) Nature of Service
- f.** In case of similar work executed through 'sub-contracting', the bidder shall submit relevant documents as mentioned under para 'b' and/or 'e' above, issued directly by the client organization/end user, along with confirmation towards consent of the client organization/end user for allowing 'sub-contracting'
- g.** SIMILAR work executed by a bidder for its own organization/subsidiary cannot be considered as experience for the purpose of meeting BEC.
- h.** Bids submitted for part of the work will be rejected. Bid will be rejected if not accompanied with adequate documentary proof in support of Work experience as mentioned in Para 1.2.

1.3 The bidder shall submit a undertaking from each of the following OEM(s) along with the technical bid, that they will provide backup support for entire period of contract, including Annual Maintenance Contract (AMC) of DCS (ABB Make), TFMS (Honeywell Make), MOV (Limitorque Make), MOV (Rotork Make), Rim Seal Fire Protection System, Boiler PLCs (Seimens Make), UPS's (Hitachi make) etc. The format for undertaking is enclosed as Annexure XP.

1.4 The Bidder must submit an undertaking along with the Technical Bid indicating that they have undergone through the scope of work and visited the work site on _____ for assessment of jobs involved.

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 01 (one) bidder, the selection will be made by draw of lot between the parties offering the same overall lowest price.

1.12 **PURCHASE PREFERENCE CLAUSE:** 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 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).

1.14 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 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.

1.16 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.

1.17 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 Single Stage 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.

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 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.

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 BEC/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 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 BEC/BRC contradict with other clauses of bidding document elsewhere, the clauses in the BEC/BRC shall prevail.

3.4 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

3.5 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.

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

GENERAL CONDITIONS OF CONTRACT (GCC)

DESCRIPTION OF WORK/SERVICES: Hiring of Services for Operation and Maintenance of ITF-Tengakhat for a period of 06 (six) years with a provision for extension by another 01 (one) year.

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) "**Willful 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 **ITF, Tengakhat.**

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.
- x) 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 for a period of **06 (Six) years** from the commencement of the same i.e. after completion of mobilization with a provision of extension by another **01 (One) year** as per Company's requirement. 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 Contract price) is Rs. _____ **(Not to be filled up by bidder while submitting the offer in Technical Attachments Folder. This figure will be filled up by OIL at the time of award of the contract to the successful bidder)** (_____ only) but the Company shall pay the Contract or only for actual work done at the all-inclusive rates set down in the Schedule of work Part II of this Contract.

On account payment may be made, not 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.

Note: All Invoices are to be sent to the following address:

Chief General Manager – PSS
Oil India Limited,
P.O. Duliajan-786602
Dist. Dibrugarh, Assam.

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:

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 counter claims(excluding interest)	Period for making and publishing of the award (counted from the date of first meeting of the 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.
- l)** 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 ARBITRATION (APPLICABLE IN CASE OF CONTRACT AWARDED ON PUBLIC SECTOR ENTERPRISE):

In the event of any dispute or difference relating to, arising from or connected with the Contract, such dispute or difference shall be referred by either party to the arbitration of one of the Arbitrators in the Department of Public Enterprises, to be nominated by the Secretary to the Government of India, In-Charge of the Bureau of Public Enterprises. The Arbitration and Conciliation Act 1996 shall not be applicable to the Arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided however, any party aggrieved by such award may make a further reference for

setting aside or revision of the award to the Law Secretary, 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 entirety without any further right or obligation on the part of the Company, except for the payment of money then due. No notice shall be served by the Company under the condition stated above.

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 LIQUIDATED DAMAGES FOR DELAY IN MOBILIZATION/COMPLETION OF WORKS AND SERVICES: 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: Contractor shall not subcontract, transfer or assign the contract, in full or any part under this contract, to any third party. Except for the main services under this contract, Contractor may sub-contract the petty support services subject to Company's prior approval. However, Contractor shall be fully responsible for complete execution and performance of the services under the Contract.

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, sub-contractors 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, sub-contractors 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 sub-contractors 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 toto 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: 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 through 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 36.1 to 36.2 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 sub-contractors, 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 **Harmonized 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 or ITC 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;
Note: OIL GSTIN numbers are as follows:
Assam :18AAACO2352C1ZW
Arunachal Pradesh :12AAACO2352C1Z8
- e) Name and address of the recipient and the address of the delivery, along with the State and its code,
- 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);

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

40.0 PERFORMANCE SECURITY: The Contractor has furnished to Company a Demand Draft/Bank Guarantee No. _____ dated _____ issued by _____ for _____ (being 10% of annualized contract value) with validity of 90 (Ninety) days beyond the contract period/duration. The performance security shall be payable to Company as compensation for any loss resulting from Contractor's failure to fulfill their obligations under the Contract. If the performance security is submitted in the form of bank guarantee then in the event of extension of the Contract period, the validity of the bank guarantee shall be suitably extended by the Contractor. The bank guarantee will be discharged by Company not later than 30 days following its expiry.

41.0 NOTICE:

41.1 Any notice given by one party to other, pursuant to this Contract shall be sent in writing or by telex or Fax and confirmed in writing to the applicable address specified below:

Company

a) **For contractual matters**

CGM-Contracts (HOD)
OIL INDIA LIMITED

b) **For technical matters**

Chief General Manager - PSS
OIL INDIA LIMITED

PO DULIAJAN - 786602
ASSAM, INDIA
Phone No. 91-374-2808650
Email: contracts@oilindia.in

PO DULIAJAN - 786602,
ASSAM, INDIA
Phone No. 91-374-2806440
Email: agadhmedhi@oilindia.in

Contractor

Phone No.:

41.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

Schedule of Work, Unit and Quantity: (SOQ)

DESCRIPTION OF WORK/SERVICE: Hiring of Services for Operation and Maintenance of ITF-Tengakhat for a period of 06 (six) years with a provision for extension by another 01 (one) year.

Item No.	Description of Services	UOM	Estimated Quantity
10	O&M Service-Charge 1 st Year	MON (Month)	12
20	O&M Service-Charge 2 nd Year	MON (Month)	12
30	O&M Service-Charge 3 rd Year	MON (Month)	12
40	O&M Service-Charge 4 th Year	MON (Month)	12
50	O&M Service-Charge 5 th Year	MON (Month)	12
60	O&M Service-Charge 6 th Year	MON (Month)	12
1. Tenure of Agreement: 06 (six) years with a provision for extension by another 01 (one) year.			
2. Mobilisation Period: 30 (Thirty) days from the date of issue of LOA			
3. The rate of escalation per annum for 'O&M Service Charge' shall remain constant for entire period of the contract. For example, if the rate of escalation for 2 nd year O&M Service Charge is x% over the 1 st year O&M Service Charge, then the same escalation rate shall be applicable for the subsequent years i.e. for 3 rd through 6 th year.			

SECTION – I : SPECIAL CONDITIONS OF CONTRACT (SCC)**DEFINITIONS AND INTERPRETATION**

1.1 “THE COMPANY / OWNER / OIL” means Oil India Limited, a Government of India Undertaking having its registered office at Duliajan, Assam.

“THE CONTRACTOR” means the successful bidder of this contract. “Act” means the all applicable laws;

1.2 “OMR” means Oil Mines Regulation 2017;

1.3 “Schedule” means a schedule appended to these regulations;

1.4 “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;

1.5 “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;

1.6 “Gas” means the vapor 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.

1.7 “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;

1.8 “Hazardous atmosphere” means an atmosphere containing any flammable gas in a concentration capable of ignition.

- 1.9 “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 and Maintenance 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 and Maintenance of Intermediate tank Farm (ITF), Tengakhat, Assam.
- 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 OPERATIONAL PERFORMANCE LEVEL” of the PLANT means trouble-free operation of the PLANT with stipulated BS&W content of 0.15% or less in the treated produced crude & oil content of less than 10 ppm with NIL sludge content in the clarified effluent water.

“DESIRED MAINTENANCE PERFORMANCE LEVEL” of the PLANT means trouble-free operation of the PLANT with stipulations explained under article PENALTY.

“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.

1.24 CUSTODY TRANSFER means handing over of wet crude by OIL to CONTRACTOR with stipulated BS&W content of 25% or less for treatment and handing over of DRY CRUDE by CONTRACTOR to OIL with stipulated BS&W content of 0.15% or less.

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 Contractor’s Normal duty hours/General Shift means from 7:00 AM to 3:00 PM on all their 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 “Periodic and Regular upkeepment and painting” means Periodicity and frequency for painting of various facilities including but not limited to Crude Oil Storage Tanks, Machineries, Sheds & Buildings etc should be once in three years. Regular Upkeepment needs

to be as per “Standard & Sound Industry Practice” as detailed in Terms of Reference (TOR)/Scope of Work (SOW) of the contract.

1.30 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 Mobilization shall be deemed to be complete when the contractor is ready in all respects to commence the work. The contractor shall intimate the Company in writing of their readiness to commence work.

2.2 The Contractor will advise readiness for commencement of mobilization / shipment to company, at least 3 days before actual mobilization / shipment commences.

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 behavior 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 & services for its own & personnel.

4.2 Transportation of Contractor'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 personnel. However, OIL may provide services of OIL Hospital as far as possible in emergency on payment.

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 POL for operation of Contractor's equipment both at work-site and campsite at Contractor's cost.

6.0 CONDUCTING FIELD & OFFICE WORKS:

6.1 The Contractor shall carry out all operations mentioned hereunder with due diligence in a safe and workmanlike manner and in accordance with accepted International oilfield practices.

6.2 All the equipments and materials required for execution of the works under this bid 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.

6.3 Contractor shall be solely responsible for the operation and maintenance of their equipments.

6.4 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 (Annexure –HSE I), which contractor has to undertake regarding compliance of all safety measures while carrying out contractual job Bidder's HSE Policy shall cover all the points listed in Annexure-HSE I 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 should be made available by the bidder at work site for emergency mobilization of personnel to hospital in case of injury/accident.

Note: The bidder shall submit an undertaking as per the Annexure –HSE I.

B) Other General HSE points:

- i) It will be solely the Contractor's responsibility to fulfil all the legal formalities with respect to the Health, Safety and Environmental aspects or 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.
- ii) Every person deployed by the contractor in a mine must wear safety gadgets to be provided by contractor. The Contractor shall provide proper Personnel Protective Equipment's 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 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
- iii) 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 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.
- iv) 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.

- v) Keep up to date SOP and provide a copy of changes to a person designated by the Mine Owner/ Agent/Manager.
- vi) Contractor has to ensure that all is carried out in accordance with Statute 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..
- vii) All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training, Initial Medical Examination and 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.
- viii) 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 work persons, Number of work persons deployed, how many work hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons.
- ix) 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.
- x) It will be entirely the responsibility of the Contractor/his Supervisor/representative to ensure strict adherence to all measures and statutory rules during operation in OIL's installations and safety to 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.
- xi) 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.
- xii) Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.
- xiii) The contractor shall have to report all the incident including near miss to Installation Manager/Departmental representative of the concerned department of OIL.
- xiv) 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.
- xv) If the company arranges any safety class/training for the working personnel at Site (company's employee, contractor worker, etc.) the contractor will not have any objection to any such training.
- xvi) The health check-up of contractor's personnel is to be done by the contractor in authorized Health Centre's 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 age and above.

xvii) To arrange daily tool box meeting and regular site safety meetings and maintain records.

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

xix) 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 employees act or omissions at work.

xx) 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.

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

xxii) In case Contractor is found non-compliant of HSE laws as required company will have right for the directing the contractor to take action to comply with the requirements and for further non-compliance, the contractor will follow the prevailing element Act/Rules/Regulations.

xxiii) 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.

xxiv) The contractor should prevent the frequent change of his contractual employees as must as practicable.

xxv) The contractor should frame a mutually agreed bridging document between OIL & the contractor will roles and responsibilities clearly defined.

xxvi) For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Act/Rules/regulations/pertaining to Health, Safety and Environment.

6.5 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.

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 program, 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 should provide the list of items if any to be imported in the format specified in Proforma-A for issuance of recommendatory letter to Directorate General of Hydrocarbons (DGH), New Delhi for clearance of equipment from Indian customs at concessional (nil) rate of customs duty.

7.5 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.

7.6 In case the Contractor imports the equipment etc. on re-export basis, the Contractor shall ensure for re-export of the equipment and all consumables and spares (except those consumed during the contract period) and complete all documentation required. Company will issue necessary certificates etc. as required. The Contractor should arrange for re-export of equipment within 60 days of notice of demobilization issued by the Company. If the re-export is not completed within the specified period, the company shall in no way be responsible for the additional custom duty/ penalty etc imposed by Indian government. The company reserves the right to withhold the payment till all such equipments are exported back and the site/base camp cleared off. Customs duty, penalty etc. levied by customs authorities for such delay shall be to Contractor's account and same will be deducted by the Company from Contractor's bills and security deposit.

7.7 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: 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 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 about award of the Contract.

11.2 For default in timely mobilization, the Contractor shall pay to the Company liquidated damages at the rate of 0.5 % of the Contract value (including Mobilization cost) 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 till the date of actual completion of the mobilization as defined in 2.0 above.

11.3 If the Contractor fails to mobilize within 140 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 in 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 2017 (OMR), a Mines Manager, an Installation Manager or his representative, Competent Person(s) for safe operation and maintenance 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 Manager, 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 operation & maintenance of the plant, reimbursement of other jobs as per this contract as per provisions of the payment terms of the contract.
- iv) OIL shall deduct such amount of money from monthly O&M bills of the contractor in case the contractor fails to carry out any job as mentioned in the tender document. A written notice stating the partial fulfillment of O&M jobs and corresponding shortfalls as per terms of contract will be given to the contractor.
- v) The Contractor will be following all the operational instructions as decided by the Installation Manager, Mines Manager or his representative for safe operation and maintenance of the plant, as per the scope of work covered under **clause no 2.1 of Part 3 Section II** (Terms of Reference and Technical Specifications). For any decision regarding safe operation and maintenance of the plant, the decision of Installation Manager, 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 ITF under the contract. Contractor must hand over all documents about their potential employees to be deployed at ITF 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 ITF. This clause is applicable in conjunction with Man power **clause no 5.1 (ii) of Part 3 Section II** (Terms of Reference and Technical Specifications).
- vii) The Installation Manager, 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 willful insubordination of any legitimate order of the Installation Manager, Mines Manager or his representative regarding operation and maintenance 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 5.1 (iii)** of Part 3 Section II (Terms of Reference and Technical Specifications).

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 Manger 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 O&M of the plant from OIL's captive power plant at a single point inside the plant boundary.

x) Natural gas required for operation of the plant will be supplied free of cost.

xi) OIL shall provide required demulsifier and deoiler for operation of the plant. OIL shall provide Monoethylene Glycol for use in bath heater. OIL shall also provide AFFF foam compound used for mock disaster drill proposed by OIL.

xii) Oil shall supply electrical power from the adjacent power plant at a single point inside the plant boundary for plant operation.

14.0 Contractor should ensure that there is no pollution either of water, air or sound during the operation. 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 of 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/ willful 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 O&M contract, the cost will be borne by OIL, unless otherwise the modification/ addition is required to rectify poor workmanship of the contractor during operation and maintenance.

20.0 Sub-Contracting/Assignment: Contractor shall not sub-contract, transfer or assign the contract, in full or any part under this contract, to any third party(ies) apart from the **AMC's as mentioned in this tender/contract**. However, contractor shall be fully responsible for complete execution and performance of the services under the contract.

SECTION – II : TERMS OF REFERENCE (TOR) AND TECHNICAL SPECIFICATIONS:

1.1 General Description of the Plant: Oil India Limited (OIL), Duliajan, Assam, which is a premier public sector organization engaged in exploration, production and transportation of hydrocarbons and production & bottling of LPG. OIL's present operations are primarily confined to the North-East India in the states of Assam, Arunachal Pradesh and Rajasthan. 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.

Intermediate Tank Farm (ITF) having 76,000 Cu.M storage capacities and 7,500 M³/day of designed dehydration processing capacity is located in Tengakhat belt of Central Asset situated at about 30 km West of OIL's field headquarters at Duliajan, Assam. Crude oil produced at different OIL-installations of this belt flow to ITF. ITF encompasses a secured & well bounded area with motorable approach road. An Oil Collecting Station (OCS), a Captive Power Plant (CPP), a Gas Compressor Station (GCS) and a Pump Station of OIL are situated adjacent to ITF.

At ITF, crude oil containing of the incoming fluid is separated & formation water dehydrated. The treated crude is then pumped to the adjacent pump station. It also has the provision of pumping crude to Duliajan Pump Station. For dehydration process, the plant comprises of three (3) numbers of Electrostatic Emulsion Treaters (EET) each having 3,750 M³/day design capacity.

The plant also has the storage facility of handling crude oil of capacity 76,000 M³ holding capacity consisting with eight (8) nos. of fixed cone roof storage tanks each of 4,500 M³ and two (2) nos. of floating roof storage tanks each of 20,000 M³ holding capacity.

The formation water separated at the EETs and other effluents shall be sent for de-oiling & de-sludging to Effluent Treatment Plant (ETP) having design capacity of 1200 KLPD. After clarification of the effluent the clarified water is disposed into the disposal wells. The ETP comprises of 1 no of 450 KL formation water holding tank, 2 numbers of 250 KL & 3 numbers of 795 KL clarified water tanks, 8 no's of formation water disposal pumps. The major components of ETP are CPI (Corrugated Plate Interceptor), IGF (Induced Gas Floatation) and MMF (Multi-Media Filters), effluent pumps, booster pumps, backwash water pumps and air blower, de-oiler dosing system.

The plant also has crude oil circulation pumps for transferring produced crude from storage tanks to dehydration unit, facilities for firefighting, process water & potable water system, fire protection & rim seal protection system, glycol-water bath heaters for pre-heating, boiler(s) for maintaining temperature of the crude oil in the storage tanks, crude dispatch pumps for transfer of crude from the tank farm, civil infrastructures, electrics & power distribution for electric drives & illumination, instrumentation, PLC System, control & communication system for plant management. The intermediate tank farm also has a Flow Improver Injection facility

1.2 Description of Process

a) Incoming crude: Crude oil containing Bottom Sediment and Water (BS&W) (average per day) of 25 % (w/w) (maximum) is received at the battery limit. The Bottom Sediment part would be insignificant on most of the days and without presence of the bottom sediments, the incoming water percentage shall be measured on volume/volume basis. On some occasions (3 to 8 days in a month) the percentage of water in the incoming crude oil to ITF may become 32 % (v/v). This crude is pre-heated by natural gas fired 02 (two) numbers of indirect glycol-water bath heaters before getting collected in storage tanks.

b) Storage Tanks: Out of 10 (ten) nos. of storage tanks 05(five) tanks are used to collect and retain the incoming crude oil being pumped from OIL's different installations. The incoming crude oil is pre-heated with help of 02(two) Feed Heaters and 01(one) plate type heat exchanger prior to its storage. The temperature in the crude oil storage tanks is maintained at 45 – 55° C with the help of steam generated at boilers.

Other 05 (five) tanks are used for storage of the treated crude: one for filling, one for settling, one for testing, one for custody transfer & one for cleaning / maintenance. Treated Crude for custody transfer is pumped through booster pump to pump-station, or to Central Tank Farm (CTF) / Secondary Tank Farm (STF), Duliajan. The treated crude oil retained in the section of pipeline from the storage tanks to suction of the dispatch pumps is evacuated with the help of Suction Charge Pump. Additionally, cooling tower facility is provided to bring down Treated Crude temperature. There is also a provision of inter-changeability shall be provided among all the tanks.

c) Dehydration at EETs: Crude oil circulation pumps pump the untreated crude oil from its storage tanks through Crude Dehydration Units (Electrostatic Emulsion Treaters (EET) or Electrostatic Dehydrators) to the treated crude oil storage tanks. At EET, electric current of range from 16 KV to 23 KV is applied onto 84 (eighty four) numbers of electrodes available inside each EET. The voltage is applied for the dehydration / de-emulsification of the untreated crude oil. The process requires the untreated crude to remain at minimum 65°C at the EET which is maintained by inducing heat through indirect glycol-water heaters connected with the EETs.

d) Formation Water Handling: Formation water separated out of the dehydration process at the EETs and other effluents is received in the effluent tanks of Effluent Treatment Plant (ETP). The effluent water from these tanks is fed to the ETP and after de-oiling & desludging, is stored in clarified water storage tanks. Clarified water disposal pumps dispose the clarified water through pipelines into water disposal wells. The disposal rate of formation water to be handled is 1200KLPD (maximum).

e) Process Output: Contractor shall have to ensure quality stipulation of 0.15% (w/w) or less BS&W content in the treated crude after crude dehydration process and oil content of less than 10 ppm with NIL sludge content in clarified water post clarification of formation water coming to ETP at a rate not more than 1200 KLPD. The Contractor shall also have to ensure zero discharge of pollutant to the environment.

The processes are modular in structure both in terms of layout and operation. Each module is self-containing and all the modules are integrated so as to make the overall process a self-sufficient one. Instrumentation & Control system of individual module are integrated for control room management of operations in fail-safe manner & for maintaining Desired Performance Level as per **clause no 2.5.1 (i)**.

f) Service Water: Overhead water storage facility of 80 KL capacity is available to meet water requirement for day-to-day process, utility/service, fill-up / charging / make-up water for hydrant circuit.

There is separate overhead tanks of total 10KL capacity and water softening plant for the boilers.

g) Fire –fighting facility: Fire fighting facility is in conformity to OISD 117, OMR and TAC norms. ITF has 10 (ten) number of diesel engine driven Fire water drenching pumps, 05 (five) nos of motor driven Jockey Pumps for maintaining the ring main pressure, 03 (three) nos of motor driven Foam pumps & 01(one) no of diesel engine driven with 48 KL Foam availability, Foam Monitors & Foam Pourers at the tanks. Each fixed cone roof storage tank has its own in-situ foam generating arrangement and differential pressure inductor foam system/pourer in floating roof storage tanks, water-drenching system to fight accidental fire. An integrated fire-protection and fire-fighting facilities like Medium Expansion Foam Generators (MEFG), High Volume Long Range Monitors (HVLRM), Fire detection & suppression system are available for the plant in accordance with revised OISD-117 & M.B. Lal Committee Recommendations. In the 02(two) Nos of floating Roof Tanks Rim-seal fire protection system is installed along with other accessories & mountings.

Standby static water storage facility comprising of 35,000 KL ground water reservoirs and 02(two) nos of over ground tanks of 1792KL each is available in accordance with OISD norms for catering to bulk fire fighting water requirement during emergencies.

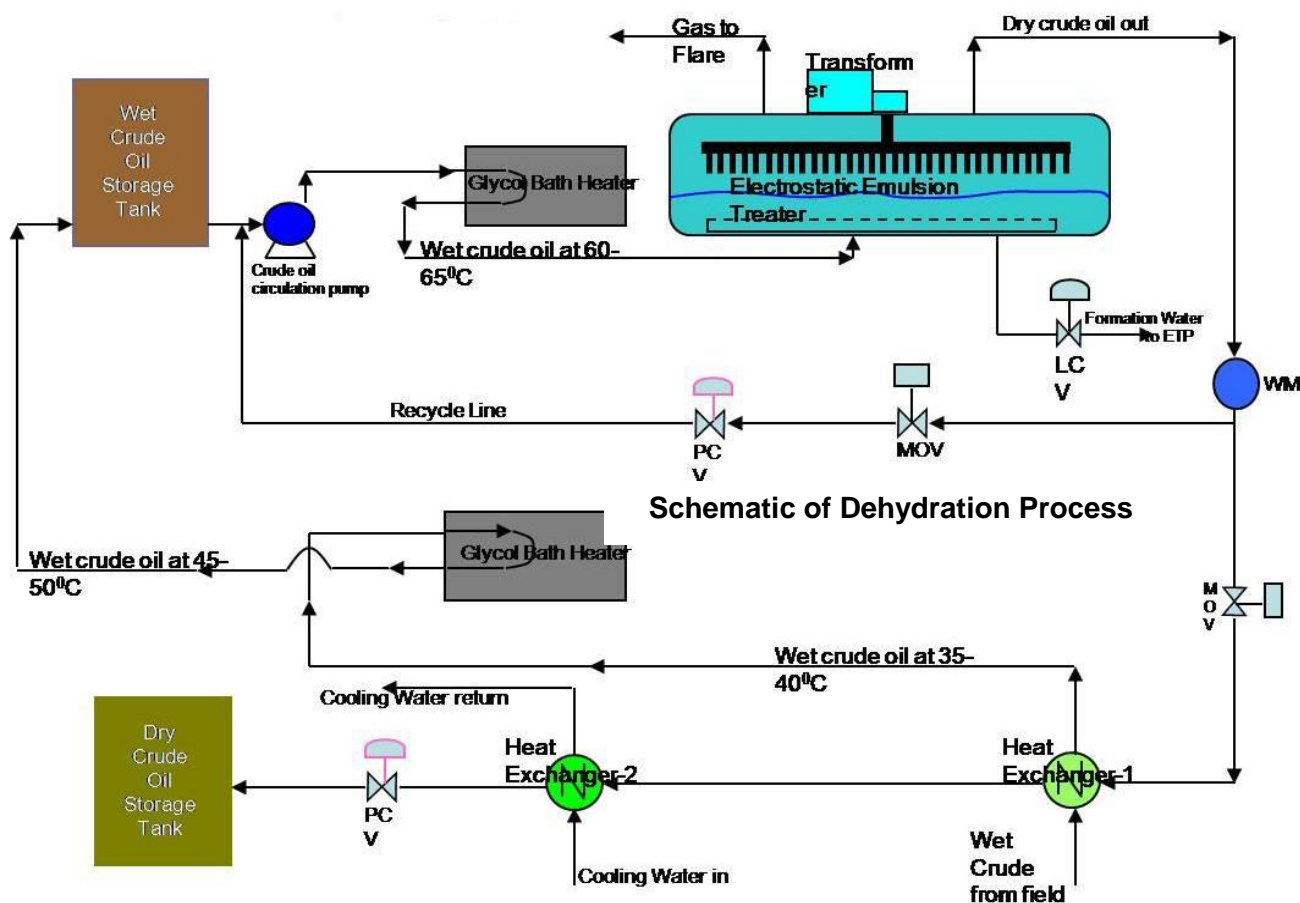
The plant premises and boundary are covered by green plantation, green belt and are developed in line with globally accepted norms for environmental protection.

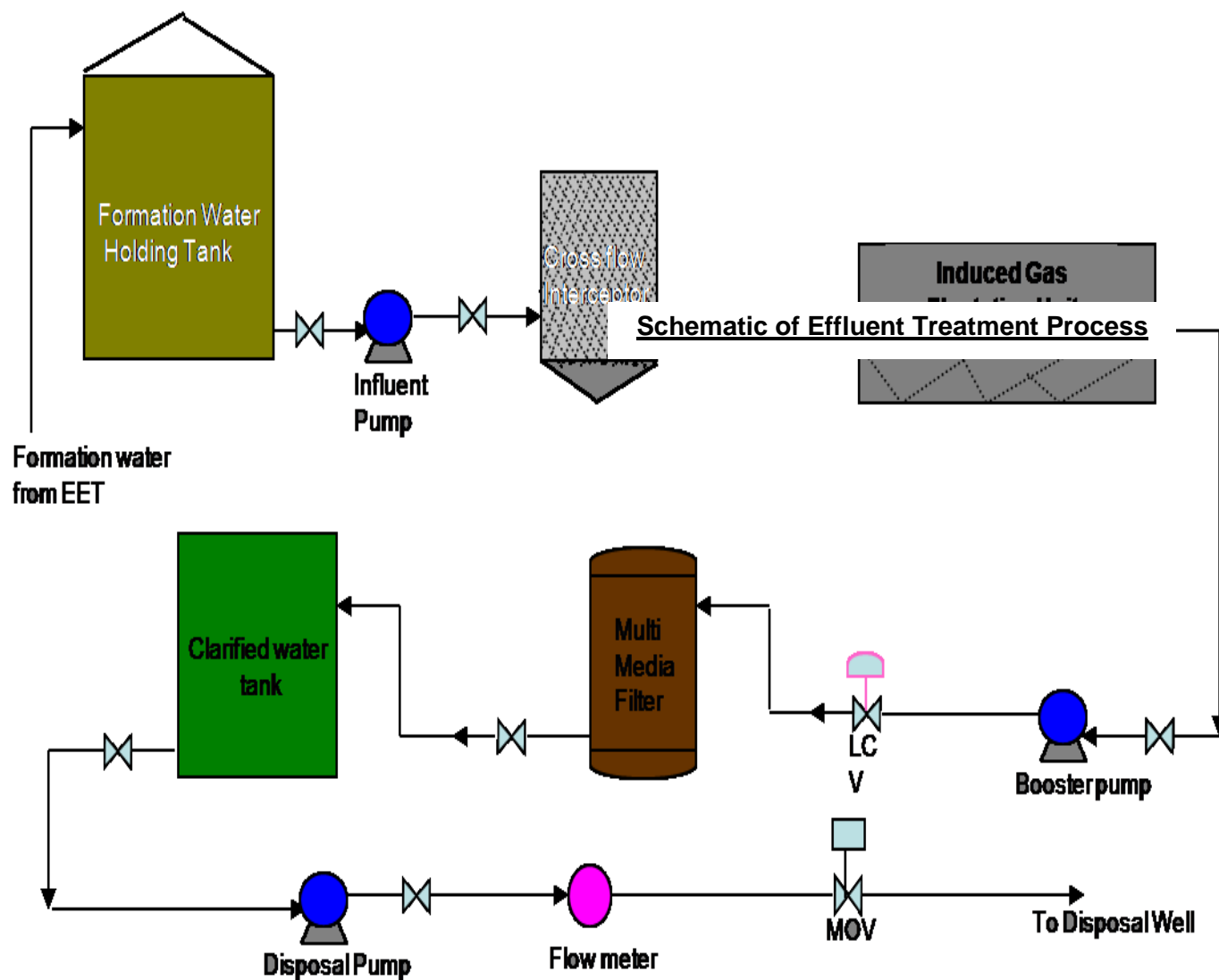
h) Flow Improver Injection Set up: At present Flow improver chemical is injected to Crude Oil Pipeline based through put of PS – Tengakhat (through put varies from 250 KLPH to 300 KLPH) & recommendation of R&D Dept., OIL. The injection is achieved through Horizontal Simplex Single Acting Packed Plunger Type Metering (Controlled) Pumps. The Flow improver chemical is supplied by OIL in drums of 180 KG capacity.

Note: OIL has planned to set up a chemical injection set-up for higher dosing rate ranges from 200 PPM to 600 PPM (for regular flow improver) and 600 PPM to 1800 PPM (for liquid flow improver). The pumps are manually controlled and the parameters shall be displayed in a control panel.

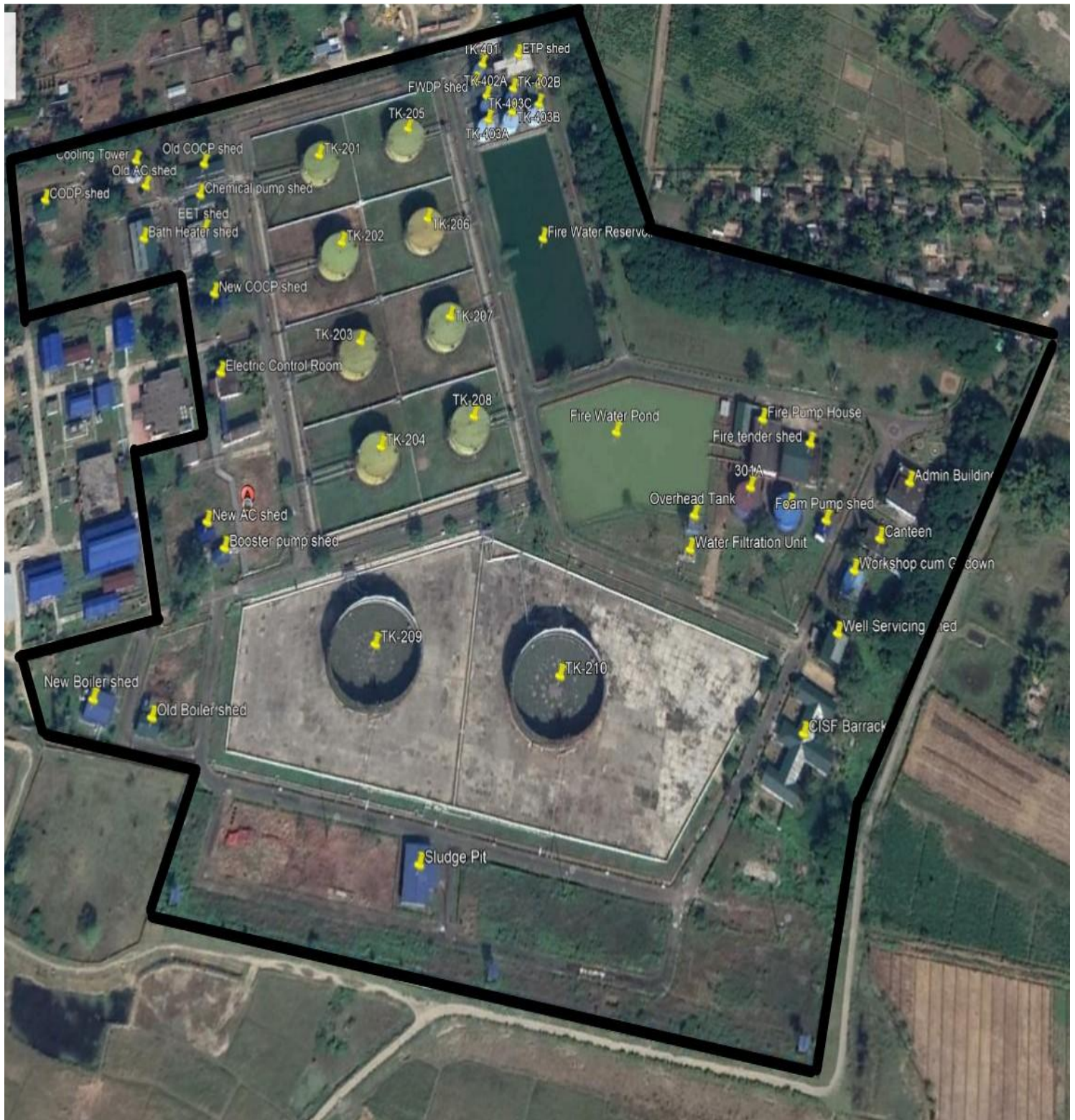
1.3 Deleted

1.4 The entire plant and its primary processes are shown in the following sketches:





LAYOUT: FACILITIES & EQUIPMENT



1.5 Description of Facilities : Following facilities / infrastructure are available at ITF:

- i) Tank Farm (i.e. Crude Oil Storage Tanks) of 76,000 M³ holding capacity consisting of 08 (eight) nos. of fixed cone roof storage tanks each of 4,500 M³ and 02 (two) nos of floating roof storage tanks each of 20,000 M³ holding capacity complete with accessories, safety implements & corrosion prevention system.

- ii) 06 (Six) numbers of Crude Oil Circulation Pumps for charging crude from untreated crude receipt tanks to dehydration unit & recycle.
- iii) 03 (Three) numbers of Crude Dehydration Units for dehydration process.
- iv) Total 12 (twelve) numbers of Chemical dosing pump with 0.5 HP motor driven reciprocating pumps, SS tanks, plastic tank.
- v) 02 (Two) numbers of crude oil dispatch pumps for crude oil dispatch to delivery pipeline. Requirement of the CODPs will be on emergency cases as stated in **clause no 2.10.1.**
- vi) 06 (Six) nos of suction charge pumps for transferring crude from treated crude storage tanks to suction end of crude oil dispatch pumps in rarest instances on emergency cases, ETP area.
- vii) Effluent Collection System for collection of separated formation water out of dehydration units & plant effluents and feeding the same to Effluent Treatment Plant.
- viii) 05 (Five) numbers of Indirect Glycol-Water Bath Heaters for pre-heating of crude.
- ix) Plate type heat exchangers & coolers.
- x) Effluent Treatment Plant with effluent & clarified water storage tanks & de-oiler dosing pumps for de-oiling & de-sludging of separated formation water out of dehydration process & other plant effluents.
- xi) Oily Water Sludge system with underground network of MS pipes of diameter 24 inches to 12 inches around tank farm on 3 sides, near EET and near CODP area. The system comprises 12 numbers of intermediate gravity separators and 02 (two) Nos of 60 KL capacity OWS separator sumps at the end of the network inside the ETP block. There is separate OWS pit of 700 Cu.m capacity is available for temporary storing of cleaned-up sledges, effluent etc of ITF (by Contractor) prior to final safe disposal of the same (by OIL).
- xii) Disposal Pumps (08 Nos) for disposal of clarified water.
- xiii) 02 (Two) numbers of Steam Generating Shell Max Boiler (each 05 Tonne/Hr) for heating of crude in tanks.
- xiv) Water source, supply & storage for Fire Fighting. Source, Storage & Supply System of water for firefighting, process & drinking purposes.
- xv) Fire Protection & Fire fighting facility.
- xvi) Electrics and Illumination – 9 High Masts, street lights, peripheral lighting.
- xvii) Instrumentation, Control & Communication system for plant management & fail-safe operation through control room operation
- xviii) Civil infrastructure -Buildings & sheds, utility buildings, control room, fire service station, Green belt, garden, roads, drainage & OWS.
- xix) Rim Seal Protection System in 02 Nos of 20000 KL floating Roof Tanks.
- xx) Flow Improver Chemical Injection Set up comprising of Horizontal Simplex Single Acting Packed Plunger Type Metering (Controlled) Pumps, Tank(s) and related piping network.

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

- i) Gate office for security.
- ii) Workshop cum go-down.
- iii) Well fleet service station.

- iv) Interconnection of the fire network with Tengakhat OCS, ETP, GCS & Pump Station.
- v) Conference room.
- vi) Chemical laboratory.
- vii) Canteen.
- viii) CISF barrack to accommodate 60 persons.
- ix) Outside motorable peripheral road for security patrolling.
- x) 05(five) nos of motorsied toll gate in license entry-exit areas.
- xi) 9 numbers of watch towers.
- xii) Parking space for 6 vehicles and motor bikes at ground floor of the Admin. Bldg.

1.7 The details of the Equipments / Facilities

1.7.1 Stationary Equipments / Facilities:

Sl No.	Description	Nos of unit	Service	Storage /Processing Capacity	Diameter / Height, m
<u>TANKS:</u>					
1	Crude Tank (fixed cone roof)	8	Crude	4500 KL	23x12
2	Crude Tank (floating roof)	2	Crude	20000 KL	50x12
3	Fire Water	2	Water	1792 KL	15.5/9.5
4	Holding Tank/Clarified tank	1	Formation water or Clarified water	450 KL	7.56x10.4
5	Calrified Water	2	Clarified water	250 KL	7x7
6	Holding/Clarified Water Tank	3	Formation water or Clarified water	795 KL	10.67x10.2
7	Fire Water	2	Clarified water	1792 KL	9.5/15.5
8	Overhead tank	1	Process Water	70 KL	
9	Overhead tank	1	Service Water	15 KL	
10	Foam Tank	2	Foam	5 KL	
11	Foam Tank	1	Foam	38.4 KL	
12	Water Pond	2	Water	35,000 KL	

13	Iron Removal Filter	5	Source Water	--	
<u>EET:</u>					
14	Dehydrator	3	Crude/Water	3750 KLPD	
<u>BATH HEATER:</u>					
15	Bath Heater	5	Crude/NG	3750 KLPD	
<u>INSTRUMENT AIR:</u>					
16	Air Dryer	1	Freon		
17	Air Receiver	1	Air		
<u>ETP:</u>					
18	CPI-ETP	1	Emulsified water	50 KL/HR	
19	Multimedia Filter	2	Emulsified water	50 KL/HR	
20	Depurator	1	Emulsified water	50 KL/HR	
21	Mixer-Dozing Tank	1	Chemical	1 KL	
<u>HEAT EXCHANGER:</u>					
22	H.E.-Plate type	2	Crude/Water	7500 KLPD	
<u>BOILER:</u>					
23	Boiler	2	Water/NG	5 Ton/Hr	
24	Gas Scrubber	2	Gas		
25	Water tank	2	Water	5.04 KL	
26	Dozing tank		Chemicals		

Note to Sr. No 14 & 15 above:

02 (two) Nos. of 3750KLPD capacity bath heaters and 01(one) no of 3750 KLPD capacity dehydrator shall be installed/replaced/commissioned and will be part of the plant at any time during the currency of the contract.

Operation & maintenance of the above replacement vessels shall be part of the contract. Contractor will not be paid any additional cost for the same.

1.7.2 Rotating Equipments / Facilities:

Sl. No	Description	Nos of units	Model	Service	Rate (m ³ /hr)	Head (m)	Power HP/ Kw	RPM	Vendor
Crude Dispatch Pump (CODP), Process Pump House & Chemical Dosing Pump House :									
1	CODP : Type-1	2	300 TP-8C	Crude	105	872	400	1800/225	National Oil
2	Caterpillar Engine	2	3408	NG			400	1800	Caterpillar
3	Cummins Engine	1		NG					Cummins
4	Suction Charge Pump	6	SUPREME 2500,6X4X14	Crude	158	30	30		National Oil Well
5	Crude Circulating Pump(COCP)	3	CHEMFLO 6X4X10.5	Crude	160	80	60	2900	Chemflow (AkayIndustry)
6	Crude Circulating Pump(COCP)	3	CHEMFLO 8X6X10.5	Crude	230	60	55	2900	Chemflow (AkayIndustry)
7	Booster Pump	1	CHEMFLO 8X6X10.5	Crude	230	60	55	2900	Chemflow (AkayIndustry)
8	Cooling Water circulation pump	2		Water	320	22	30		Kirloskar Brother Ltd.
9	Chemical Dosing Pump	12	UMBL-20	Chemical	40	100		200 SPM	MATZ Pump Pvt. Ltd
ETP:									
10	Influent feed pump	2	KPD 80/20QF	Formation Water	50	4	3	1000	Kirloskar Brother Ltd.
11	Booster Pump	1	CPHM 50/16			30	15/11	2930	
12	Booster Pump	1							
13	Oil Skim Pump	2	KPD 32/16QF	Crude	7.6	3.85	3	1000	
14	Backwash Pump	2	CPHM 65/16	Water	75	17	10	2900	
15	Air Blower	2		Air	93		3	1430	

16	Deoiler dozing pump	2	M-12	Chemicals	30 lit/min	10 Ksc	0.5	1410	Milton Roy India Ltd.
17	FW Disposal pump (FWDP) Type-1	4	3 HPx 15A	Clarified Effluent	50	20	100/75	2975	FLOWSERVE
18	FWDP : Type-2	2	RM608		20	50	75 / 56	2975	Roto pump
19	FWDP:Type-3	2	RK350/15L7		20	200	40/30	2950	KSB

FIRE SYSTEM :

20	Fire Water pump	3	UP 150/38BC	Water	410	105	-	2100	Kirloskar Brother Ltd.
21	Fire Water pump	7	8/8DMETA	Water	410	105	-	1500	Wilo (Mather+Platt)
22	Jockey Pump	2	CPHM40/26	Water	25	88	25	2900	Kirloskar Brother Ltd.
23	Jockey Pump	3	ETISO17H	Water	90	110	-	2955	Wilo (Mather+Platt)
24	Foam Pump	2	TDSH 088	Foam	1671/m		20	1450	Tushaco Ltd.
25	Foam Pump	1	RDZXI-400S	Foam	32	120	-	1475	Del Pd Pumps & Gears(P) Ltd
26	Foam Pump	1		Foam	32	120	-	1500	
27	Diesel Engine(F/w)	3	6SL9088TA	Diesel	-	-	188/255	2100	Kirloskar Oil
28	Diesel Engine(F/w)	7	TBD3V6II	Diesel	-	-	313/230	1500	Greaves Cotton Ltd
29	Diesel Engine (Foam)	1	HA-494	Diesel	-	-	43	1500	Kirloskar Oil

INSTRUMENT AIR :

30	Air Compressor	2	UP5-7.5	Air			15/11		IR
31	Air Compressor	2	KES 37-10	Air	207 cfm	95	-	2947	Kirloskar Brother Ltd.

WATER SYSTEM:

32	Bore Well	2	CORA 18C/11	Water	50	55.22	3.0/4.0	2900/2791	KSB, Type: CORA 18C/11
33	Bore Well	2	BPN 393/3	Water	204	42	37.3	1845	KSB

BOILER:

34	Boiler Feed pump	4	CDL4-22	Water	4	178	-	2900	CNP
TANKS:									
35	Side Entry Mixer	8	Swivel mixer	Crude	-	-	7.5 / 5.5	1450/	LIGHTNIN - Plenty
36	Side Entry Mixer	4	Swivel mixer	Crude	-	-	22	-	-

Note to Sr. No 1 to 5 above : All these units shall be put in operation only in rarest instances of emergency cases of nearby Tengakhat pump station shutting down.

1.8 Description of Electrics at ITF: OIL has its own captive power plant (CPP) situated adjacent to the ITF. The CPP is outside the battery limit of ITF. Power from the CPP is supplied to the ITF through underground electrical cables. There are two (2) nos. 800 kVA Booster Transformers (380V/433V) within the battery limit of ITF to achieve rated terminal voltage (415V).

From the booster transformers power is fed into an LT AC Board physically located at the Electric Control Room (ECR) in the ITF. From the LT AC Board, the power is distributed to 4 (four) nos. of MCCs located at different locations inside the ITF. Power supply to the different electrical drives/loads are fed from these MCCs. Local Control Stations are available nearer to all the drives/loads.

Electrical network for power supply to the recently completed ITF extension (2 Nos. 20,000KL Tanks) is completely separate from the original one. Power supply to the ITF extension is from the same CPP but through different incomer cable/source. Electrical power supply to the newly constructed switch room under ITF extension is from an electrical sub-station (physically located outside the battery limit of ITF). PMCC Board in the ITF extension is having two (2) incomers (800Amps 4 pole ACB), one running and one standby. These two incomers have mechanical interlock so that only one can be in energized condition at one point of time. The bus-bar rating is 2500Amps, 4W, 3ph with neutral, 50 Hz, 50kA (1sec).

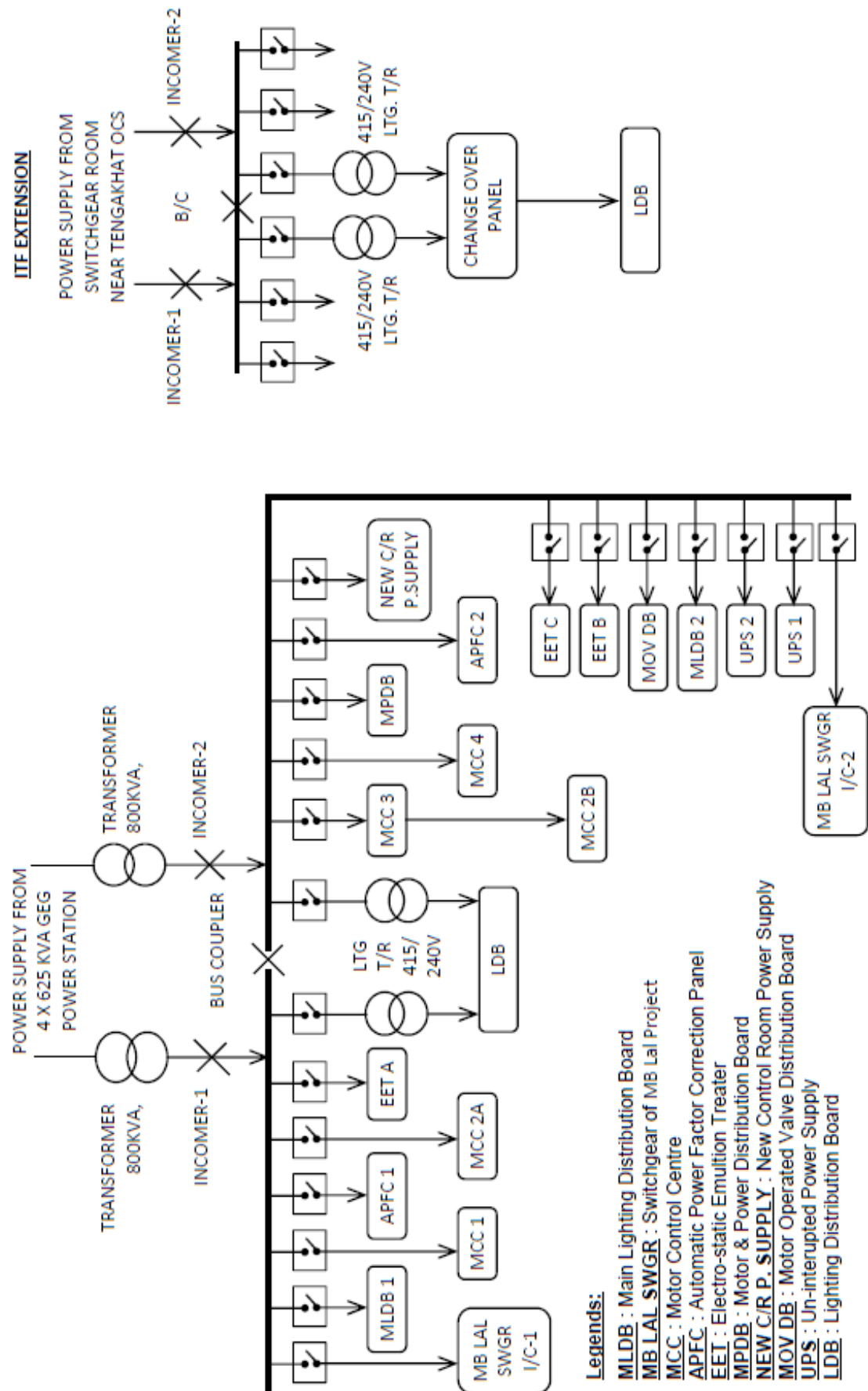
Outdoor lighting includes 9 (nine) Nos. 30 mtr High Masts lighting systems and several peripheral/boundary lightings. Indoor lighting includes various types light fittings for sheds/buildings illumination.

A MLDB (Main Lighting Distribution Board) is located at ECR, which gets supply from LT AC. Board. High mast and peripheral lighting are fed from MLDB.

For hazardous area lighting, the lighting voltage is 240V phase-to-phase from the lighting transformer (415V/240V, DYn11) as per I.E. Rules and OISD Guidelines.

1.9 Deleted.

**SINGLE LINE DIAGRAM (SLD)
INTERMEDIATE TANK FARM(ITF)**



1.10. Electrical Equipments at ITF:

Sl. no	Description of Electrical Item	Make	KW /rpm	Qty	Remarks
1	Motor at Tank Side Entry Agitator	Crompton Greaves Ltd.	5.5 / 1450	8	
2	Motor at Tank Side Entry Agitator	Bharat Bijlee	22/ 1460	4	
3	Motor at Suction Charge pump	Crompton Greaves Ltd.	22 / 1470	5	
4	Motor at Booster pump	Crompton Greaves Ltd.	55/ 2980	1	
5	Motor at Crude Oil Circulation Pump	Crompton Greaves Ltd.	55/ 2980	3	
6	Motor at Crude Oil Circulation Pump	Crompton Greaves Ltd.	45 / 2955	3	
7	Motor at Clarified Water Disposal Pump-1	Crompton Greaves Ltd.	75 / 2975	4	
8	Motor at Clarified Water Dispo Pump-2(MS)	Bharat Bijlee	30/ 2950	2	
9	Motor at Clarified Water Dispo Pump-3(RP)	Bharat Bijlee	55 / 1475	2	
10	Motor at Flootation Unit of depurator, ETP	Crompton Greaves Ltd.	3.7 / 1450	4	
11	Motor at Back Wash Pump, ETP	Crompton Greaves Ltd.	7.5 / 2900	2	
12	Motor of Air Blower at ETP.	Crompton Greaves Ltd	2.2 / 1430	2	
13	Motor at Booster Pump at ETP.	Crompton Greaves Ltd	11 / 2930	2	
14	Motor at Deoiler Dosing Pump at ETP.	Crompton Greaves Ltd	0.37 / 1410	2	

15	Mixer/agitator motor (Dosing Tank)	Crompton Greaves Ltd	0.37 / 1410	1	
16	Motor at Influent Feed Pump at ETP.	Crompton Greaves Ltd	2.2 / 945	2	
17	Motor at Skimming Blade at ETP.	Crompton Greaves Ltd	2.2 / 945	2	
18	Motor at Skim-Oil transfer pump at ETP.	Crompton Greaves Ltd	0.37 / 1410	2	
19	Motor at OWS Pump at ETP.	Crompton Greaves Ltd	33.6 / 2900	2	
20	Motor at Slop Pump at ETP..	Crompton Greaves Ltd	3.7 / 1450	2	
21	Motor at Jockey Pump	Crompton Greaves Ltd	18.5 / 2900	2	
22	Motor at Jockey Pump	Marathon Motors	55/ 2955	3	
23	Motor at Foam Pump	Bharat Biulee	15 / 1450	2	
24	Motor at Foam Pump	Crompton Greaves Ltd	30 / 1475	1	
25	Motor at Cooling Water Circulation Pump	Kirlosker	30 / 1475	2	Summer use
26	Cooling Tower Fan	Megha Motor	11 / 560	1	
27	Air Compressor		11 /	2	
28	Bore Well-1(Submersible Motors)		7.5 / 2900	2	
29	Motor at Boiler feed water pump	TE Grundfos, Hungary	3 /	4	
30	Motor at Chemical dosing Pump, Boiler	Milton Roy India Pvt Ltd	0.37 /	2	
31	Motor at Chemical dosing Pump system		0.37 /	8	
32	Booster Transformer	ONAN Voltamp, Boroda		2	

33	Lighting Transformer	Automatic Electric Co		2	
34	EET Transformer	BETRA		3	
35	FLP Lighting Fixures	Flexpro	0.25	34	
36	FLP Lighting Fixures	Flexpro	0.125	37	
37	FLP Push Button Station	Flexpro	2.075	46	
38	FLP Junction Box	Flexpro	0.125	4	
39	FLP Lighting Distribution Board	Flexpro	13.28	-	
40	FLP Welding receptackles	Flexpro	26.145	-	
41	High Mast Lighting system	Bajaj Electricals	9.6	9	
42	Air Conditioning	LG	20	6	
43	Plant Illumination (Except High Mast)	Bajaj Electricals	55		
44	In comer		800	2	
45	Bus coupler		800	1	
46	COCP Panels	-	55	4	
47	Boiler panels	-	80 Ams	2	
48	Bore Well-1(Submersible Motors) With Panel	-	37 / 2900	2	
49	Agitator	-	22	4	
50	MOVs	-	-	63	
51	UPS	HI-REL	20 KVA	1	

1.11 Technical Details of Motors and other electrical equipments at ITF:

Sl. no.	Specification of equipment	FLP	No of equipments & Location	Haz / Safe
1.	Tank Side Entry Mixer Motor – Frame size :E132M ; Volt: 415 +/-10%, kW: 5.5 ; Eff: 86% ; Speed :1450 rpm ; Freq: 50 Hz +/-5% ; Amp: 10.6A ; Connection : star ; Duty : S1; Amb:45°C ; IP:55 ; Ins. Class: F	FLP	8 nos. at Existing 8 tanks	Haz.
2.	Tank Side Entry Mixer Motor – Volt:415+/-10%; KW(HP): 22(30); Eff:91.8%; Speed:1500 rpm; Freq:50+/-5%; Amp: 39.97 DELTA; Duty: S1; Amb: 45C; IP:55; Ins. Class: F	FLP	4 nos. at 2 nos of floating roof tanks	Haz.
3.	Suction charge pump Motor - Frame size :E180L ; Volt: 415 +/-10% ; kW: 22 ; Eff:91% ; Speed : 1470 rpm ; Freq: 50 Hz +/-5% ; Amp: 38 A ; Connection : star ; Duty : S1; Amb: 45°C ; IP:55 ; Ins. Class :F	FLP	6 Nos. at Suction Charge Pump at main pump house and ETP.	Haz
4.	Booster pump Motor- E250M; Volt:415+/-10%; KW(HP): 55(75); Eff:93%; Speed: 2980 rpm; Freq:50+/-5%; Amp: 89; Duty: S1; Amb: 45C; IP:55; Ins. Class: F	FLP	1 no. at new booster pump house	Haz
5.	Crude Oil Circulation Pump Motor Frame size :E225M ; Volt: 415 +/-10% ; kW: 45 ; Eff:91% ; Speed : 2955 rpm ; Freq: 50 Hz +/-5% ; Amp: 73A; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55,Ins Cl:F	FLP	3 Nos. at Main Pump House -1	Haz
6.	Crude Oil Circulation Pump Motor E250M; Volt:415+/-10%; KW(HP): 55(75); Eff:93%; Speed: 2980 rpm; Freq:50+/-5%; Amp: 89; Duty: S1; Amb: 45C; IP:55; Ins. Class: F	FLP	3 Nos. at Main Pump House-2(ITF Augmentation)	Haz
7.	Clarified Water Disposal Pump Motor Frame size :E280M ; Volt: 415 +/-10% ; kW: 75 ; Eff:93.50% ; Speed : 2975 rpm ; Freq: 50 Hz +/-5% ; Amp: 119A ; Connection : star; Duty : S1; Amb:45degC ;	FLP	4 Nos. at Clarified Water disposal pump shed	Haz

	IP:55,Ins Cl:F ;			
8.	Clarified Water Disposal Pump Motor Volt:415+/-10%; KW(HP): 55(75); Speed:1475 rpm; Duty: S1; Amb: 50C; IP:55; Ins.	FLP	2 Nos. at Clarified Water disposal Rpto pump shed	Haz
9.	Clarified Water Disposal Pump Motor Volt:415+/-10%; KW(HP): 30(40); Eff:92.6%; Speed:2950 rpm; Freq:50+/-5%; Amp: 51.2; Duty: S1; Amb: 50C; IP:55; Ins. Class: F	FLP	2 Nos. at Clarified Water disposal multistage pump shed	Haz
10	Chemical Dosing Pump Motor Frame size: LF80; Volt:415+/-10%; KW(HP): 0.37(0.5); Eff:70%; Freq:50+/-5%; Duty: S1; Amb: 50C; IP:55; Ins. Class: F	FLP	12 nos at Chemical dosing pump house	Haz
11.	Floatation Mechanism Motor Frame size :E112M ; Volt: 415 +/-10% ; kW: 3.7 Eff:83% ; Speed : 1450 rpm ; Freq: 50 Hz +/-5% ; Amp: 7.5 A ; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55, Ins Cl:F ;	FLP	4 Nos. at ETP Area	Haz
12.	Back Wash Pump Motor Frame size :E132M ; Volt: 415 +/-10% ; kW: 7.5 Eff:85% ; Speed : 2900 rpm ; Freq: 50 Hz +/-5% ; Amp: 14A ; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55, Ins Cl:F	FLP	2 Nos. at ETP Area	Haz
13.	Effluent Treatment Booster Pump Motor Frame size: 160M; Volt:415+/-10%; KW(HP): 11(15); Eff:89%; Speed:2920 rpm; Freq:50+/-5%; Amp: 51.2; Duty: S1; Amb: 49C; IP:55; Ins. Class: F	FLP	1 Nos. at ETP Area	Haz
14.	ETP Blower Motor Frame size : E100L ; Volt: 415 +/-10% ; kW: 2.2 ; Eff:82% ; Speed : 1430 rpm ; Freq: 50 Hz +/-5% ; Amp: 4.5A; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55, Ins Cl:F ;	FLP	2 Nos. at ETP Area	Haz
15.	Deoiler Dosing Pump Motor	FLP	2 Nos. at ETP Area	Haz

	Frame size : E90L ; Volt: 415 +/-10% ; kW: 0.37 ; Eff:73.5% ; Speed : 1410 rpm ; Freq: 50 Hz +/-5% ;Amp:.95A ; Connection : star ; Duty : S1; Amb:45degC ; IP:55, Ins Cl:F			
16.	Influent Pump Motor Frame size:E112M; Volt: 415 +/-10%; kW: 2.2; Eff:80% ; Speed : 945 rpm ; Freq: 50 Hz +/-5% ; Amp: 5.1A; Connection : star ; Duty: S1 ; Amb:45degC ; IP:55,Ins Cl:F Gas Group : IIA, IIB ;	FLP	2 Nos. at ETP Area	Haz
17.	Skimming Pump Motor Frame size : E112M ; Volt: 415 +/-10% ; kW: 2.2 Eff:80% ; Speed : 945 rpm ; Freq: 50 Hz +/-5% ; Amp: 5.1 A ; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55, Ins Cl:F	FLP	2 Nos. at ETP Area	Haz
18.	Air Compressor, 11 KW, 415 V,	-	2 Nos. near Cooling Tower area.	Haz
19.	Air Compressor, 11 KW, 415 V,	-	2 Nos. near Booster pump house	Haz
20.	Oil Skimmer Motor Frame size :E90L ; Volt: 415 +/-10% ; kW: 0.37 Eff:73.5% ; Speed : 1410 rpm ; Freq: 50 Hz +/-5% ;Amp:0.95 A; Connection : star ; Duty : S1; Amb:45degC ; IP:55,Ins Cl:F	FLP	2 Nos. at ETP Area	Haz
21.	OWS Pump Motor Frame size :E225M ; Volt: 415 +/-10% ; kW: 45; Speed : 1480 rpm ; Freq: 50 Hz +/-5% ; Amp: 76A ; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55,Ins Cl:F	FLP	2 Nos. at OWS Pump Shed	Haz
22.	Slop Pump Motor Frame size :E112M ; Volt: 415 +/-10% ; kW: 3.7; Speed : 1450 rpm ; Freq: 50 Hz +/-5% ; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55,Ins Cl:F	FLP	2 Nos. at Slop Pump Shed	Haz
23.	Jockey Pump;	Non	2 Nos. at Drenching Pump	Safe

	Frame size :ND160L ; Volt: 415 +/-10% ; kW: 18.5 ; Eff:90% ; Speed : 2920 rpm ; Freq: 50 Hz +/-5% ; Amp: 32A ; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55,Ins Cl:F ;	FLP	Shed	
24.	Jockey Pump; Frame size: D280S; Volt:415+/-10%; KW(HP): 55(75); Eff:92.5%; Speed: 2955 rpm; Amp: 93; Duty: S1; Amb: 40C; IP:55; Ins. Class: F	Non FLP	3 Nos. at Fire water Pump Shed	Safe
25.	Foam Pump: Frame size : 160L ; Volt: 415 +/-10% ; kW: 15 ; Speed : 1450 rpm ; Freq: 50 Hz +/-5% ; Amp: 27.6A; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55, Ins Cl:F	Non FLP	2 Nos. at Drenching Pump Shed	Safe
26.	Foam Pump Motor : Frame size: ND200L; Volt:415+/-10%; KW(HP): 30(40); Eff:92%; Speed:1475 rpm; Freq:50+/-5%; Amp: 53 DELTA; Duty: S1; Amb: 50C; IP:55; Ins. Class: F	Non FLP	1 No. at Foam System Pump House	Safe
27.	Cooling Water Circulation Pump; Frame size :SC200L ; Volt: 415 +/-10% ; kW: 30 ; Eff:92% ; Speed : 1475 rpm ; Freq: 50 Hz +/-5% ; Amp: 119A; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55,Ins Cl:F	Non FLP	2 Nos. at Cooling Tower area	Safe
28.	Cooling Tower Fan Frame size :180L ; Volt: 415 +/-10% ; kW: 11 ; Speed : 560 rpm; Freq: 50 Hz +/-5% ; Connection : star ; Duty : S1 ; Amb:45degC ; IP:55, Ins Cl:F ;	Non FLP	At Cooling Tower area	Safe
29.	Booster Transformer : Rated output : 800KVA, Rated voltage Pri/Secy : 380V / 433V, Rated current Pri/Secy : 1215A / 1066A 50Hz, Cooling : ONAN	-	2 Nos.	-
30.	Lighting Transformer ; 433/250V Dry Type	-	2 Nos.	-
31.	EET Transformer ; 433/23000 V Dry Type	-	3 Nos.	Haz.
32.	FLP Lighting Fixures ; Cat. No. MFW/193/1 ; Rating : 250W	-	34 Nos at ETP, EET, Bath Heater, CODP.	Haz. area
33.	FLP Lighting Fixures ; Cat. No. MFW/1931/H/IH ; Rating :125W	-	37 Nos. at S/CH, CODP, Bath Heater, EET, ETP	Haz. area

34.	FLP Push Button Station Cat . No. MFPB/302/1, MFSS/900/11, MFRS/104/1 Rating : 5A, 415V, 2NO/2NC	-	46 Nos. at S/Ch Pump -8. CT -3, CHD-2, Tank Farm-8 ETP-25	-
35.	FLP Junction Box ; Cat . No. MFJB/201 ; Rating : 125 W ; IP- 66, 4 Way	-	4 Nos. at S/Ch Pump, EET & Tank Farm	-
36.	FLP Lighting Distribution Board ; Cat. No. MFP/1500/3 ; Rating : 32A, 415V, 6 – Way ; With 240V, DP switch	-	EET shed -1, S/Ch Pump Shed -1, ETP shed -1, Bath heater -1	-
37.	FLP Welding receptackles ; Rating : 63A, 415 V AC ; Cat No. MFSS/900/6/1 ; 230V AC	-	3 Nos.	-
38.	HVLRM up/down & Left -right controlling motor: Frame size:71; Volt: 415+/-8%; KW(HP): 0.37(0.85); Eff: 78%; Speed: 1350rpm; Freq.: 50+/-3%; Amp: 1.15; Duty: S3; Amb: 45C; IP: 65; Ins. Class: F.	FLP	24 nos in 12 nos of HVLRM surrounding tank-farm	FLP
39	HVLRM spray-jet controlling motor: Frame size:71; Volt: 415+/-8%; KW(HP): 0.18(0.25); Eff: 78%; Speed: 1350rpm; Freq.: 50+/-3%; Amp: 0.6; Duty: S3; Amb: 45C; IP: 65; Ins. Class: F.	FLP	12 nos in 12 nos of HVLRM surrounding tank-farm	-

1.12 Description of Instrumentation, Control & Communication system of ITF:

Operation and Maintenance Contract (O&M) shall include operation and maintenance services for all instrumentation systems of ITF Tengakhat including 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.

1.12.1 Special terms on Instrumentations and Controls of the station:

- (i) Master PLC system of Make: ABB
- (ii) Tank Farm Management System of Make: Honeywell
- (iii) Bath Heaters with Burner Management Systems of Make: Combustex
- (iv) Boilers with PLCs of Make: Seimens and Rockwell
- (v) Rim-seal fire protection system of Make: De's Technico Pvt. Ltd
- (vi) Field Instruments

1.12.2 Description of Instrumentation, Control & Communication system of ITF:

The control system at ITF is distributed and failure of one section does not lead to shutdown of the entire system. Each major units of the plant like Indirect Heaters, Storage tanks, Dehydration systems, Water treatment plant and Boiler have their own control systems through PLCs which in turn are connected to the Master station PLC of Make ABB in the control room with MMI facility.

The PLCs of the major units of the plant control the respective process and transmit various critical parameters to the Master station PLC. However, the override control & ESD (Emergency shutdown) are provided from the Master station only.

The control room has the Process Mimic panel, Engineer's workstation, Contractor's workstation, PC, Printers and other Hardware accessories for continuous monitoring, logging and controlling various critical parameters of the process.

ABB AC800M HI (High Integrity) PM 865 Controller and SM811 supervisory module is used for Safety application. The system is compliant to AK 1-6 risk environments according to DIN V 19250 and SIL-3 according to IEC 61508.

PLC/DCS/SCADA software of the Control Room Workstation has following key features

- Contractor interface
- Mimic display
- Real time database
- Alarm event management
- Historic storage facility
- Trending.
- Reporting
- Server Redundancy
- Point configuration & display
- Control loop configuration & display
- Interlocks configuration
- Integrated on-line documentation
- Utility programs for various engineering calculations.
- Data backup facility

1.12.2.1 Tank Farm Management System (TFMS): A comprehensive Tank farm management system shall be integrated with the Master station PLC/DCS/SCADA system. The system shall consist of Ten (10) nos. of Radar type level Gauges (Frequency Modulated continuous wave type) & Ten (10) nos. Servo type level gauges: one for each of the eight nos. of fixed cone roof & two nos of floating roof crude oil storage tanks in the Intermediate Tank Farm. The system shall also have the following

(a) Field equipment:

- (i) Radar Tank Level Transmitters -12 Nos
- (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) Pressure Transmitter for density in each crude oil storage tanks.
- (v) 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
- (ii) Common interface Unit-CIU PLUS: 2 Nos
- (iii) TFMS Servers (2 Nos) with all required software packages including peripherals such as TFT, Keyboard, Printers.

Note to Clause No.1.12.2.1: The scope of the contractor shall include but not limited to the following:

- i) The contractor shall carry out routine calibration & Configuration as required as per OEM recommendation and shall be included in each preventative maintenance jobs.
- ii) TFMS database software upgradation during the tenure of the contract as and when upgrade is issued by the OEM. The said upgradation will be finally decided & approved by OIL. Any, accessories required for the upgradation of the same will be under contractor's scope.
- iii) Calibration report shall be submitted to OIL for record after each calibration.
- iv) 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.
- v) 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 during the tenure of the contract.

1.12.2.2 INDIRECT BATH HEATERS

- Burner remote ignition, control and shutdown in case of flame failure using Ignition Module and Burner Management System of Make: Combustex
- Fuel gas regulators in both pilot and main gas lines.
- Temperature Sensing of bath heaters with Thermocouple.
- Temperature indicators in Treater vessels.
- Temperature indication of the inlet and outlet crude oil
- Temperature indication of the glycol-water bath.
- Pressure indication of the inlet and outlet crude oil.
- Pressure gauges in both pilot and main gas lines.

Note to Clause No. 1.12.2.2: Replacement or upgradation of BMS may took place during the tenure of the contract and therefore operation & maintenance of the same shall be under the scope of the contractor.

1.12.2.3 DEHYDRATION UNIT (EET)

The Dehydration units (Electrostatic Emulsion Treater) are equipped with the following instrumentation and PLC based control system.

- Low liquid level alarm.
- Pressure indicator of the Treater vessel.
- Interface level controllers for the Treater vessel.
- Level Controller for oil outlet of the Treater vessel.
- Back pressure controller (PCVs) of the Treater vessel.
- High and low pressure alarm of the Treater vessel.
- On-line High precision Water-in-oil monitor in the Crude oil outlet line.
- Controls for diversion of the bad quality crude oil for re-treatment.
- Magnetic type liquid level indicator.
- Temperature indicator of the Treater vessel.

1.12.2.4 BOILER

- Sequence control for purging and lighting of Pilot and Main burners using PLVC.
- Pilot-burner-ignition with Ignition transformer & electrodes working on 230VAC, 50Hz.
- Pilot flame sensing and shutdown of main fuel supply in case of pilot flame failure.
- Water level control.
- Feed water pump control.
- Air-Fuel ratio control.
- Steam pressure control.
- Low level alarm and tripping of burner
- Low air pressure alarm and tripping of burner.
- High level alarm and tripping of Feed water pumps.
- Steam Pressure High alarm and tripping of burner.
- Main gas pressure High and Low alarms.
- Fuel gas regulators in both pilot and main gas lines.
- Pressure gauges in both pilot and main gas lines.
- Temperature and Level indicators.

Note to Clause No. 1.12.2.4: 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.

The broad scope of O&M work shall include but not limited to routine 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.

1.12.2.5 CCTV system

- A Closed Circuit Television System availed to monitor the critical areas of the Tank farm like along the boundary wall, Crude oil storage tanks, Pump house, Indirect Heaters, Electro-static emulsion treaters, ETP etc.
- It consists 12 Nos of High resolution speed dome cameras, Controller with Keyboard, 16 channel Digital video recorder with 500 GB internal storage (for minimum one week storage), 48 inch TFT Displays (3 Nos), Weather proof junction box with power supply unit for each camera, RG11 armoured video cable, power cable, camera mounting structures & accessories.
- The surveillance through CCTV system can be done from the control room as well as from the administrative building of ITF. The CCTV system is independent system from the control system of the Tank farm.
- A separate UPS of 2KVA capacity with SMF batteries is also available in control room.

1.12.2.6 Other General information

- Communication system within the plant premises comprises VHF communication containing base station in the control room & 6 sets of Portable VHF Trans receivers. OIL's intercom phone facilities at strategic locations are also available.
- All the field instruments are designed, manufactured for intrinsic safety, and suitable for operation in Class I, Division 1&2, Group C&D environment and have approval of Directorate General of Mines Safety (DGMS).
- The Housings of the field instruments are of NEMA IV & IP-65 standards.
- All the Motorised control valves are explosion proof duly certified by DGMS for use in Class I, Division 1&2, Group C&D environment.
- All field-instruments run on 24V DC. Zener-Barriers used to power field instruments.
- All the field instruments are provided with lightning protection circuits.
- All the pressure measuring instruments are of diaphragm sealed type.
- All temperature sensors are provided with thermowells.
- All field instruments are immune to Radio frequency & Electromagnetic interference with field strength of 15 volts/mtr or less over frequency range of 50 Hz to 450 MHz.
- The Junction boxes are certified by DGMS (Director General of Mines Safety).
- Broad Specification of Instrumentation CABLES
 - Conductor : Copper
 - Insulation : PVC (Fire retardant)
 - Stranded : 7 strands minimum
 - Shielding : Overall shielded & armoured

1.12.2.7 Instrumentation Equipment/Field Instruments list:

I. PLC System

1. Power Distribution Cabinet (ITF-PLC-PDB-01)

SL. No.	DESCRIPTION	PART NUMBER	MAKE	QTY	UNIT
1	Cabinet W800xD800xH2115	RAL 7035	RITTAL	1	NO
2	Door Switch		ABB Std.	2	NO
3	Fluorescent Tube light 230 VAC		ABB std.	2	NO
4	Handle and Lock		RITTAL	2	NO
5	Lifting eyes		RITTAL	4	NO
6	Name Plate		ABB Std	2	NO
7	ABB Logo		ABB Std.	2	NO
8	Metallic Louvres		ABB Std.	4	NO
9	Drawing Holder		RITTAL	2	NO
10	MCB (2A)		ABB Std.	54	NO
11	MCB (6A)		ABB Std.	24	NO
12	MCB (32A)		ABB Std.	1	NO
13	MCCB (63A)		ABB	4	NO
14	Bus Bars (50Wx200Lx6T)		ABB Std.	8	NO
15	Current Transformer		ABB Std.	4	NO
16	Analog Voltmeter 0-230VAC		AE	4	NO
17	Analog Ammeter 230/5A AC		AE	4	NO
18	Indication Lamp Red		ABB Std.	4	NO
19	Incomer Unfused Terminal Block (grey)	UK6N	Phoenix	2	NO
20	Unfused Terminal Block (blue)	UK5N	Phoenix	74	No
21	Unfused Terminal Block (grey)	UK5N	Phoenix	74	NO
22	Unfused Terminal Block	UK2.5B	Phoenix	37	NO
23	Fused Terminal Block	UK5-HESI	Phoenix	9	NO
24	CT Disconnect TB		Phoenix	8	NO
25	Power Earthing Bar		ABB Std.	4	NO
26	Grey Cable Duct (40x100)		ABB Std.	**	Mtrs
27	Grey Cable Duct (60x100)		ABB Std.	**	Mtrs

2. PLC System Cabinet (ITF-PLC-SYS-01)

SL. No	DESCRIPTION	PART NUMBER	MAKE	QTY	UNIT
1	Cabinet W800xD800xH2115	RAL 7035	RITTAL	1	NO
2	Door Switch		ABB Std.	2	NO
3	Fluorescent Light		ABB std.	2	NO
4	Handle and Lock		RITTAL	2	NO
5	Lifting eyes		RITTAL	4	NO
6	Name Plate		ABB Std	2	NO
7	ABB Logo		ABB Std.	2	NO
8	Drawing Holder		RITTAL	1	NO
9	Louvres with Fan (Metallic Type)		ABB Std.	4	NO
10	Louvres without Fan		ABB Std.	4	NO
11	Power Supply Unit (3A)	SD831	ABB	4	NO
12	Power Supply Voting Unit-20Amps	SS823	ABB	4	NO
13	Processor Unit with Base Plate	PM865	ABB	4	NO
14	CEX Bus Interconnection Unit with Base Plate	BC810	ABB	4	NO
15	Safety CPU Module	SM811	ABB	4	NO
16	Modbus TCP Interface Module	CI867	ABB	2	NO
17	Serial Interface Communication Module	CI853	ABB	6	NO
18	External Battery Module	SB822	ABB	4	NO
19	16 Port Ethernet Switch	Cisco	ABB Std.	2	NO
20	RS232-RS485 Converter (24VDC)		Santelequip	10	NO
21	Receptacle (Telephone Port)		ABB Std.	1	NO
22	Incomer Unfused Terminal Block (grey)	UK6N	Phoenix	10	NO
23	Unfused Terminal Block (grey)	UK2.5	Phoenix	63	NO
24	Fused Terminal Block without LED (Black) 24 VDC	UK5-HESI	Phoenix	45	NO
25	MCB 6A Double Pole		ABB Std.	5	NO
26	Fan Failure and Temperature Unit (FFTDU) 4-20 mA		ABB Std.	1	NO
27	Power Socket with Switch (universal)		ABB Std.	3	NO

28	Power Earth Bus Bar		ABB Std.	2	NO
29	Contractor Key with Selector Switch 1 no., PB(Green) 2 nos., Lamp(green) 1 no.		ABB Std.	2	SET
30	Grey Cable Ducts		ABB Std.	**	Mtrs

3. PLC Marshalling Cabinets (ITF-PLC-MAR-01, 02, 03, 04 & 05)

SL. NO.	DESCRIPTION	PART NUMBER	MAKE	QTY	UNIT
1	Cabinet W800xD800xH2115	RAL 7035	RITTAL	5	NO
2	Door Switch		ABB Std.	10	NO
3	Fluorescent Light		ABB std.	10	NO
4	Handle and Lock		RITTAL	10	NO
5	Lifting eyes		RITTAL	20	NO
6	Name Plate		ABB Std	10	NO
7	ABB Logo		ABB Std.	10	NO
8	Drawing Holder		RITTAL	10	NO
9	Louvres with Fan (Metallic Type)		ABB Std.	20	NO
10	Louvres without Fan (Metallic Type)		ABB Std.	20	NO
11	Power Supply Unit (20A)	SD834	ABB	6	NO
12	Power Supply Voting Unit-20Amps	SS823	ABB	6	NO
13	Module Bus Cluster Modem	TB840A	ABB	24	NO
14	Termination Unit for TB840 Support for RED.IO	TU840	ABB	12	NO
15	Analog Input Module 1x8 ch	AI880	ABB	32	NO
16	Module Termination unit for AI880 (redundant)	TU844	ABB	16	NO
17	Analog Output Module 1x8 ch	AO845	ABB	4	NO
18	Digital Input Module 1x16 ch	DI880	ABB	58	NO
19	Digital Output Module 1x16 ch	DO880	ABB	20	NO
20	Module Termination Unit for DI880, DO880, AO845 (redundant)	TU842	ABB	41	NO
21	AI Barriers	KFD2-STC4- EX1.20	P&F	70	NO

22	AI Barriers	KFD2-STC4-EX1	P&F	10	NO
23	AO Barriers	KFD2-SCD-EX1.LK	P&F	18	NO
24	DI Barriers	KFD2-SFR2-EX1-W.LB	P&F	29	NO
25	DO Barriers	KFD0-SD2-EX2.1045	P&F	10	NO
26	Power Feed Module	KFD2-EB.R4A.B	P&F	8	NO
27	SIL 3 Relays	KFD0-RSH-1.4S.PS2	P&F	580	NO
28	Receptacle (Telephone Port)		ABB Std.	5	NO
29	Incomer Unfused Terminal Block (grey)	UK6N	Phoenix	**	NO
30	Unfused Terminal Block	UK2.5	Phoenix	**	NO
31	Fused Terminal Block without LED	UK5-HESI	Phoenix	**	NO
32	Unfused Earthing Terminal Block		Phoenix	**	NO
33	Grey Knife Edge Unfused Terminal Block	MTK E	Phoenix	**	NO
34	Blue Knife Edge Unfused Terminal Block	MTK BUE	Phoenix	**	NO
35	MCB 6A Double Pole		ABB Std.	11	NO
36	Fan Failure and Temperature Unit (FFTDU) 4-20 mA		ABB Std.	5	NO
37	Power Socket with Switch (universal)		ABB Std.	5	NO
38	Power Earth Bus Bar		ABB Std.	10	NO
39	Instrument Earth Bus Bar		ABB Std.	10	NO
40	Grey Cable Ducts		ABB Std.	**	Mtrs
41	Blue Cable Ducts		ABB Std.	**	Mtrs

4. PLC Workstation and Software

Sl. No.	DESCRIPTION	PART NUMBER	MAKE	QTY	UNIT
SOFTWARE					
1	Compact Control Builder		ABB	1	NO

IT HARDWARE AND SOFTWARE					
1	Contractor Station with 22" LCD Monitors, Keyboards, Mouses	T3020 (CPU), P2214Hb (Monitor), KB212B (Keyboard)	DELL	2	NO
2	PLC Engineering Station with 22" LCD Monitors, Keyboard, Mouse	T3020 (CPU), P2214Hb (Monitor), KB212B (Keyboard)	DELL	1	NO
3	History Station with 22" LCD monitors, keyboard, mouse	T3020 (CPU), P2214Hb (Monitor), KB212B (Keyboard)	DELL	1	NO
4	Network Swiytch	SF300	Cisco	2	NO
5	Large Screen Display (50" LED Display)	50PE	Mitsubishi	1	NO
6	A4 B/W Laser Printer	HP Laserjet Pro 400 Printer M401n	HP	1	NO
7	A3 B/W Laser Printer	HP Laserjet Pro M706n	HP	1	NO
8	Antivirus		McAfee	4	NO
9	MS-Office		Microsoft	4	NO

II. Tank Farm Management System

SL. NO.	DESCRIPTION	PART NUMBER	MAKE	QTY	UNIT
1	CIU Prime	U**T880BBBZZZZ	Honeywell	2	NO
2	CIU Plus	U*SP880RRZZZZZ	Honeywell	2	NO
3	Entis Pro Kernel	U02K876GBH00301S	Honeywell	1	NO
4	Entis Pro Option A	U02A876GBPBLSTG-	Honeywell	1	NO
5	Entis Pro Option B	U02B876GBNEZPZ	Honeywell	1	NO
6	TFMS PC with Monitor		DELL	2	NO
7	CIU Mounting Cabinet		Honeywell Approved	1	NO

8	Cable Glands		Honeywell Approved	1	SET
9	PC Console		Honeywell Approved	1	NO

III. Field Instruments**1. Pressure Transmitter:**

Sl. No.	LOCATION	MAKE	MODEL/TYPE	RANGE	QTY	UNIT
1	Crude Oil Tanks(fixed roof)	Rosemount	3051L	0-1100cm WC	8	NO
2	Fire System	Yokogawa	DP Harp transmitter EJA 438W Style-S2,Suffix EASA-AA5-92EAKS2	0-10 Kg/cm2	1	NO
3	Water Disposal	Rosemount	3051T	0-30 Kg/cm2	1	NO
4	Instrument Air	Rosemount	3051T	0-8 Kg/cm2	1	NO
5	Crude discharge	Rosemount	3051T	0-100Kg/cm2	1	NO
6	Treated Oil inlet to Plate type Heat exchanger	Yokogawa	DP Harp transmitter EJA 438W Style-S2,Suffix EASA-AA5-92EAKS2	0-10 Kg/cm2	1	NO
7	Wet Crude Oil inlet to Plate type Heat exchanger	Yokogawa	DP Harp transmitter EJA 438W Style-S2,Suffix EASA-AA5-92EAKS2	0-10 Kg/cm2	1	NO
8	Eletrostatic Emulsion Treaters – 3 nos	Yokogawa	DP Harp transmitter EJA 438W Style-S2,Suffix EASA-AA5-92EAKS2	0-10 Kg/cm2	3	NO
9	Wet Oil from Storage Tank to H-200A/B/C	Yokogawa	DP Harp transmitter EJA 438W Style-S2,Suffix EASA-AA5-92EAKS2	0-10 Kg/cm2	3	NO
10	Recycle crude from Dehydrator	Yokogawa	DP Harp transmitter EJA 438W	0-10 Kg/cm2	1	NO

			Style-S2,Suffix EASA-AA5-92EAKS2			
11	CODP-1 Suction	Druck	PTX1240	0-200 psi	1	NO
12	CODP-1 Discharge	Druck	PTX1240	0-3000 psi	1	NO
13	CODP-1 Engine Oil pressure	Druck	PTX1240	0-200 psi	1	NO
14	CODP-2 Suction	Druck	PTX1240	0-200 psi	1	NO
15	CODP-2 Discharge	Druck	PTX1240	0-3000 psi	1	NO
16	CODP-2 Engine Oil pressure	Druck	PTX1240	0-200 psi	1	NO
17	Fire Water Discharge Line	Honeywell	STG170 E1G 0000 HC SM ZS A6 LP CC TG MB F1 CA	0-55 Kg/cm2	2	NO
18	TFMS	Emerson	3051TG2A2B21AI1D 4M5Q4S1+1199WDA 95ARTW30DAA7	-1.01 to 10.34 BAR	3	NO
19	Crude Oil Tanks (floating roof)	Honeywell	STD730-E1AC4AS-1- E-CHC-11C	0 -100 psi	2	NO
20	Inlet & outlet line of Crude Oil Tanks (floating roof)	Rosemount	3051TG2A2B21AI1D 4M5Q4S1	0 – 5.5 Ksc	4	NO
21	Treated Oil Outlet to Pump Station	Rosemount	3051TG2A2B21AI1D 4M5Q4S1	0-10 Kg/cm2	1	NO
22	Wet Crude Oil inlet to Plate type Heat exchr	Rosemount	3051TG2A2B21AI1D 4M5Q4S1	0-10 Kg/cm2	1	NO
23	Wet Oil from Storage Tank to H-200A/B/C	Rosemount	3051TG2A2B21AI1D 4M5Q4S1	0-10 Kg/cm2	1	NO
24	Recycle crude from Dehydrator	Rosemount	3051TG2A2B21AI1D 4M5Q4S1	0 – 5.5 Ksc	1	NO
25	Booster pump delivery	Rosemount	3051TG2A2B21AI1D 4M5Q4S1	0 – 5.5 Ksc	1	NO
26	New Air compressor	Rosemount	3051CGGA22A1AM5 B4BFE8D404.	0-16 Ksc	2	NO
27	Boiler 1 & 2	Danfoss	MBS3000060G1133	0-20 Bar	2	NO

2. Control Valve:

SL. NO	LOCATION	MAKE	MODEL/TYPE	RANGE	QTY	UNIT
1	CODP-1 Suction	Druck	PTX1240	0-200psi	1	NO
2	Crude Oil Tanks-8 nos	Fisher Sanmar	ET	0-100 %	8	NO
3	Cooling Water return	Fisher Sanmar	ET	0-100 %	1	NO
4	Recycle crude to Wet Oil Storage Tank	Fisher	Body-Size-6", Port Size-6", Rating-150, Plug-316 SSTequal %, Actuator: Size70, Tp- 667, Bench-15-30, Travel-2", Op6-30	0-100 %	1	NO
5	Natural Gas line to Feed Heaters – 2 nos.	Masoneilan Dresser Valve India Pvt Ltd	Body Size-2",CV-46,Range-6-30psi,Material-ASTM A216 GR WCR	0-100 %	2	NO
6	Natural Gas line to Pre-Heaters – 3 nos.	Masoneilan Dresser Valve India Pvt Ltd	88-21126, 88-21127, 88-21128 Body Size-2",CV-46,Range-6-30psi,Material-ASTM A216 GR WCR	0-100 %	3	NO
7	Dry Crude to Storage tank from Heat exchr	Fisher	ET Body-Size-8",Port Size-8" , Rating-150, Plug -316 SST equal %,Actuator: Size-80, Type-667,Bench-7-37, Travel-3", Op 0-45	0-100 %	1	NO
8	Eletrostatic Emulsion Treaters	Fisher	ET Actuator: Type-667,Bench-7-37,Travel-1-1/8", Operating-6-30,	0-100 %	3	NO

			31 & 32			
9	New Tank farm (steam line)	Forbes Marshall	Body size-6, rating-150, Actuator-UV-60.N, Supply prss.- 4 Bar, Function- Air to open, Kv value-210, Control range-0.6 – 1.4 bar.	0-100%	1	NO
10	New Tank farm (T-209 & 210)	Forbes Marshall	Body size-4, rating-150, Actuator-UIII-300.V, Supply prss.- 4 Bar, Function- Air to open, Kv value-160, Control range-2.2 – 3 bar.	0-100%	2	NO

3. Temperature Element:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Emulsified Wet Crude Oil to inlet of Heat exchr	General Instruments Consortium			1	NO
2	Dry Crude oil from Dehydrator to Heat exchr	General Instruments Consortium			1	NO
3	Dry Crude oil between HXs	General Instruments Consortium			1	NO
4	Dry Crude oil E-200 outlet to Storage Tank	General Instruments Consortium			1	NO
5	Wet Crude Oil From HX outlet to Feed heater	General Instruments Consortium			1	NO
6	Wet Crude Oil From Tank to Pre heater	General Instruments Consortium			1	NO
7	CODP -1 Engine				1	NO
8	CODP -2 Engine				1	NO

4. Temperature Transmitter:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Emulsified Wet Crude Oil to inlet of Heat exchr	Rosemount	3144P	0-100 degree C	1	NO
2	Dry Crude oil from Dehydrator to Heat exchr	Rosemount	3144P	0-100 degree C	1	NO
3	Dry Crude oil between HXs	Rosemount	3144P	0-100 degree C	1	NO
4	Dry Crude oil E-200 outlet to Storage Tank	Rosemount	3144P	0-100 degree C	1	NO
5	Wet Crude Oil From HX outlet to Feed heater	Yokogawa	YTA-110	0-100 degree C	1	NO
6	Wet Crude Oil From Tank to Pre heater	Yokogawa	YTA-110	0-100 degree C	1	NO
7	Crude Oil Tanks 209 & 210	Rosemount	644HAI1J6 M5Q4	0 to 150 degree C	6	NO
8	CODP -1 & 2 Engines	Weed Instrument	Sensor - Mate , Model 4100 Series		2	NO

5. Thermocouple:

SL. NO.	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Crude Outlet from Feed Heaters - 2 nos	General Instruments			2	NO
2	Crude Outlet from Pre Heaters - 3 nos	General Instruments			3	NO

6. Flow Element:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Natural Gas inlet to Feed Heaters - 2 nos	Wika	35026-11 & 35026-12	0-1.0	2	NO
2	Natural Gas inlet to Pre Heaters - 3 nos	Wika	35026-8, 35026-9 &	0-1.0	3	NO

			35026-10			
3	Multimedia Filter - 2 nos	ABB	2600T MWP OVP- 21MPa	6-600kPa	2	NO
4	104-FE-1201	Honeywell	STD720 E1HS4AS 1C AHC 11C B 11A0 F1 0000	10-1000mbar	1	NO
5	Air compressor	Honeywell	ST700/ST80 0		2	NO

7. Flowmeter:

Accessories : Electronic Flow Totalizer with RS-232C/ RS-485 interface for Master Station integration

MASS FLOWMETER						
SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Wet Crude Inlet - 2 nos	Micro motion	1700 Sensor:1700R11ABZE ZZZ Indicator: CMF400M435NQBZE ZZZ	400 M3/HR	2	NO
2	Crude discharge Line- 2 nos	Micro motion	1700 Sensor:1700R11ABZE ZZZ Indicator: CMF400 M999NQBZEEZZZCEQ 8495	350 M3/HR	2	NO
TURBINE FLOWMETER :						
1	Dry crude CODP-1 Despatch	Nuflu				
2	Dry crude CODP-2 Despatch	Nuflu				
3	Clarified Water Disposal	Rockwin Flowmeter India Pvt. Ltd	TFM 1050 F Display : TMTR 8600- MFI			

8. Water in Oil Monitor:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Wet Crude Inlet	Honeywell	High precision, Non-intrusive. Analyser: WCA100-0A-0000020000-1-PMRS Sensor Assembly : YWCS008-0YA0B1-00	0-100%	1	NO
2	Crude oil at outlet of EETs - 3 nos	Honeywell	High precision, Non-intrusive. Analyser: WCA100-0A-0000020000-1-PMRS Sensor Assembly : YWCS008-0YA0B1-00	0-100%	3	NO
3	Crude discharge	Honeywell	High precision, Non-intrusive. Analyser: WCA100-0A-0000020000-1-PMRS Sensor Assembly : YWCS008-0YA0B1-00	0-100%	1	NO

Note to 8: Replacement or upgradation of Water in Oil Monitor may took place during the tenure of the contract and therefore all operation & maintenance of the same shall be under the scope of the contractor.

9. Motor Operating Valve:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Wet Crude Inlet to Plant	Limitorque	L120-20/250NB		1	NO
2	Dry Crude to Storage tank from HX	Limitorque	L120-20/250NB		1	NO
3	Inlet from receipt line - 8 nos	Limitorque	L120-20/250NB		8	NO
4	Crude to dehydration - 8 nos	Limitorque	L120-20/300NB		8	NO
5	Treated crude inlet - 8 nos	Limitorque	L120-20/250NB		8	NO
6	Dry Crude transfer Ln - 8 nos	Limitorque	L120-20/300NB		8	NO
7	Recycle crude from Dehydrator to	Limitorque	L120-20/250NB		1	NO

	Storage Tank					
8	Dry crude outlet from EETs to Storage Tank - 3 nos	Limitorque	L120-10/200NB		3	NO
9	Recycle crude from EETs to Storage Tank - 3 nos	Limitorque	L120-10/200NB		3	NO
10	Crude dispatch Line	Limitorque	L120-10/100NB		1	NO
11	Clarified Water Disposal	Limitorque	L120-10/100NB		1	NO
12	Fire water storage tank & reservoir	Rotork	K150F10E/900NB		4	NO
13	Inlet from receipt line	Rotork	K600 /400NB		2	NO
14	Crude to dehydration	Rotork	K600 /400NB		2	NO
15	Treated crude inlet	Rotork	K600 /400NB		2	NO
16	Dry Crude transfer Ln	Rotork	K600 /400NB		2	NO
17	COCP Suction line	Rotork	K600 /400NB		3	NO
18	COCP discharge line	Rotork	K150 F10A/150NB		3	NO
19	Booster pump suction Ln	Rotork	K600 /400NB		1	NO
20	Booster pump discharge	Rotork	K150 F10A/150NB		1	NO

10. Thermal Relief Valve:

SL. NO	LOCATION	MAKE	MODEL / TYPE	RANGE	QTY	UNIT
1	Dry crude Oil at Cooling Tower & HX	Tycoo			2	NO
2	Steam Lines at Tanks	Tycoo			16	NO
3	New Tank farm	Forbes marshall			27	NO

11. Breather Valve:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Tanks (Floating roof)				8	NO
2	Tanks (Fixed roof)				16	NO

12. Pressure Switch:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Jockey Pump1 - 2 nos	Indfos		4-17 Bar	2	NO
2	Jockey Pump2 - 2 nos	Indfos		4-17 Bar	2	NO
3	Fire Header - 3 nos	Orion		0-8 Bar	3	NO
4	EETs - 6 nos (2nos each)	Switzer	GH 204 05 A4K 55	.08-.4 Bar	6	NO
5	EETs - 3 nos	Switzer	GH 204 05 B7K 55	.7-7 Bar	3	NO
6	Natural Gas Inlet to 5nos of Bath Heaters - 5 nos	Switzer	GH 204 05 A4K 55	.08-.4 Bar	5	NO
7	Foam Pumps	Switzer	GH9032E332		2	NO
7	Boiler-1 & 2 - 2 nos	PRESSOST AT	900-10YY	0-20 Bar	4	NO

13. Level Switch:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Cross Flow Interceptor - 2 nos	Pune Techtrol Pvt. Ltd	DSBESM2DR			NO
2	Induced Gas Flotation Mechanism - 2 nos	Pune Techtrol Pvt. Ltd	DSBESM2DR			NO
3	Bath Heaters - 5 nos	Chemtrol Samil(I) Pvt. Ltd				NO
4	EETs - 3 nos	Chemtrol Samil(I) Pvt. Ltd				NO
5	Fuel Tank of Fire engines	Manohar Valves			7	NO

14. Temperature switch:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Bath Heaters - 5 nos	Switzer	GM-731-OT-Q4C-55		5	NO

15. Temperature gauge:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Wet Crude Inlet	M Guru	6BQSWAA	0-100 degree C	1	NO

2	Discharge from CT Wtr pumps	M Guru	6BQSWAA	0-100 degree C	1	NO
3	Cooling Wtr return line to CT	M Guru	6BQSWAA	0-100 degree C	1	NO
4	Cooling Tower water outlet			0-100 degree C	1	NO
5	Wet CO inlet from HX - 2 nos			0-100 degree C	2	NO
6	Dry CO inlet of HX - 2 nos			0-100 degree C	2	NO
7	Dry CO outlet from HX - 2 nos			0-100 degree C	2	NO
8	Cooling water return line to CT	M Guru	6BQSWAA	0-100 degree C	1	NO
9	Wet CO from Storage Tank			0-100 degree C	1	NO
10	CO outlet from Heaters - 3 nos			0-100 degree C	3	NO
11	At all 5 bath heaters - 5 nos			0-100 degree C	5	NO
12	At all 3 EETs - 3 nos			0-100 degree C	3	NO
13	Service Crude TI-1201, TI-1202, TI-1203, TI-1204, TI-1205, TI-1206, TI-1207, TI-1208	H. Guru	6BQSWS3	0-100 degree C	8	NO

16. Pressure Gauge:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	CODP discharge - 3 nos	H-Guru	Diaphragm type	0-120Kg/cm2	3	NO
2	Suction charge & circulation pump suction lines - 9 nos	H-Guru	Diaphragm type	0-2 Kg/cm2	9	NO
3	Crude oil Circulation pump discharge lines - 3 nos	H-Guru	Diaphragm type	0-4Kg/cm2	3	NO
4	Suction charge pump discharge lines - 4 nos	H-Guru	Diaphragm type	0-6Kg/cm2	4	NO
5	CODP suction line - 3 nos	H-Guru	Diaphragm type	0-6Kg/cm2	3	NO
6	Fire Wtr pump suction - 3 nos	H-Guru	Bourdon Tube	0-2Kg/cm2	3	NO
7	Fire Wtr pump delivery- 3 nos	H-Guru	Bourdon Tube	0-20Kg/cm2	3	NO
8	Fire Pump Header	H-	Bourdon Tube	0-20Kg/cm2	1	NO

		Guru				
9	Jockey pump delivery - 2 nos	H-Guru	Bourdon Tube	0-20Kg/cm2	2	NO
10	Foam pump discharge - 3 nos	H-Guru	Bourdon Tube	0-20Kg/cm2	3	NO
11	FWD pump suction - 2 nos	H-Guru	Bourdon Tube	0-6Kg/cm2	2	NO
12	FWD pump discharge - 2 nos	H-Guru	Bourdon Tube	0-25Kg/cm2	2	NO
13	Cooling Tower (CT) Pump	H-Guru	Bourdon Tube	0-6Kg/cm2	1	NO
14	Cooling Wtr inlet Line to CT	H-Guru	Bourdon Tube	0-10Kg/cm2	1	NO
15	Borewell Discharge	H-Guru	Bourdon Tube	0-10Kg/cm2	1	NO
16	Air compressor delivery	H-Guru	Bourdon Tube	0-16Kg/cm2	1	NO
17	Natural Gas Inlet to EET	H-Guru	Bourdon Tube	0-16Kg/cm2	1	NO
18	Fuel gas line	H-Guru	Bourdon Tube		1	NO
19	Gas line in Bath Heaters - 12 nos (3nos on each)	Wika		0-1.6 K/cm2	12	NO
20	Outlet of PreHeaters - 3 nos	Wika		0-10Kg/cm2	3	NO
21	At ETP pumps - 12 nos	Mass			12	NO
22	At Boiler-1 & 2 - 8 nos				8	NO
23	Wet Crude Oil inlet and outlet at Heat Exchangers - 2 nos				2	NO
24	Wet CO from Storage Tank					
25	Service Water PG-1201, PG-1202, PG-1203, PG-1204, PG-1205, PG-1206, PG-1207, PG-1208, PG-1209, PG-1209, PG-1210, PG-1211, PG-1212, PG-1213, PG-1214, PG-1215	H. Guru	6PSSWS2	0-25 kg/cm2	15	NO

17. Level Gauge:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	At all 5 bath heaters - 5 nos	Levcon Instrument Pvt. Ltd	RS448-2118		5	NO
2	At all 3 EETs - 3 nos	Levcon Instrument Pvt.	ILGD 444-6100		3	NO

		Ltd				
3	FW storage tank - 2 nos	Nivo Controls Pvt Limited	MLF-1000 CRT		2	NO
4	Cross Flow Interceptor				1	NO
5	Induced Gas Flotation Mechanism				1	NO
6	Deoiler Dosing Tank				1	NO
7	At Boiler-1 & 2 - 8 nos				8	NO

18. Level Transmitter:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	ETP Holding Tank	Rosemont	3051T	0-10400 mm WC	1	NO
2	ETP clarified wtr tanks - 2 nos	Rosemont	3051T	0-7000 mm WC	2	NO
3	EETs - 2 nos	Fischer Controls	2493 Displacer: Type-2493, Assy Rating-2'-150, Displacer Rating-1400, Displacer size- 2.38X15.7, Assy Material-CS, Vol- 70,Displacer wt- 4.75lbs,Trim-316/ Displacer- 316.Indicator:Typ-DLC 3010	0-100%	2	NO
4	Process Water Overhead Tank	Levson	Probe : LCP31217: Control unit : LC321351		1	NO
5	Drinking Water Overhead Tank	Levson	Probe : LCP31217: Control unit : LC321351	0-2274 mm WC	1	NO

19. Radar Gauge:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Crude Oil Tank - 10 nos	Honeywell Enraf	RHVBVRZ_AEF0830 /Z		10	NO
2	Fire Water Storage Tank- 2 nos	Honeywell Enraf	RAVH----ACS0805		2	NO

20. Servo Gauge:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Crude Oil Tank - 10 nos	Honey well Enraf	UIAV854C11A2*K* W/Z		10	NO

21. VITO Interface:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1.	Crude Oil Tanks	Honeywell Enraf	UP**762*AG A/Z		10	NO

22. Tank Side Indicator:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Crude Oil Tank - 10 nos (Servo gauge)	Honey well Enraf	977TSI		10	NO
2	Crude Oil Tank & Fire water storage Tank (Radar gauge)	Honey well Enraf	U**B977BSA*****/ Z		12	NO

23. Level Controller:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Induced Gas Flotation Mechanism	Fischer	Assy:Rating-285,Material-STL,Displacer Rating-1200, Size-3x14,Weight-4 3/4 lbs:Volume -99, Mtl: Trim -316,Displacer-NiCu,Torque Tube-NiCu		1	NO
2	Boiler-1 & 2	Malhotra & Bros	62537376		2	NO

24. Magnetic pickup Unit with Pulse Convertor:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	CODP-1 & 2 Engine	Electronics Data	FTC	0-2000 RPM		

		devices	4.02420			
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25. Self Controlled Valve:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Natural Gas inlet to all heaters	Fischer	Max Outlet-125, Max inlet-300, Spring Range-5-15		5	NO
2	Natural Gas inlet to heaters	Fischer	Max Outlet-125, Max inlet-300, Spring Range-5-15		5	NO
3	Foam Discharge Header				1	NO
4	Natural Gas inlet				1	NO
5	Natural Gas header for CODP				1	NO
6	Steam				1	NO

26. Pneumatic Actuated Valve- 50 NB:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Natural Gas inlet to all 5 bath heater - 10 nos (2nos on each)	Rotex	Microfinish BS-5354 Series no-84, DN-50, Class-150 ENDRFE, Max Pr.-19 Bar, Max Tempr. 200°C-11bar/ Sol. Valve.			

27. Bleed Valve-15 NB & Block Valve-15 NB:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Natural Gas inlet to bath heater	Rotex	Bleed Valve Coil-Rotex, Type-111-24V -DC-63/ Type-20101-4-4R, 0-1ATM ,		10	NO
2	Natural Gas inlet to bath heater	Rotex	Block Valve Coil-Rotex, Type-111-24V -DC-63/ Type-20101-4-4R, 0-1ATM ,		10	NO

28. Pneumatic controlled valve:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Treated Effluent	Fischer	2498			

	Discharge		Size;150mm,Angle Open-60,CV-612, End Connection-ANSI 150, Body-A216,WGB,Vane-A351CF 8M, Seat-Vecton,Pack-V7132Y			
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29. Shut Down Valve:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	At Boiler-1 & 2 - 8 nos				8	NO

30. Pressure Regulating Valve:

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	At Boiler-1 & 2 - 6 nos	Vanaz Engineers	4308 Flow-73.5 KSC, Inlet Pr-5 KSC Outlet Pressure-3 Kg/cm2(KSC)		6	NO

31. Safety Valve (Pressure Relief Valve):

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	EETs				6	NO
2	CODPs				3	NO
3	Cooling water pump discharge header				1	NO
4	Fire Water Header				1	NO
5	Discharge of Foam Pumps				3	NO
6	At Boiler-1 & 2				6	NO
7	Safety Relief Valve	Nutech Controls			12	NO

32. IR Point Type Detector

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Tank-201,202,203,204,205,206,207,208, 209 & 210 , MOVs & Pumps.	CROWCON	IRmax	0-100% LEL	20	NO

33. Pitot Tube

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Fire Water 104-FE-1201	STAR MECH Controls (I) Pvt. Ltd.	FTM-86	2277.032 1 mmH2O	1	NO

34. Remote Operated Shut Off Valve (ROSOV)

SL. NO	LOCATION	MAKE	MODEL/ TYPE	RANGE	QTY	UNIT
1	Tank Farm	Pentair Valve Control	F30000		12	NO

2.1 Broad scope of work:

2.1.1 Broad scope of work includes receiving of crude oil dispatched from OIL's different installations containing 25% Bottom Sediments & Water (BS&W) (average per day) (w/w) at the maximum, out of which Bottom Sediments will be insignificant {on rare occasions (2 to 3 days in a month) the percentage of water in the incoming crude oil to ITF may become 30%(v/v)}; processing of the crude to achieve BS&W of 0.15% (w/w) or below; to provide suction to booster pump of adjacent Pump Station, OIL, Tengakhat or sometimes to dispatch to CTF, OIL, Duliajan (or proposed STF, Duliajan) with crude oil dispatch pumps **as per clause no 2.10.1**; treatment of the formation water received at ETP of ITF to achieve less than 10 ppm oil with NIL sludge; disposal of treated formation water to the wells earmarked by OIL or adjacent ETP (5000 KLPD); operation and maintenance of all mechanical, electrical, instrumentation, fire-fighting, water source & supply of potable & process water, steam generation and distribution equipment, facilities and infrastructure (excluding any mason / carpentry jobs) ; housekeeping, one time painting of the plant after 4 years from the date of Work Order; gardening and up-keeping of the entire plant to achieve zero pollutant to the environment.

2.1.2 The Plant includes systems of crude oil receipt and dispatch, crude oil storage tank farms, crude oil dehydration facility, effluent treatment plant inclusive of holding tanks, slop tank, clarified water storage tanks, disposal pumps and pumping system, oily-water-sludge system inclusive of all its constituent underground piping network, gravity separators, OWS separator sump etc, crude oil dispatch pumps and pumping system, boiler batteries, fire fighting network, foam compound system, fire water pumps and pumping system, foam pumps and pumping system, bore well pumps and pumping system, water supply facility for drinking and process water, fire water storage facility, foam tank, fire water reservoirs, all utility pipe lines & fittings, electrical substation and MCC(s), plant electric and illumination, control room along with associated instrumentation covering the above, all civil and other infrastructure facilities (including but not limited sheds, building, bathroom, toilet, office rooms, godown and workshop), green belt, garden & premises. All systems of ITF comprise the equipment, facilities and infrastructures as stated in **clause no 1 and all its sub-clauses and table nos 1.07.1, 1.07.2, 1.10, 1.11 and 1.12.2.7.**

2.1.3 The scope of work under operation & maintenance of the plant includes all that are required for safe, trouble-free & uninterrupted operations of all the systems as stated in **clause no. 2.1.1 and 2.1.2** vis-à-vis all their constituent equipment, facilities and infrastructure of the Plant as per sound industry practices, for a period of six years. Contractor shall be responsible for arranging all resources including competent manpower as per requirements of Indian Mines Act, its bye-laws & other legislations in force; employee insurance & benefits and all resources / facilities for continuous twenty four hour operations on shift basis; public liability insurance; routine, scheduled & break-down maintenance including running repairs and provisioning of relevant spares & consumables in relation thereto, directly or through AMC; general housekeeping & upkeep of the premises including painting of the plant after 4 years from the date of Work Order. Provisioning of spares & replacements shall be as per **as per clause no 2.6**.

2.2 PLANT and PLANT BATTERY LIMITS :

2.2.1 "PLANT" shall mean the entire area of ITF falling within the existing boundary walls of ITF on its four sides. PLANT encompasses all facilities, equipment, machinery, civil structures, sheds & buildings within the boundary walls.

2.2.2 PLANT BATTERY LIMITS is defined below and is meant for defining the custody transfer points of all the products, resources etc (crude oil, formation water, natural gas, fire fighting water, electric power) between the two parties viz M/s OIL and the Contractor. The limits are for defining handover points of different products, resources etc between the two parties in regards to the responsibilities & accountabilities of handling different fluids, resources etc under the contract.

- i) Battery limit for incoming crude oil starts at crude inlet manifold inside the plant and ends at the boundary of ITF on booster suction line of adjacent OIL's pump station or ends at the boundary of ITF on crude delivery line of the Crude Oil Despatch Pumps for treated crude.
- ii) Battery limits for clarified formation water of the plant ends at delivery headers of clarified water disposal pumps for O&M purpose. Normal O&M jobs of the Contractor on ETP's equipment, facility, pipeline, fittings etc ends at this limit.
- iii) Battery limits for Electrical power shall be at a single point inside the plant ahead of booster transformer.
- iv) Battery limits for the fire fighting ring main line ends at 4 (four) isolation valves as stated in **clause 2.4 (xii)**.
- v) Battery limits for Natural gas for fuel, servo system or otherwise shall be at a single off-take point inside the plant. Battery limit for natural gas shall end at the flare header meant for flaring of the gas that would be in surplus of plant usage. Should oil carry over to the flare, the Contractor shall be responsible & accountable for the same, its rectifications and any other statutory implications that may arise.

2.2.3 In no other circumstances what so ever except the above **clause no 2.2.2**, PLANT BATTERY LIMITS is applicable. The Contractor cannot and shall NOT use PLANT BATTERY LIMITS in any cases related to scope of work of O&M of the PLANT.

As an example, the work under **clause no 2.9 (i)** includes removal and disposal of cut grass etc at OIL's designated places at distances of around 1.0 km from ITF. Plant Battery Limit shall NOT be applicable in this case and cases similar to this.

2.3 Power and duties of Contractor: Contractor shall take all appropriate steps to maintain in force & execute the Contract in accordance with the terms of the Contract. All operations and maintenance 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.

2.4 HSE (Health Safety and Environment):

i) Contractor shall operate and 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, Indian Boiler Regulations 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.

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 fulfill all legal formalities with respect to the Health, Safety and Environmental aspects of entire O&M 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 O&M jobs at ITF, 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. All terms & conditions under **clause no 2.4 and 5.1** shall be applicable to all persons of Contractor deployed at ITF.

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 ITF. 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 60 days from LOA of the contract - shall prepare written Site Specific Safe Operating Procedure (Site Specific SOPs) 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 all the risks that may arise to men, machineries & material during execution of any O&M jobs to be done by the Contractor and how it is to be managed. The Contractor shall provide a copy of the SOP to the Installation Manager or his deputed competent persons at ITF who shall be supervising the Contractor's work. The Contractor shall keep an up-to-date SOP and provide a copy of the changes to OIL's person as above.

Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for that purpose he may deploy adequately qualified and competent personnel. For work of a specified scope/nature, he should develop and provide to the mine owner a site specific code of practice in line.

If HSE policy / SOPs of the Contractor or part thereof is/are considerably different from OIL's HSE policy leading to confusion of procedural steps /SOPs, the Contractor must frame draft of "Bridging Document" with roles and responsibilities clearly defined in regards to the concerned parts for making a uniform HSE policy for O&M of ITF. This draft must be furnished to OIL within 2 months from LOA of the contract. A final "Bridging Document" will be put in force after discussion on the draft among the two parties in conjunction with HSE departments of both the parties.

v) 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 non-compliance is corrected.

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) Contractor has to take material quality certifications from OIL's technical team in case Contractor changes any part of machine / equipment / unit etc during maintenance work. Contractor will be solely responsible in case of accident or further damage to equipment caused due to supply of sub-standard & spurious material during maintenance works not certified from OIL's technical team.

vii) Contractor shall carry out **Daily Plant General Inspection** in the entire plant asset-wise or area-wise. Contractor shall do visual inspections of all equipment; facilities etc wherever possible and indentify level of deposition, attrition/depletion, and deterioration in materials. Contractor shall also identify and ascertain likelihood of material deterioration at any part of all equipment, facilities etc where the same can be carried out with the help of checking-tools. (eg tank bottom condition by CP checking).

The Contractor shall also indentify likelihood of any related unsafe working environment due to the above and promptly inform OIL.

The Contractor shall be responsible for any unplanned circumstances / events in the plant operation that may take place due to material failure resulting from O&M jobs of the Contractor. The Contractor shall also be responsible for failure to identify or to report any abnormality as above not leading to subsequent unplanned circumstances / events. The cause(s) of such circumstances / events shall be investigated by OIL's technical team and finding thereof shall be final.

viii) Mines Manager, Production Services 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 ITF. Appointment of the competent persons is not a pay-roll appointment.

ix) All persons deployed at ITF by the Contractor must undergo Mines Vocational Training, Initial Medical Examination, Periodic Medical Examination and other requisite statutory trainings like but not limited to fire fighting 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 Centers 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 MVT 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 filed Head Quarter, 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 O&M jobs.

x) Every person deployed at ITF 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 ITF without PPE and such debarring of any of the Contractor's person(s) may lead to penalty under **clause no 6.0** of TOR vide Man power **clause no 5.1** if Contractor cannot arrange substitute(s) for the debarred person(s).

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. 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.

xi) The Contractor must also possess various other safety items including but not limited to 2 (two) fire suits , 1 (one) lifting-jack for rescuing trapped persons, high intensity safety torches (minimum 5 nos), various leak plugging gadgets etc.at site. The Contractor shall have to keep FIRST AID BOXES at all primary sites of the plant like control room, administrative building, fire fighting pump station, EET, Bath Heater shed, ETP, Boiler, Pump house area, CODP etc. All the FA boxes must have all the required and fresh batches of medicines and other items. In case of failure of the Contractor to provide the above safety gadgets at the plant, **Clause number-1 of Penalty Clause no. 6.0 (ii)** will be imposed on Contractor.

xii) Contractor must maintain all firefighting equipment, appliances and entire fire fighting operation for round the clock availability in 100% operational condition. In this respect, all terms and conditions under clause no 2.6 for maintenances and provisioning of items etc including **Penalty Clauses under 6.0 of TOR-I** shall be applicable and adequate manning of Fire fighting system shall be as per man power **clause no 5.1**.

Regular maintenance & servicing jobs and operations need to be followed for firefighting system of the plant as per the format in **Annexure-I**.

The Contractor shall carry out Painting & Hydrostatic test (at 30kg/sq.cm) of the DCP Extinguisher along with cap & hose assembly once every three years and that of CO2 extinguisher before every refilling or once in 5 years, whichever is earlier at their cost.

The details of the extinguisher Painting & Hydrostatic test is shown in Annexure-I. Plant painting as per **clause no 2.10.4** does NOT include the painting of the above mentioned extinguishers but includes painting of other Firefighting equipment (i.e. Monitors, Hose boxes, Hydrants, Foam Tanks, Inductors etc.) & Fire water ring main.

Contractor must keep all the drenching pumps and jockey pumps in full operational condition at all time and keep the entire fire fighting pump system in Auto Mode. For that purpose, ring main pressure must be maintained at minimum 7 Ksc as per design of installation requirement with the help of the jockey pumps.

Fire water ring main line is connected to three (3) more adjacent OIL's installations at 4 (Four) points with isolation valves. Battery limit for the ring main line ends at the 4 (Four) isolation valves as already stated in **clause 2.2.2 (iv)** above. Operating these 4 (Four) isolation valves is under the scope of the Contractor for this contract. For maintaining the system in Auto Mode OIL may decide to keep the 4(four) isolation valves in shut-in state or keep the jockey pump (motor driven) in continuously running state. In the first case, the Contractor must ensure shut-in of the valves and the Contractor must immediately open the valves for Mock Drill and Fire Fighting at any of the OIL's two adjacent installations. Maintenances of the 4(four) isolation valves are entirely under OIL's scope.

All the drenching pumps and jockey pumps must be put to different test with test-frequencies as stated in Annexure-I. Routine checks, periodic inspection, maintenance & testing as per the requirements of OISD-STD-142 need to be done for all other firefighting equipment of the plant.

Reports of all testing / checks / inspection / observations etc conducted on firefighting system and any corrective actions required / taken are to be as per **clause no 4.1 (v)**.

The formats under Annexure-I are for general guidelines on the required activities of maintenance and/or servicing jobs along with their required frequencies of firefighting units of the plant. All these activities in the formats shall be only a part of the total maintenance and servicing jobs and are not exhaustive. The Contractor cannot and shall not decline to do any other activities required for trouble free, smooth uninterrupted 24 hour operation of ITF as per safe & sound industry practice.

OIL and/or the Contractor - after consultation & consent from OIL - may include / change / modify any formats for maintenance and/or servicing jobs at any point in time during the currency of the contract.

In case of Contractor's failure specifically to maintain Fire Fighting pumps in Auto Mode, and ring main pressure at minimum of 7 Ksc , failure to start any drenching pump and

failure to comply other terms stated in this clause no 2.4 (xii), **Clause number-2** of **Penalty Clause no. 6.0** (ii) will be imposed on the Contractor.

xiii) Contractor must always check the quality / usability/ quantity of the AFFF i.e Aqueous Film Forming Foam available at site. The AFFF compound needs to be replaced as per **Clauses no 2.6.1** when the compound loses its quality or when its self-life/ validity expires whichever is earlier. In case of non-availability of the AFFF of the required quality at ITF, **Penalty Clause number-2** will be imposed on the Contractor.

xiv) Contractor must conduct Fire Mock drills at ITF once every fortnight. Fire water ring main line is connected to three (3) more adjacent OIL's installations namely Tengakhat OCS, Tengakhat ETP and Tengakhat Pump Station at 4(four) points with 4(four) isolation valves. Fire fighting operations must cater to the needs of these three installations for Fire Mock Drills and Fire Fighting Scenario. Expenses of monthly Mock Fire Drill at these three installations has already been incorporated in the contract cost and expenses on fire fighting for the three installations will be reimbursed on actual.

xv) The Contractor shall have to obtain / renew Provisional Steaming Order (PSO) and carry out all statutory boiler inspections as per IBR clause numbers 383, 384 and 395 on yearly basis. The inspection must include the following one

- a) Inspection of tubes.
- b) Inspection of de-super heaters, steam receiver, feed heater, flanges etc
- c) Inspection of valve fittings etc.

All the necessary fees for the regular PSO and the inspections of Boilers as above shall be borne by the Contractor.

xvi) Contractor will provide all necessary support & co-operation in terms of resources, man-power and other facilities if OIL decides to obtain any HSE related certifications including but not limited to ISRS, ISO, OHSAS at ITF.

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 and monitoring safe operation.

xvii) The Contractor must carry out all operation and maintenance 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.

The new additional units / facilities will comprise minor changes only and there shall not be any additional man-power requirement. The O&M including of such additional items

shall have to be carried out by the Contractor without any cost implication. Any consumables on such additional units will be borne by OIL.

2.5 Day to day Processing & Operating jobs (Crude Dehydration Process, Effluent Treatment Process, Boiler Running, Water filtration, Flow Improver Injection Set up) :

The Contractor must carry out all the processes as described in Process Descriptions under Clause no 1.02 and carry out all related operation and maintenance jobs for smooth, trouble free, uninterrupted, full-capacity and safe operation of the plant.

The Contractor shall have to do all that is necessary in carrying out the primary process of crude oil dehydration. The primary activities that the Contractor shall have to be mindful of in the pursuit of the above include but in no way limit to the following:

- a) All the bath heaters run normally with 10(ten) burner-flames working at their optimal capacities with bath temperature reaching near 100° C
- b) All boilers are running normally giving steam in full blast and storage tanks temperatures never falling down 50° C even at sever winter nights.
- c) All the chemical dosing pumps dosing of different chemicals into the EETs &/or into the tanks are running normally and chemicals are being injected at near-stipulated ppm.
- d) All the Flow Improver Injection pumps dosing of Flow Improver chemicals into the Crude Oil Pipe Line are running normally and chemicals are being injected at stipulated ppm.
- e) All tanks with all ancillaries and crude circulating pumps are fully operational.
- f) At least 2 (two) of the 3 (three) EETs are fully operational. All electrics / instruments of the EETs are fully functional. All electrodes and their connections / ammeters / voltmeters / transmitters / switches are to be fully alright at all point in time.
- g) All mechanical parts in the process conduit including the conduit itself namely piping etc are fully operational.
- h) All Formation Water disposal pumps are in running conditions and capable of disposing maximum 1200 KLPD of clarified formation water having oil content of less than 10 ppm.
- i) All COCPs and booster pumps are in running conditions with their maximum rated flow & pressure and associated seals & valves should be leak free.

2.5.1 The performances of the Contractor shall be judged on the following specifications:

- i) Plant performance as well as performance of the Contractor in plant operation shall be firstly determined by “DESIRED PERFORMANCE LEVEL” of the PLANT which means trouble-free operation of the PLANT with stipulated BS&W content of 0.15% or less in the

treated produced crude and oil content of less than 10 ppm with NIL sludge content in the clarified effluent water.

BS&W content in percentage (v/v) of treated crude for this purpose shall be determined by 3(three) ways on daily basis and by 4th way occasionally. The daily determination of BS&W content shall include real time values given by Water In Oil Monitor with its trend curve, TMB (Top-Middle-Bottom) sampling as per ASTM & auto-sampling. Occasional 4th way shall be sampling of treated crude at sample collection points on ITF outlet line by manual collections of spot / representative / master samples.

Results of sampling from any one of these samplings not meeting the stipulated BS&W content of 0.15% shall mean departure from “DESIRED OPERATIONAL PERFORMANCE LEVEL” of the Plant and of the Contractor.

BS&W content of the incoming crude oil to ITF shall be measured on real time basis by Water in Oil Monitor with its trend curve. In case of non-availability of the same, the Contractor shall have to carry out the following:

- a) Fill up the tank receiving incoming crude oil.
- b) Change over the receipt and retain the tank for few hours.
- c) Take manual dip with water-finding paste applied on dip-tap.
- d) Calculate/find out water quantity from the water finding paste dip.
- e) Take 2% of total crude oil volume received in the tank.

Water quantity in the tank shall be deemed to be equal to amount as per (d) Plus (e)

ii) Sampling and testing: Sampling of different samples at ITF will be as per SOPs. Testing of Formation Water of ETP shall have to be carried out by the Contractor at ITF-laboratory. All chemicals required for testing of Formation Water samples must always be available at ITF.

The number of TMB sampling to be taken in a particular day will be at least equal to number of dry-tank(s) taken for custody transfer to OIL on that day. However, Contractor may need to carry out few more sampling than above as per OIL's advice. Auto sampling will be at adjacent Pump station. Contractor must take Manual sampling along with OIL's personnel when OIL advises. Custody transfer of treated crude shall start only after sample testing and confirmation of sample results by OIL.

Contractor needs to carry out sample-testing of all Formation Water and TMB samples at ITF in front of Installation Manager or his representative on all days. Disposal of formation water and dispatching of crude oil can only be started after sample testing and confirmation of results thereafter.

Finalization of results of TMB, Auto and Manual samples will be as per testing report by Chemical Dept OIL. Key personnel or any representative of the Contractor shall witness sample testing at OIL's laboratory. If the Contractor fails to depute their personnel in the laboratory, subsequently it cannot and shall not raise any complaint or ask for re-testing if sample results come out to be beyond stipulated levels.

The FW sampling and testing are to be done on 2-hourly basis during disposal. Additionally, FW sampling and testing shall have to be done from clarified tank(s) prior to taking a tank for disposal of FW to OIL's well on any day. However Contractor may need to carry out few more (2 to 3) sampling and testing than above as per OIL's advice. Disposal of formation water shall start only after confirmation of the sample results by OIL. For night-time disposal of FW day-time planning of sampling and testing shall be carried out by the Contractor.

Actual conduct of sample-testing of all formation water and crude oil samples at ITF shall have to be in front of the Installation Manager or his representative on all days. In the absence of the Installation Manager or his representative at the plant on any day(s), these samples shall be stored safely and properly in pots with proper tags. These samples shall be tested subsequently on the next day of his presence at the plant.

In case of failure of the Contractor to do any sampling and testing activities stated above will invite penalty on Contractor as per **Penalty Clause number-3** of **clause no. 6.0 (ii)**.

iii) The Contractor must carry out minimum total processing of 6000 KLPD of crude oil per day. [Total processing = 80% of 2 EET's processing capacities = $0.8 \times 3750 \text{ KLPD} \times 2$]. In case OIL's supply of crude oil to ITF is not sufficient for achieving the processing limit on a day, this specification will not hold good for that day. Further, should OIL supply crude oil to ITF having water cut above 20%, the processing limit will be reduced accordingly. [$\{\text{excess water in KLS} / 50 \text{ KL per Hr of ETP}\} \times 250 \text{ KL per Hr}$]

In case of failure of the Contractor to achieve the capacity will invite penalty on the Contractor as per **Penalty Clause number-4** of **clause no. 6.0 (ii)**.

iv) (a) The bath heater's bath temperature must not fall below 90°C and crude-temperature leaving bath heaters must not fall below 65°C on all days in a year.

(b) Steam pressure in boiler outlet must be 10Ksc; steam must be available at 7Ksc at all the crude storage tanks. Boiler feed water treatment shall be in conjunction with **clause no 2.5.5 (ii)** and shall be such that all steam coils of tanks must be scale, rust and deposition free [which needs to be ascertained as per **clause no 2.4 (vii)**].

(c) All 08 (eight) chemical dosing pumps shall have to be in operational state at all time. The Contractor shall have to maintain the dosing pump system at full running condition at all time. Chemicals to be dosed shall include anti-scalant, de-oiler, oil soluble demulsifier (OSD), corrosion inhibitor, bactericides, flow improver, pour point depressant etc but OIL will change / replace any chemicals as per operational requirements. The Contractor shall have to dose all chemicals as advised by OIL at near stipulated ppm. Some chemicals may require heating prior to their dosing at facilities to be provided by OIL. The Contractor shall have to carry out job heating / imparting heat to chemical as per requirements. The Contractor shall submit the report of all chemical dosing with their dosing ppm rates etc on daily basis.

Note: The PPD Dosing pumps may be replace with varying range pumps during the running of the contract. The Contractor has to do the O&M of the pumps if it is replaced during the contract period.

In case of failure of Contractor to meet the above specifications of O&M of boiler, bath heaters & chemicals penalty on Contractor will be imposed as **Penalty Clause no.-5** of **clause no. 6.0 (ii)**.

v) Skim oil, from holding tank of ETP, must be evacuated regularly to slop tank; amount of skim oil shall NEVER be more than 30cm at the holding tank.

Deoiler dosing must be regularly done at recommended rate of dosing. Supply of deoiler will be under the scope of OIL.

All parts and component of CPI / IGF / MMF and all surface drains surrounding ETP must be oil and sludge free at all time. No FW shall spill out of ETP or any of its units & equipment and no FW shall flow to the surface drains.

- a) Cleaning frequency of CPI and IGF shall be once in a month.
- b) Back washing frequency of MMF shall be once in each shift.
- c) Change of all media of MMF shall be once in a quarter.
- d) Cleaning frequency of clarified water or holding tanks shall be once in 6 months.
- e) Holding tank oil skimming frequency as per requirement as stated above.

De-oiler stock at ITF and De-oiler tank-dips must be recorded on the daily morning report. All the above jobs from (v)(a) to (e) are to be properly recorded by one of the shift engineer of the Contractor in bound paper book and countersigned by Installation Manager or his representative on back to back basis. The Contractor shall depute one of the shift engineers in all 3 shifts for looking after all O&M activities at ETP of ITF.

In case of failure of the Contractor to meet the above specifications of O&M of the ETP, penalty will be imposed on Contractor as per **Penalty Clause number-6** of **clause no. 6.0 (ii)**.

vi) The Contractor shall have to carry out disposal rate determination of OIL's Formation Water disposal wells for 2 hours on each day by pumping clarified water on a single specified flow-line connected to a particular well. Further – on advice from OIL - the Contractor shall maintain and monitor pressurized condition on any specified flowline and record the same on half hourly intervals.

The report / record of disposal rates and that of half -hourly pressures shall have to be submitted next day.

vii) The Contractor shall have to maintain all the pumps of ETP and keep them in running conditions always at their full potentials and operate the pumps for disposing a daily limit of 1200 Kiloliters of clarified formation water having less than 10ppm oil content. The Contractor can or shall have to operate 4(four) pumps simultaneously by engaging one (1) pump of each pair at a time.

The Contractor shall have to dispose clarified formation water having oil content of less than 10ppm for the maximum amount out of the following alternatives:

a) Daily treated amount of formation water at ETP to a maximum limit of 1200KLPD.

OR

b) Daily disposal amount by running formation water disposal pumps for daily cumulative **96 hours (8 pumps x 12 Hrs)** with 4 pairs of the pumps(01 running; 01 standby).

2.5.2 Contractor must carry out all the above jobs for achieving the primary objective as stated in **clause no 2.5**. During execution of the jobs, the Contractor shall carry out all routine and schedule/preventive maintenances and servicing jobs on all the equipment and facilities used in carrying out the jobs as per formats given in **Annexure- I, II & III** and other maintenance schedules to be provided by OIL as stated in **clause no. 2.6.1**.

These formats under Annexure- I II & III are for general guidelines on the required activities of maintenance and/or servicing jobs along with their required frequencies of all mechanical units of the plant.

All these activities in the formats shall be only a part of the total maintenance and servicing jobs and are not exhaustive. The Contractor cannot and shall not decline to do any other activities required for trouble free, smooth uninterrupted 24 hour operation of ITF as per safe & sound industry practice.

OIL and/or the Contractor - after consultation & consent from OIL - may include / change / modify any formats for maintenance and/or servicing jobs at any point in time during the currency of the contract.

However – as stated in forthcoming **clause no 2.5.4**, the scheduled / emergency breakdown maintenance services of the boilers are specific in nature.

In case of failure of the Contractor to do any of the maintenance and servicing jobs as above and fill up any of the formats as per schedule, penalty on the Contractor will be imposed as per **Penalty Clause number-10** of **clause no. 6.0 (ii)**.

2.5.3 Contractor must carry out all the above processes in clean, safe and environmentally friendly ways; must avoid all sorts of pollution & contamination of the surrounding areas & environment. Contractor-performance will be judged on following specification

i) Entire Oily Water Sludge (OWS) system must be in complete operational state on all days in a year. Presence of oil, oily water sludge & water in the system shall be at minimum level.

Non-compliance/non-performing of this job will be judged by fluid levels in all the OWS gravity separator pits available at different parts of the plant and in the final OWS separator sump available at the ETP. The levels as above shall NOT be more than 50cm from the bottom of each OWS pits & sump.

In case of failure of the Contractor to maintain the above specifications, penalty on the Contractor as per **Penalty Clause number-7** of **clause no. 6.0 (ii)** will be imposed.

ii) All surface drains surrounding the plant must be free of oil, oily water sludge, formation water and/ or any other ingredient, organism etc coming with the feedstock of ITF. Side walls and bottom of all surface drains shall be free from any deposition, stain / marks or smudges. This job is particularly for cleaning of oily dirt etc and is separate from general drain cleaning activity stated in **clause no 2.9 (ii)**.

iii) All cleaning activities of equipment (eg pump-strainers etc), facilities, and infrastructures and their parts & components shall be done in a way that oil, dirt and any other residue are confined to the OWS only and are not allowed to spill or spread to any other parts of the plant.

iv) Any oil marks / smudges / oil sludge on ground or on any surfaces must immediately be cleaned / scrapped and disposed safely at OIL designated place(s).

NOTE:

a) Non compliance / non-performing of the jobs under clauses (ii), (iii) & (iv) above will be judged respectively by

a-(1). Presence of formation fluids or their deposition(s) on the surface drains of ITF during any time of a month for (ii) above.

a-(2). Presence of oil-spillage &/or spread into drains, equipment, facility, road, vacant parts of plant during any time of a month for (iii) above.

a-(3). Presence of oil stain / marks / smudges etc at any area of the plant during any time of a month for (iv) above.

Monthly O&M bill-payment shall be deducted accordingly for non-completion of the Contractor's any or all of these 3 jobs as per **Penalty Clause number-8** of **clause no. 6.0 (ii)**.

b) The Contractor shall have to collect the oil-spillage / oily sludge / oily soil, sand and all other materials generated after execution of jobs under **clauses (ii), (iii) & (iv) above** and transport the same in a safe manner to the oily water sludge pit.

2.5.4 **Boiler Maintenances:**

The Contractor shall have to carry out 06 (six) monthly maintenance jobs and emergency boiler maintenance jobs. The activities of the boiler maintenance jobs are at Annexure-III. The implementation of 06 (six) monthly boiler maintenance jobs is a statutory requirement and report of the same to be submitted to Boiler Inspector.

The Contractor shall have to be fully equipped with all tools & tackles like but not limited to boiler maintenance tool boxes, tool kit-sets, tube expander etc for all maintenance jobs of boilers. Some of boiler-maintenance tools may be required to be consumed during the jobs but shall be deemed tools to be provided by the Contractor.

The Contractor shall have to provide all the boiler maintenance services in stipulated frequencies as enumerated Annexure-III, the cost of which inclusive of all tool costs is to be

included in the contract. The said boiler maintenances services in Annexure-III are therefore specific as stated in **clause no 2.5.2**.

2.5.5 **Source, Supply & filtration of process-water and drinking-water**

i) There are 04 (four) nos of around 200 meter deep tube wells with FLP motors & pumps. There is an iron removal drinking water plant of capacity 25 to 150 cum/hr to cater for water supply in the fire- fighting facilities.

i) The Contractor shall maintain quality of water used for process, service and drinking purposes. The quality of the water shall be as per BIS (IS-10500:2012) which defines the desirable limits of various parameters of water as below:

Sr. No	Characteristic	Unit	Drinking Water	Boiler Feed Water
1	Appearance	-	Clear	Clear
2	Turbidity	NTU	5.0 (max)	Nil
3	pH	-	6.5 to 8.5	8.5 to 9.5
4	Total Hardness	mg/l	200.0 (max)	5.0 (max)
5	Iron	mg/l	0.30 (max)	0.02 (max)
6	Chloride	mg/l	250.0 (max)	200.0 -220.0
7	Total dissolved solids	mg/l	500.0 (max)	300.0 (max)
8	Dissolved Oxygen	mg/l	-	0.5 (max)
9	Alkalinity	mg/l	200.0 (max.)	-
10	Mineral Oil	mg/l	0.5 (max.)	-
11	Silica	mg/l	-	0.02 (max)
12	Arsenic	mg/l	0.01 (max)	-

The Contractor must do the needful to eliminate heavy metal components (like Ca, Mg, Pb, Zn, Cr, Al, B, Cu etc) to minimum level as per BIS (IS-10500:2012).

ii) The Contractor shall do all required filtration jobs and chemical treatments of water for maintaining the quality as above. For that, purpose the Contractor must maintain ready stock of all chemicals including but not limited to bleaching powder, chlorine, Mg, resin etc. Regeneration of chemicals used for treatments of boiler feed water shall be once in a day. Hardness testing to be done by pH tester on all days.

Non-compliance of the above will be judged by absence of testing records and stock records of chemicals.

iii) In case bore wells become non-functional and / or quality of water becomes unacceptable and beyond maintenance/serviceable, OIL shall replace the wells with new wells. The Contractor shall have to provide service for lowering of the bore wells cost of which to be included in the contract. Such occurrence of lowering of bore-wells may be considered to be twice in a year.

In case of failure of Contractor to do the jobs and to maintain the specifications mentioned in all sub-clauses of 2.5.5 as above, penalty on Contractor will be imposed as per **Penalty Clause number-9** of **clause no. 6.0 (ii)**.

In case of failure of the Contractor to maintain stock of chemicals/ consumables etc in conjunction with clause no 2.6.2 below, penalty on the Contractor will be imposed as per **Penalty Clause number-13** of **clause no. 6.0 (ii)**.

2.6 Routine, breakdown & schedule maintenance and repairing, servicing of equipment:

The Contractor shall carry out regular maintenance, repair, servicing jobs and scope of such jobs shall extend to all equipment / facilities / infrastructure / units of the plant required for mechanical (pumps, engines etc), instrumentation, electrical, boiler, fire fighting, water supply systems and all other systems as stated in broad scope of work under clause no 2.1.2.

Definition of Spare: The equipments / facilities listed under plant description under clause no 1.01 to 1.04 and all units / subunits as tabulated in the table nos 1.07.1, 1.07.2, 1.10, 1.11 and in 1.12.2.7 are the assets of OIL at ITF. All constituent serviceable parts and components of the above equipment, facilities, units of the plant are the spares required for their maintenances (scheduled/preventive and break-down maintenances) as well as for keeping them operational so as to continue their safe, trouble free and uninterrupted operations. 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 as per this clause of the contract.

Scope of supply & provisioning of spares & consumables and execution of all types of maintenance jobs shall be as per following **clauses no 2.6.1 to 2.6.3**.

2.6.1 OIL's scope of supply and provisioning of Spares, Consumables and Replacements.

i) OIL shall bear the entire cost of all spares and replacements including expenses on their procurement process and supply at ITF except for the items coming under the scope of the Contractor as stated in **Clause no 2.6.3**.

ii) OIL shall be responsible for supplying, provisioning and inventorying of spares, ~~consumables~~ and replacements required for scheduled / preventive maintenances, major repairs and major breakdown maintenances. **Penalty Clause number-14** for breakdown maintenance shall be applicable irrespective of scope of spare supply.

Contractor shall be provided with schedules of all scheduled maintenances of units / facilities / equipment stated in **clause no 2.6**. The Contractor can put forward additional /modified list of maintenance schedules of the above based on OEM recommendations or other technical justifications etc along with items, quantities, source & values of spare-items required in regards to such additional / modified maintenance schedules within 90 days from Work

Order. Such additional / modified list of maintenance schedules shall be reviewed by OIL and incorporated if found justified.

Contractor cannot and shall not claim the maintenance-schedules given by OIL to be improper at a later time than 90 days from Work Order. Likewise the Contractor cannot attribute any fault (malfunction / breakdown / under- performance etc) of any unit of ITF that may take place at a later time than 90 days from Work Order on the ground of OIL's improper maintenance-schedules.

iii) OIL 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 operational jobs or routine maintenances (as per attached check lists / log sheets / maintenance schedule etc in Annexure-I to VI)

Penalty clauses in regards of the reason(s) for replacement units &/or capital nature units shall remain applicable irrespective of scope of spare supply

iv) OIL shall provide all chemicals required for day to day crude oil processing operations. This shall include demulsifier, deoiler, anti-scalant, corrosion inhibitor, pour point depressant, bactericide etc. OIL shall also provide Monoethylene Glycol for use in bath heaters.

v) OIL shall supply all capital nature safety items like AFFF, oil sorbent for oil spillage arresting, lift up jacks, fire hoses, foam pick-up tubes etc as and when asked by the Contractor subject to OIL's preliminary checking of the requirement and also to availability of the items with OIL.

In case of AFFF, availability of required quality is the responsibility of the Contractor as per **clause no 2.4(xiii).**

2.6.2 Contractor's scope of doing the purchasing process on behalf of OIL for Supply of Spares, Consumables & Replacements.

The Contractor- on behalf of OIL - shall do all the necessary jobs for procurement of spares, consumables and replacements and supply of the same at ITF for sets of items enlisted below.

Contractor's entire expenses in procurement and supply of any spare items at ITF as above shall be reimbursed to the Contractor as handling charge at a rate of **10%** above the OEM quoted prices of equipments or above the item-price as per vouchers/memos submitted by the Contractor.

In cases of purchase of items from foreign market etc, OIL shall pay the Contractor all invoiced amount including the price of the item, duties & taxes wherever applicable, freight & transportation charges or any other expenses subject to furnishing all supporting purchase-documents in that regard. Contractor shall be paid an additional amount of **5%** on invoiced

price of the item as administrative cost. On emergency cases as per advice and permission from OIL, the Contractor shall have to arrange air-freight of items which shall be reimbursed to the Contractor on actual after submission of supporting documents.

The Contractor shall have to follow **OIL's prevailing set of rules for procurement** of the items viz procurement from L1 bidder selected from multi quote bidding (minimum 3 quotes) / from proprietary source / from OEM sources etc. The Contractor shall have to take certification from OIL on the quality of items purchased by the Contractor prior to use / inventorisation as and when advised by OIL for the same.

The Contractor shall initiate the procurement process by submitting to OIL about their intended purchase of items including quantities, make / brand / manufacturer's name etc against each item. The Contractor shall take next steps in its procurement process only after taking approval / permission / certification from OIL.

For procurement of items coming under petty expenses / local purchases / multi-brand etc, OIL's prevailing procurement process may not be required to be followed and Contractor 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.

Items coming under Contractor to do the purchasing process are as below:

i) For 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 in Annexure-I to VI) and running repair-jobs.

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 etc of FW disposal pumps, various regular spares of processing pumps, fire fighting pumps & engines 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 to do the purchasing process within 180 days from LOA. Contractor shall compile the initial list from description of equipment / facilities in this document (clause nos stated in 2.6 under "definition of spare") and from routine maintenance check lists / log sheets etc attached as annexure of the bid document. Contractor can also visit ITF for having better insight before taking over of O&M services of ITF.

b. A list of **some such items is given in Annexure A, B ,C** 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 to do the purchasing process thereof at any point in time during the currency of the contract.

d. The inventory of such items shall be at ITF. 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 Contractor must maintain enough stock of each item in the inventory at ITF at all time. 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 number-13** of **clause no. 6.0 (ii)**.

ii) On 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 come under OIL's scope of supply as per clause no 2.6.1 above and which are not included in the list of items under Annexure- A, B and C.

iii) 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 OIL's scope of supply. Contractor shall provide such quotation(s) or respond otherwise in writing within 7 days from OIL's written request for the same.

The Contractor cannot and shall not decline to carry out the procurement process on behalf and on advice of OIL as per this **clause no 2.6.2**. 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 ITF, **Penalty Clause number-13** of **clause no. 6.0 (ii)** shall be imposed on Contractor.

2.6.3 Contractor's scope of supply and provisioning of Consumables & Materials.

As stated above under the two foregoing **clause nos 2.6.1 & 2.6.2** – the costs of all the spares, consumables and replacements shall be borne by OIL irrespective of the procurement processes to be done by OIL or the Contractor.

The items under this clause are entirely under the scope of the Contractor for carrying out the purchasing. Cost of consumables and other materials as described in this clause, which will be a part of their monthly O&M bill-amounts, is already incorporated in the rates.

i) The Contractor shall bear the cost on PPE for all of their employees to be deployed at ITF. 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 operations) | 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 clause no 2.4 (x).

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 Services Support Mines of ITF. As per the man-power clause, persons without PPE shall not be allowed to work at ITF on any time of a day and corresponding **Penalty Clause number-20** on shortage of man power shall be imposed on the Contractor. This penalty along with **Penalty Clause number-4** for non-processing or partial processing shall be imposed on the Contractor in the event of impossibility of running the O&M of the plant at its full capacity on account of shortage of minimum numbers of man-power.

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

ii) The Contractor shall bear the costs on all POL items viz HSD, engine oil, gear oil, grease, coolants for compressor, bearing-lubricants, fasteners etc. for normal day to day operation and routine maintenance jobs. Contractor shall have to provide all or any of the above consumables for routine maintenance jobs carried out at DAILY-intervals to the maximum of MONTHLY-intervals.

Further 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. However, stock of HSD for each fire-fighting engines should be available for continuous 04 (four) hours running as per the OISD.

iii) The Contractor shall bear the costs on chemicals (as per ASTM-standard & safety standards) required for Formation Water and crude oil sample testing and the costs on all other related consumables like filter papers (ASTM-standard size), cleaning agents etc.

iv) The Contractor shall bear the cost on all chemicals & consumables required for filtration of around 100 Kiloliter/Day of process water, service water, boiler feed water and drinking water. Contractor shall also provide filter media for multimedia filtering units of the ETP. All such filtration items include but not limited to the following or their substitutes:

Hydrated lime, Oxygen scavenger, Resin, NaCl, Bleaching Powder, Sand, Pebble, Anthracite coal / activated carbon etc.

v) The Contractor shall bear the cost on consumables required while carrying out day-to-day O&M jobs which includes but not limited to materials like lube oil filters, fuel filters, air filters, various drive belts, separator elements, various kinds of O-rings, various sizes gland packing, air tube, various sizes spider rubber coupling, flexible rubber, high pressure rubber hose (fire engine) nuts & bolts of different sizes / different kind of gasket / asbestos ropes/ jute etc. (Spares and/or replacements do not come under this clause)

vi) The Contractor shall bear the cost on consumables required for general cleaning of the entire premises of the plant as per **clause no 2.9 (vi)** like phenyl, toilet cleaner , sanitizer, soap & powder, deodorants , room fresheners, naphthalene etc and all cleaning tools like brushes , moper , broom, rakers, spades etc.

vii) The Contractor shall bear the cost on electrical consumables/ items required for day to day smooth & trouble free operation of the plant. These items primarily include HPMV Ballast ; chokes ; starters ; capacitors ; fuses ; bulbs ; panel indicator lamps ; MCB ; cleaning agents etc.

Electrical items shall be of different ratings wherever applicable like HPMV Ballast of the ratings of 125 / 150 / 250 / 400 watt; bulbs of the ratings of 250W, HPMV / 400W, HPSV / HPSV, 220V, SON-T / 20W Fluorescent Lamp / 150W HPSV Bulb / 400W HPMV Lamp / 80W, HPMV Lamp / 40W Fluorescent Lamp / 125W, MV Lamp..

Shortage / lack of any item(s) as stated under clause no 2.6.3 shall be on Contractor's account; penalty on Contractor shall be imposed as per **Penalty Clause number-13** as per 6.0 (ii).

2.6.4 Execution of Day-to-day Routine / 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) Contractor will be given 30 days time from Work Order of the O&M contract, during which the Contractor can furnish a list of all non-functioning / malfunctioning / breakdown units of ITF. OIL will scrutinize the list and check within next 10 days and if found alright the remaining equipment / facilities / the capital items under 2.6 / other units etc will be under the Contractor's scope for maintenance with immediate effect. If defects are found, OIL shall revive the non-functioning / malfunctioning / breakdown units. These non-functioning / malfunctioning / breakdown units as approved by OIL will also be under the Contractor's scope for maintenance after reviving of the units by OIL and acknowledgment of the same by the Contractor.

ii) After initial communication and subsequent acknowledgement of the Contractor in regards to maintenance as stated in the **clause 2.6.4 (i)** above, 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 O&M contract, the Contractor needs to immediately report to OIL. The timings and type of reporting shall be as per reporting Clause no 4.3 (v) of this contract.

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. The forthcoming Penalty Clause number-14 under Clause no 6.0 (ii) shall be imposed on Contractor if fault is found to start earlier.

iii) 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 operations and routine maintenance / servicing jobs and schedule / preventive maintenance jobs of the plant in the most regular, meticulous and diligent ways.

The Contractor must be able to identify any problems, wear & tear in parts / components etc of a bigger 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 **clause no 2.6.2 (i) (d)** in regards to items used / replaced. The Contractor must eventually be able to avoid breakdown or malfunctioning of any equipment, facilities, units of plant.

OIL may decide to go for additional maintenance jobs on any of the units / equipment / facility of ITF over & above the scheduled ones. The Contractor shall have to carry out the same, spare for which shall be supplied by OIL either from its inventory or purchasing the same.

For all routine maintenances / servicing jobs, schedule / preventive maintenance jobs and also for forthcoming 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, assembling-disassembling etc. Further, the Contractor shall have to be equipped with all required tools & tackles and other equipments. These include but not limited to items like wrenches, tongs, hammers, chisel, dies, all tools necessary for attending routine and breakdown maintenance of electrics, instrumentation and control system; temperature guns for machine-temperatures, tachometer for measuring rpm, allen key sets, hydraulic pullers of sufficient ratings, tripods & chain pulleys of required ratings, boiler maintenance tool boxes, tool kit-sets, tube expander etc for all maintenance jobs of boiler.

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 later date shall not be accepted.

Should the Contractor fail to start any jobs as above in professional manner and with full man-power strength as per man-power clause 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 Contractor as per any or all of **Penalty Clause numbers-10, 11 & 12** as per 6.0 (ii) as the case may be.

Any one or more of these penalties shall be applicable irrespective of the Contractor's above failure leads to or does not lead to malfunctioning, underperforming or shutdown / breakdown of any unit, equipment, facility of ITF. In the first case, subsequent Penalty clauses are liable to be imposed on the Contractor.

The Contractor's performance or the lack of it in doing routine operations and routine & schedule maintenance jobs shall be determined from Contractor's already submitted reports / records / documents etc regarding all servicing & maintenance jobs and regarding all used spare parts & consumables on the particular unit or equipment.

iv) In case of breakdown or malfunctioning or under-performing of any equipments, the Contractor needs to immediately report the same to OIL as per **Reporting Clause no 4.3 (v)** of this contract.

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 depending on availability of spares, avoiding interruption or under-performance of the plant.

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 as per **Man-power clause no 5.1(x)**. Presence of Key personnel during the maintenance job will be as per **Man-power clause 5.1 (ix) (e)**.

Should the Contractor fail to start immediate, continuous and professional maintenance jobs with full man-power strength as per Man-power clause due to any reasons including but not limited to the reason of non availability or shortage of spares, other critical items and consumables falling under the scope of the Contractor to do the purchasing process as per spare-supply **clause no 2.6.**, the Contractor shall be fully responsible and accountable. Penalty will be imposed on the Contractor as per **Penalty Clause number-14** of **clause no. 6.0 (ii)**.

v) In regards to carrying out immediate, continuous and full-strength professional O&M operations as stated in the clause no **2.6.4 (iv)**, Contractor shall be fully responsible. Man power of Contractor should be competent & sufficient for carrying out such jobs.

Requirement of OEM or their franchisees for Annual Maintenance Contracts (AMCs) / Warranties of their respective equipment shall be an issue of the Contractor of their own. Any issues including financial ones regarding OEM services does not come under the terms /

provisions of this contract. In case, the Contractor decides for bringing OEM or their franchisees for any job at ITF the same needs to be endorsed by OIL on back-to-back basis. But the primary responsibility for the O&M service shall entirely rest with the Contractor and all penalties remain applicable on the Contractor even if OIL endorses /permits the Contractor's request for bringing services of the OEMs. Attributing any failure of the Contractor on the OEM / franchisees or their service(s) shall not be acceptable. OIL's endorsement is only for allowing the Contractor to employ the OEMs / franchisees 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 stand-by arrangement shall have to be provided by the contractor without extra charge.

However, the Contractor shall do all the necessary jobs to make arrangements to obtain Annual Maintenance Contract (AMC) with the OEMs which should include viz. preventive maintenance, equipment inspection, on call service etc. of the following vital instrumentation systems of ITF:

- i) DCS (ABB Make)**
- ii) TFMS (Honeywell Make)**
- iii) MOV (Limitorque Make)**
- iv) MOV (Rotork Make)**
- v) Rim Seal Fire Protection System**
- vi) Boiler PLCs Simatic S7-200 (Seimens Make)**
- vii) UPS Model No -14-PR of 25 KVA x 2 nos (Hitachi make)**

NOTE: Successful Bidder must submit a copy of the Annual Maintenance Contract signed with the OEM to M/s OIL after receiving the LOA. Only after receiving the AMC copy, Bidder will be allowed for mobilization against the Contract.

Following jobs are to be covered in AMCs for the above mentioned equipment for ITF Tengakhat. AMC for each of the above mentioned equipment will have to cover:

- i) Preventive Maintenance jobs,
- ii) Predictive maintenance jobs,
- iii) Breakdown maintenance jobs,
- iv) Overhauling jobs and
- v) Any other supports needed by the O&M contractor for smooth functioning of the above equipment to ensure overall safety and reliability of the system for 100% availability and to reduce unwanted failures of the system.

The above mentioned AMC should be done as per OEM's recommendations. All the jobs performed by OEMs and spares replaced for AMCs of the above mentioned equipment must be recorded and submitted to OIL during execution of any AMC jobs.

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 72 hours of reporting of such incident by the contractor, failing which penalty shall be imposed as per **Penalty Clause number-21**. In this regard, the contractor must make arrangements with OEMs for AMC and on-the-call-services as described above as a part of this contract.

In case Contractor fails to start immediate, continuous & full-strength professional O&M operations and should the corresponding delayed, discontinuous & poor execution of maintenance jobs results in shutdown of some operation, malfunctioning / under-performance of the plant, penalty along with corresponding financial losses to OIL shall be recovered from Contractor's monthly O&M bills as per **Penalty Clause number-15** of **Clause no. 6.0 (ii)** .

vi) 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 O&M bills. This is deemed as **Penalty Clause number-16** of Clause no. 6.0 (ii). OIL shall intimate the Contractor prior to start of the jobs. This financial recovery shall be in addition to the **Penalty Clause number-14** as stated in clause nos 2.6.4 (iv). The **Penalty Clause number-15** is liable to be imposed as stated in clause no 2.6.4 (v).

vii) In the case the Contractor has complied to clause no 2.6.4 (iv) above and carried out breakdown maintenance-jobs accordingly but fails to restore / revive the breakdown or malfunctioning equipments, the Contractor will submit the faulty unit to OIL along with all servicing & maintenance records of the particular equipment and records of used inventoried spare-parts or separately purchased spare-parts.

If the Contractor's submitted documents are found to be in order and based on the already submitted documents if it is found that the Contractor has put its best maintenance effort, OIL will purchase the replacement as a whole for the faulty item(s) as per clause no 2.6.1.

Otherwise, if the documents submitted by the Contractor are found to be incorrect, penalties as per **Penalty Clause number-14, 15 and 16** as per 6.0 (ii) shall be imposed on the Contractor.

viii) In case of breakdown of equipments and after its immediate reporting to OIL, if the Contractor reports that the equipment - is beyond economic repair / lasted its expected self-life period / does not have any constituent serviceable spares to be changed &/or any scope of repairing / servicing etc and so there is no scope of the Contractor for maintenance of the item and OIL needs to replace the item as a whole, the Contractor will submit the equipment to OIL.

OIL will investigate the Contractor's claims and if these claims are found to be correct, OIL will purchase the replacement item(s) as a whole as per clause no 2.6.1.

Otherwise, if the Contractor's claims are found to be incorrect, as per OEM or standard technical literatures etc all the penalties as per **Penalty Clause number-14, 15 and 16** as per 6.0 (ii) shall be imposed on the Contractor.

ix) Any failure in operation or delay in execution of any specific operation due to shortage / lack of spares, consumables and replacements, the procurement-process of which are under OIL's scope, OIL shall be responsible,

x) The Contractor shall immediately communicate to OIL in writing about any other equipment / facilities etc that may likely to get adversely affected due to OIL's failure as stated in clause nos 2.6.4 (ix) with technical backing and justifications. Without the Contractor's written communication, the Contractor cannot and shall NOT attribute any other failure of equipment / facilities that may take place at a later time to OIL's failure as stated in clause nos 2.6.4 (ix).

xi) After the Contractor's communication as in clause nos 2.6.4(x), OIL shall decide and communicate the Contractor about further running of those equipment / facilities. Should any major breakdowns take place due to further running of such units, OIL shall be responsible.

2.6.5 Statutory aspects in regards to procurement of items & services

i) All O&M jobs and related purchase of spares, consumables & materials (as per clause 2.6.2) and services etc from third parties or directly or indirectly through a tie-up or otherwise by the Contractor shall be in strict accordance of relevant stipulations of Oil Mines Regulations and other safety norms in force as well as Oil Industry Safety Directorate (OISD) standards in vogue. The most stringent of provisions stipulated in latest editions/ amendments of Oil Mines Regulations & OISD shall be followed.

ii) All spares, consumables and materials procured by the Contractor as above (as per clause 2.6.2) for O&M of the plant 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, Indian Boiler Regulations etc. in force or byelaws / directives promulgated by Govt. circulars.

iii) If electrical spare items (including, among others, those of Crude Dehydration Units & Instrumentation & Control System) are required to be purchased by Contractor (as per clause 2.6.2), these must have CMRI certification and DGMS approval obtained / arranged by the Contractor.

In all the above 3 cases, the cost / expenses to be incurred by the Contractor shall be deemed to be the Contractor's procurement-expenses on behalf of OIL. OIL shall issue all necessary letters & guarantees and reimburse the Contractor for its all procurement expenses on actual (as per clause 2.6.2) including that for required statutory charges/fees wherever applicable under the prevailing law to facilitate the process of obtaining such permissions / approvals / certificates / clearances.

2.7 Day to day routine operation and maintenance job for Electrics of the plant

The scope of work of electrics under this contract starts from outgoing terminal of the feeder/breaker at the captive power plant (CPP) and covers operation and maintenance (O&M)

of all electrical items including electrical control panel, switchgear, motors, motor starters, transformers, lighting DB, light fittings, high mast lighting system, area lighting, feeder pillars, cables junction boxes, UPS etc. within the physical boundary of the ITF.

Spare supply, repair and maintenance jobs of all electrical equipment shall be governed by the above clause no 2.6. All terms and conditions stated in clause no 2.6 are applicable for all electrical equipment, machinery and facilities of the plant.

General guidelines on the required activities under the electrical maintenance and/or servicing jobs along with their required frequencies shall be as per formats at **Annexure-IV** and other maintenance schedules to be provided by OIL as stated in 2.6.1. All these activities in the formats shall be part of the routine electrical maintenance and servicing and are not exhaustive. The Contractor cannot and shall not decline to do any other activities required for trouble free, smooth uninterrupted 24 hour operation of the plant as per safe and sound industry practice.

OIL and/or the Contractor - after consultation & consent from OIL - may include / change / modify any formats for electrical maintenance jobs at any point in time during the execution of the contract.

Electrical Manager of the contractor shall be continuously in touch with concerned electrical engineer of OIL. All the scheduled maintenance of the electrical equipment shall be carried out in time as per the maintenance schedule. Available maintenance schedule is subject to modification time to time.

If any scheduled maintenance / breakdown maintenance is found pending on the part of the contractor, it will be brought to the notice of the contractor for immediate completion. If contractor fails to complete the same within the reasonable time, penalty will be imposed on the contractor as per the Penalty Clause.

Quality of maintenance works shall be as per the relevant industry standard. If OIL notices poor quality of maintenance of job on the part of contractor, contractor would be penalised or may be asked to do the job again as deemed fit by the OIL's engineer.

In case of failure of the Contractor to do any of the electrical maintenance and servicing jobs as above and fill up any of the formats as per schedule, penalty on the Contractor will be imposed as per **Penalty Clause number-11** of **Clause no. 6.0 (ii)**.

2.8 Day to day routine operation and maintenance job for Instrumentation of the plant

2.8.1(i) The contractor must carryout preventive/scheduled/breakdown maintenance schedule as per **Annexure-V**. The contractor has to follow the approved schedules for operation and maintenance of the instrumentation system and field instruments as specified in the OEM manual.

(ii) 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.

(iii) The contractor shall find a copy of the following documents with respective the Installation Manager

- (a) Datasheets of the all the instrumentation systems
- (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 as per terms of this contract for OIL's approval.

(iv) Spare supply and repair, maintenance of all instrumentation equipment's shall be governed by the **clause no. 2.6**. All terms and conditions stated in **clause no. 2.6**. are applicable for all instrumentation equipment and facilities of the plant.

(v) It shall be responsibility of the O&M Contractor to make all instruments and control system of the plant work satisfactory throughout the contract period and also handover the systems to OIL in working condition at the expiry of the contract.

(vi) The O&M Contractor shall maintain the equipment as per manufactures' guidelines. System back-up of each workstation at control room including backup of DCS, processors, PLCs shall be maintained by the O&M Contractor on regular basis.

(vii) The contractor must also prepare Calibration Report formats and a schedule for calibration of all instruments such as gauges, transmitters, flow meters, hydrocarbon detectors etc. based on OEM recommendations and the same must be submitted for OIL's approval within 30 days from the date of issuance of Work Order. The contractor has to strictly adhere to these Calibration Schedules and Formats and a copy of all reports must be submitted to IM for record-keeping.

(viii) The contractor must carry out checking of wiring with respect to measurement of different signals such as Analog (Voltage/current/Resistance etc.) and Digital from field instruments at Junction Boxes/ Marshaling panels of field/ control room during troubleshooting or when need arises.

(ix) The Contractor must replace small instrumentation spares such as glass fuse, barriers, terminal block (TB), indicating lamp, and system history backup as and when required.

(x) The Contractor must have minimum tools and tackles, test equipment such as Multimeter, Portable Pressure Calibrator, Temperature Bath, mA & mV source etc for calibration and maintenance of all instruments and the same are to be kept available in the ITF Tengakhat

premises. In addition to the above mentioned minimum tools and test equipment, any other test and measuring equipment which may be required at any point of time during the contract period for maintenance of any instruments under the ITF Tengakhat Instrumentation system, must be arranged by the Contractor of their own accord and kept in ITF Tengakhat.

(xi) For any instrument found faulty/ non-functional by the Contractor during maintenance jobs performed, the Contractor must provide a thorough analysis mentioning the particular fault(s) due to which the instrument is not functioning and the analysis report must be submitted to M/s OIL.

(xii) General guidelines on the required activities under the instrumentation maintenance and/or servicing jobs along with their required frequencies shall be as per OEM maintenance schedules. All these activities shall be part of the routine instrumentation maintenance and servicing and are not exhaustive. The O&M Contractor cannot and shall not decline to do any other activities required for trouble free, smooth uninterrupted 24 hour operation of ITF Tengakhat as per safe & sound industry practice.

(xiii) OIL and/or the O&M Contractor - after consultation & consent from OIL - may include / change / modify any formats for instrumentation maintenance jobs at any point in time during the currency of the contract.

(xiii) In case of breakdown or malfunctioning or under-performing of any instrument, the O&M Contractor needs to immediately report the same to OIL as per Reporting **Clause no 4.3. (v)** of this contract.

Simultaneously, the O&M Contractor must immediately start break-down maintenance jobs for restoring the instrument at their cost and/or must replace any such break-down unit(s) within the shortest time avoiding interruption or underperformance of the plant. If the O&M contractor fails to restore/repair the breakdown of any instrument within 24 Hours, the O&M contractor shall have to call the service of that equipment's OEM/dealer to attend any breakdown maintenance and repair of sub-assemblies at their own cost. The service engineer of the OEM/dealer shall have to be deployed within next 72 Hrs and rectification by 48 hrs during normal working days or during weekly off days or during national holidays.

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.

Should the O&M Contractor fail to start immediate, continuous and professional maintenance jobs with full man-power strength as per Man-power clause due to any reasons including but not limited to the reason of non-availability or shortage of spares, other critical items and consumables falling under the scope of the O&M Contractor to do the purchasing process as **per clause no 2.6** and its sub clauses, the O&M Contractor shall be fully responsible and accountable.

(xiv) In regards to carrying out immediate, continuous and full-strength professional O&M operations as stated in the **clause no 2.6.4 (iv)**, O&M Contractor shall be fully responsible. Man power of O&M Contractor should be competent & sufficient for carrying out such jobs.

In addition to this, the Contractor must include the following in instrumentations maintenance schedule:

(I) PREVENTIVE MAINTENANCE: Contractor shall carryout 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 preventive maintenance should also include the following:

(a) SOFTWARE ENHANCEMENT & SOFTWARE SUPPORT INCLUDING NECESSARY CHANGES IN GRAPHICS: The Contractor will provide a comprehensive software maintenance and enhancement program for on-going support of the system under this contract. Necessary changes in existing graphics as per operational requirement including pertaining addition of few equipment / facilities shall be also executed by Contractor at no extra cost.

(b) 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) REPORT AND DOCUMENTATION:

i) For all the AMC jobs, the OEM's service engineer shall have to submit report to OIL about all work performed by OEM including diagnostics and preventive/predictive/breakdown maintenance jobs and parts replaced (for replacement spares, OIL's prior approval will be required) for OIL's verification. Such reports will be part of AMC jobs and the O&M contractor shall have to ensure that such reports are submitted OIL.

ii) The OEM service engineer shall have to carry out calibration of any equipment during each visit for the above AMC jobs wherever required. If any aberration or deviation is observed, then the same need to be rectified by the OEM service engineer. All such calibration reports shall have to be signed by the OEM service engineer, O&M contractor's plant manager, and OIL's representatives.

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 O&M contract to include any other jobs/services as required for trouble free maintenance of ITF Tengakhat. Any further works/spares required for smooth functioning of systems mentioned under **1.12.3** 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 ITF Tengakhat at no extra cost to OIL

OIL and/or the Contractor - after consultation & consent from OIL-may include / change / modify any formats for instrumentation maintenance jobs at any point in time during the currency of the contract.

In case of failure of the Contractor to do any of the instrumentation maintenance and servicing jobs as above and fill up any of the formats as per schedule, penalty on the Contractor will be imposed as per **Penalty Clause number-12** of **clause no. 6.0 (ii)**.

2.8.2 Calibration and cross-checking of field instruments

Calibration of following instruments and cross checking of field instruments including the following must be carried out regularly and as per requirements at site by the Contractor. All the necessary calibration to be witnessed by OIL. Contractor should be equipped with necessary tools & tackles for the calibration purpose.

- | | | |
|------|-------------------------|-------------------------------------|
| i) | Pressure gauges | : Regularly and as per requirement. |
| ii) | Temperature gauges | : Regularly and as per requirement. |
| iii) | Radar gauges | : Daily cross-checking. |
| iv) | Pressure transmitter | : Regularly and as per requirement |
| v) | Temperature transmitter | : Regularly and as per requirement |
| vi) | Flowmeters | : Regularly and as per requirement |
| vii) | Hydrocarbon detectors | : Regularly and as per requirement |

2.8.3 Tank calibration:

Calibration of the 10 (ten) numbers of crude oil storage tanks (20000 KL and 4500 KL capacity) shall have to be arranged by the Contractor for 02 (two) times around in the years 2023 & 2026 or when advised by OIL. However, costs there on including fees and other expenses based on vouchers / memos etc as produced by the Contractor shall be reimbursed to the Contractor on actual. Further, an additional amount of **15%** above the total fee amount of the 10 tanks shall be paid to the Contractor as handling and administrative charge.

2.9 General Housekeeping and up-keepment of the plant.

The Contractor must always keep the entire plant; it's all equipment, facilities, buildings and sheds, premises and roads, footpaths, walkways etc in highest level of cleanliness and aesthetic look. In this respect the Contractor shall take up all necessary jobs including but not limited to the following:

i) Cutting of grass / jungle / reeds / creepers (on all vertical parts of all structures) etc & removal and disposal of the same at OIL's designated places at distances of around a 1.0 km from ITF.

Grass height at all around the plant must be maintained at minimum level (4 inches from ground).

ii) Cleaning of top part / inside vertical parts / bottom part of all surface drains and the drains surrounding all building, shed barrack etc and disposal of the debris / sludge etc at OIL's designated places at distances of around a 1.0 km from ITF.

All the drains need to be clean, devoid of any litter, trash, clogging etc. This job is in addition to cleaning of oily dirt etc as per **clause no 2.5.3(ii)**.

iii) Contractor shall have to maintain all footpaths, CC mattress area, brick-soled area walking path around tanks in the tank dyke area etc in completely clean condition. These areas shall have to devoid any growth like algae or any other slippery organic, non-organic formation on them at all time during a year.

Contractor shall have to carry out cleaning of road side-burns and sides of all surface drains of the entire plant. All roadsides and drain sides shall have to be clean and free of any grass.

iv) The Contractor needs to maintain garden areas in the ITF entrance area, around administrative building, beside fire tender station, around control room area and along all the internal roads of ITF.

The Contractor shall have to plant not less than **800 numbers** of flower-plants and/or decorative plants with flowers in each month in the garden area. The varieties of flowers shall be Dahlia / Salvia / Marigold / Austr Pansy / Petunia / Critianthum / Danthesh / Gauldardi / Phalkas / Cosmos etc. Preferably around equal numbers of the variety of the flowers are expected.

The Contractor must engage person(s) for day time up-keepment and attending to the garden. This job of the Contractor shall also include arranging of required amount of cow-dung which is available within a radius of 1.0 to 2.0 Km from ITF.

v) There shall not be any dry grass, shoots, tinder etc inside any part of the plant. There shall not be any garbage, dumping, trash in any part of the plant. Contractor shall keep the plant without littering in any part of the plant.

The Contractor shall have to keep the two ground water reservoirs completely clean without any sorts of foreign materials on the water of the reservoirs. Contractor should be able to keep the water in a very clean state so that the reservoir-bottoms are visible from surface for enhancing their aesthetic look.

vi) All bathrooms, toilets, urinals etc must be maintained at highest level of cleanliness. The Contractor must deploy sweepers regularly in that respect. There must be all time

availability of all types of sanitary fittings, essentials and sanitary consumables at all these places.

In respect to above, any one or more of the 6 jobs shall be deemed to be incomplete in a month if deviation(s) from the specifications is/are observed at any part of the plant during any time of a month. Monthly O&M bill payment shall be deducted accordingly for non-completion of the Contractor's job. This shall be deemed as **Penalty Clauses number-17** as per 6.0 (ii).

The deviation(s) from the specifications as above, if observed, shall be communicated immediately to the Contractor by OIL. On prompt rectifications by the Contractor within specific time period, penalty on the Contractor shall NOT be levied. OIL expects good relationship with the Contractor and also expects highly professional and positive attitudinal approach of the Contractor for prompt response in rectifications of any faults / deviation from specs.

2.10 Other Jobs and Services:

2.10.1 Dispatch of treated crude oil to CTF/STF, OIL, Duliajan with crude oil dispatch pumps

Under normal circumstances OIL will not use crude oil dispatch pumps i.e the CODPs of ITF for dispatching treated crude oil from ITF. On rarest occasions of emergency, OIL may require to pump the treated crude oil of ITF to CTF/STF, Duliajan with the help of the CODPs of ITF.

The Contractor therefore shall have to keep the CODP units always in functional / operational state. The Contractor shall run the CODP engines in no load condition or in circulation-open condition (between suction & delivery) along with the suction charge pumps for duration and frequencies as per their technical judgment, but in all circumstances the CODP units must be put into service as soon as OIL advises the Contractor for the same.

The Contractor shall have to do all maintenances of the CODP units (pumps and engines) and suction charge pumps in safe ways following SOPs. All running consumables of the CODPs shall be borne by the Contractor as per terms of the contract vide clause no 2.6. Some of the consumables of mechanical units under the scope of the Contractor to supply have been mentioned in Annexure-A. As described in clause no 3 (xi), the CODPs comprise gas driven engines and OIL shall supply gas, free of cost to the Contractor without any limit.

If the Contractor fails to do O&M of the CODPs and/or put the CODPs in service as and when required, penalty will be imposed on the Contractor as per **Penalty Clause number-18** of clause no. 6.0 (ii).

2.10.2 New additional equipment, instrument, facility at ITF during the Contract.

i) OIL may decide to incorporate new equipment, facilities, instruments etc. at ITF for the sole purpose of better performance of the plant, for compliance of recommendations of any statutory bodies or audits etc and for subsequent operational requirements.

The Contractor must carry out the additional operational processes for which there will not be extra manpower burden on the Contractor. However all maintenance expenses on spares & consumables of the new items as above will be reimbursed to the Contractor on actual after the Contractor's claim with all relevant documents.

Any new equipment / facility / instrument commissioned as replacements in place of already existing ones shall NOT fall under this category. All such new items commissioned as replacements shall be part of the contract and all terms and conditions of this contract agreement shall remain applicable for the items newly commissioned as replacements. The old replaced items shall be out of the terms of the contract.

ii) Responsibility of maintenance of any new items referred as above shall be on the Contractor and they cannot decline to take up maintenance jobs on any of such new items. Spares-supply for any new items – irrespective of their costs will be under OIL's scope. Clause no 2.6.2(ii) for OIL to advice the Contractor to buy items on behalf of OIL will be applicable after 6 (six) month's from installation of the new items.

iii) Should the Contractor hold that the new items as referred in clauses 2.10.2 (i) & (ii) above have no connection to operation of ITF and they decline to carry out both Operation and maintenance or any one of them, matter will be resolved by the managements of both the companies. But in that case also the Contractor must start doing its O&M jobs on the new items and in NO case shall wait for settlement of the matter. If the decision of the managements goes in favour of the Contractor, OIL will reimburse for their O&M jobs.

If Contractor does NOT do O&M of new items which is found to be for O&M of ITF, penalty will be imposed on Contractor as per **Penalty Clause number-19** as per 6.0(ii).

Further, failure to carry out operation and maintenance on the new items will invite clause no 2.6.4 (ii), (iii) & (iv) and all three (3) penalty will be imposed on the Contractor. Clause no 2.6.4 (ii) will NOT be applicable if the delay or discontinuity of maintenance is due to non-supply of spare by OIL.

2.10.3 Welding Service

The Contractor shall have to provide welding service for

a) Mostly day to day running maintenance jobs requiring non-API welding. The welder for these types of jobs is as explained under man power clause.

b) IBR approved welding that may be required for 6 (six) monthly preventive or for emergency boiler maintenances. The welder for these particular welding jobs at boilers shall have to be certified for such jobs. Contractor has to hire the service of such a welder if its normal welder does not fall into that category.

The Contractor shall provide the welding service to OIL either by placing portable or vehicle-towed welding machine at ITF or by electric power driven welding machine. For electric

welding machine, OIL can provide 3(three) FLP Welding Receptacles at 3(three) fixed positions of the plant as stated in table under clause no 1.10 (i) – 33. However for welding requirement at other places of the plant not reachable from the receptacles, Contractor shall have to make the other alternative arrangement.

The minimum requirement of welding machine shall be a

- i) Combination of 190 Amps strong, high quality DC welding and/or up to 6KVA of AC electric power all in the same unit (in case portable machines).
- ii) The welding set should be able to weld electrodes from 1.6 mm to 4 mm.
- iii) In case of portable unit, it should have built in power generators with up to 5KVA single phase 230V and 6kVA three phase 400V.
- iv) Diesel engine set should develop a power of 6.5KW (8.8HP) with electric start.

Non-compliance of the above by the Contractor shall be invite imposition of penalty as per **Penalty Clause Number-14.**

2.10.4 Plant Painting:

The Contractor shall have to complete painting of the entire existing plant of ITF once during the contract period prior to completion of 4(forth) years of O&M from the date of Work Order of the contract. Scope of painting shall NOT include (2) two nos of 20000 KL capacity floating roof tank. Further, any new additions in the existing plant shall also NOT be under the scope of painting. All the painting material/equipment's/manpower in under the scope of the Contractor. The broad scope of painting job is attached in **Annexure-VI.**

Application of paints and surface preparation prior to that for all steel structure of ITF shall be as per standard DIN-EN-ISO-12944. The Contractor shall have to show OIL the surface preparation on any part prior to application of paints on the same. Application of paints should be made with the help spray-machines. The Contractor shall have to do all that is necessary for safe execution of the painting job. All terms and condition under S&E clause 2.4 and man power clause 5.1 shall be applicable on all the personnel involved in the painting job.

If the Contractor does not complete the painting job before the end of 4th (forth) year of O&M contract from the date of issue of Work Order, 1.5% (one and half percent) from monthly bills along with prevailing loan-interest charged by RBI at the time of each month will be recovered from the Contractor's next monthly O&M bill for already elapsed 48 (forty eight) months. The subsequent monthly O&M bills shall be released by deducting 1.5% (one and half percent) from the total amount of monthly O&M bills.

2.10.5 Canteen Service

i) OIL has Canteen building with dining room, a kitchen, a store room and a bathroom. Fuel gas, water, electricity to the canteen will be supplied by OIL on free of cost of basis. The Contractor can run the Canteen service for catering to their employees and to OIL's personnel.

- ii) The Contractor shall be free to utilize the canteen building along with its connected utilities like gas, water and electricity. The Contractor shall also be free to extend the canteen facility to any of their employees and for any of their other occasions.
- iii) The Contractor shall have to provide OIL on chargeable basis with the following food and catering service either from the canteen at ITF or from other sources:
 - a) The Contractor shall have to provide OIL the service food items like meals / tiffin / tea etc as per OIL's advance (minimum 6 hours) advice. Payment for such service shall be made on-the-spot basis.
 - b) The Contractor shall have to cater meals / beverages / fruits / sundaes etc as per OIL's advice to a group of people (around 30 nos) of OIL on 1 day's prior notice. For this, rates as fixed with OIL's prior consent shall be paid to the Contractor. The total amount will be paid by next working day.
 - c) The Contractor shall have to cater meals / beverages / fruits / sundaes etc to VIPs, dignitaries etc of Govt, OIL etc (around 30 nos) with added excellence of serving / presenting the same on 1 day's advance notice. On such occasions, differential rates as fixed with OIL's prior consent shall be paid to the Contractor. The total amount will be paid by next working day.
- iv) Should the Contractor decide to run the canteen at ITF, the upkeepment and food-quality of the canteen must be of as per the following standard / specifications:
 - a) All persons deployed at canteen must have good health and hygiene and all are to be in clean uniform with clean aprons / toupee at all time during the year.
 - b) The floor of the entire canteen building including that of kitchen, store room, bath room need to be clean, stain free and dry. The entire canteen building must be free from all sorts of foul smell, pests, flies, insects, vermins etc.
 - c) All walls/ windows, tables, shelves, mitchefs etc of the entire canteen building and particularly of the kitchen & store room must be stain free and clean.
 - d) Washing area and all drains out from the washing area of the canteen outside the canteen building needs to be clean, devoid of any litter, trash, clogging and foul smell. Canteen must have garbage disposal system at a distance of not less than 30 meter for both bio-degradable and imperishable waste.
 - e) Canteen must have good quality cooks who can deliver good quality & tasty food.

2.10.6 Public Relation Jobs:

- i) The Contractor shall establish and maintain such relationship with Government, local authorities and with the public as shall be necessary or appropriate to assure that the Operations are conducted and carried out in the most effective way and to the best advantages of OIL.
- ii) Contractor shall resolve issues related to the operations of ITF (excluding the force majeure conditions) which otherwise may significantly affect the operations of the plant; and

perform all other acts of similar nature necessary or in proper connection herewith; and any court appearance pertaining to matters relating to the Contract.

iii) The Contractor will have to do everything that is necessary including but not limited to jobs like liaising with all concerned government departments, civil administration, law-enforcing agencies etc for keeping all O&M operations of ITF normal during any public protest, picketing, “bandh” call etc. Such public protest, picketing, “bandh”-call etc may be in general or specifically against M/s OIL. In any case, the Contractor shall be responsible and accountable for smooth, uninterrupted and trouble-free O&M jobs of ITF. The Contractor cannot and shall not attribute any disruption of normal O&M jobs of ITF on account of the above reasons to Force Majorue or to OIL.

2.10.7 O&M job not specifically mentioned in foregoing clauses:

During the currency of the contract, Mines Manager or Installation Manager may give the Contractor any written advice for conducting any work or providing any service coming under the scope of O&M of the plant.

The job or the service shall be deemed as a specific operation or an assigned job of the Contractor under the O&M contract during that month.

The Contractor has to reply in writing within next 2 to 5 days of receipt of the letter if it claims that the work does not come under O&M contract. Contractor must give details of their justifications, related clauses of the contract for not doing the job. The issue will be discussed among managements of both the companies for early settlement.

Looking at the urgency of the job in regards to operation & overall performance and safety of the plant, OIL may write to the Contractor to carry out the job first before settlement of the issue. If the job is found to be out of the purview of O&M contract, total expenditure of the Contractor on actual basis will be reimbursed at the earliest.

2.11 General guidelines to the Contractor for carrying out O&M jobs:

i) ASSURANCE OF OUTPUT CRUDE QUALITY & CLARIFIED EFFLUENT WATER: The contractor shall provide OIL an assurance in writing that the output crude quality does not exceed 0.15% BS&W and oil content does not exceed 10 ppm in NIL sludge content in clarified effluent water for the entire period of Operation & Maintenance agreement.

ii) TRAINING TO OIL'S PERSONNEL:

The contractor shall provide training at the installation, free of cost, to OIL's personnel in respect of operation, maintenance, start-up, shutdown & safety of the plant & its control system.

iii) After completion of the period of currency of O&M, the plant shall be handed over to OIL in sound health & good maintainable order. OIL at its discretion may consider extension / renewal of the Operation & Maintenance arrangement, thereafter, with the same party or

otherwise, as deemed fit. At the end of the contract or any extended contract period, OIL shall decide on independent inventory audit of the entire plant.

iv) Contractor shall not, without prior written consent of OIL, disclose the Contract, or any provision thereof, or any specification, plan, drawing pattern, sample or information about the plant or in connection therewith, to any person, organization or agency. This obligation of the Contractor shall be in force even after termination of the Contract.

v) Contractor shall not, without prior written consent of OIL, make use of any document or information except for purposes of performing O&M. This obligation of the Contractor shall be in force even after termination of the Contract.

vi) Contractor to be mindful of interest of India. The Contractor shall always be responsible and mindful in the conduct of Operation of the rights and interests of India.

vii) Contractor shall open a Bank Account at Duliajan.

3.0 Power and duties of OIL:

For smooth and trouble free operation and maintenance of ITF, OIL will have some administrative and operational power. Further, OIL will have some duties to perform and assistance to provide to the Contractor. The entire scope of OIL's power, duty and assistance to the Contractor is mentioned in clause 13.0 of Part 3 of Section-III of the tender document.

4.1 Reports / Records / Documents / Write-ups to be submitted to OIL

i) The Contractor - within 60 days of LOA of the contract - must develop a Safe Operating Procedure (SOP) including crude receipt & handover procedures in line with the Company's requirements, reporting formats and such on-line and off-line records as may be generated by Plant Instrumentation & Control system as well as checklists & schedule of routine and periodic activities for operation and maintenance of the plant as per sound practices adopted in upstream hydrocarbon industries. Such SOP shall be duly approved by the Company and be strictly adhered to by the Contractor for operation & maintenance of the plant.

ii) The Company shall also reserve the right to inspect / review the Plant as well as its SOP by itself or its representatives or audit / statutory bodies and demand compliance of recommendations thereof in a particular timeframe. Such compliance jobs from the Contractor as above may entail changes in the SOPs already approved by OIL and these changes will be incorporated in a revised SOP which needs to be adhered to thereafter. In general OIL is not likely to revise once-approved SOPs but there is no limit to number of revisions/amendments to any SOPs.

The Contractor has to update and timely submit all HSE related reports / records etc 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.

iii) In case of conflict /contradiction arising out of SOPs, contract clauses will prevail. SOPs are made within the purview and after the commencement of the contract.

iv) The Contractor shall establish & maintain such books, records and accounts as are required by the contract like but not limited to reports of laboratory tests for dry and wet crude and treated formation water etc. In addition to the reporting formats as in the SOPs, the Contractor shall have to furnish all such additional books, records, accounts, data & information pertaining to the operation & maintenance of the plant as may be required and specified by OIL from time to time.

v) The Contractor shall maintain and submit reports, log sheets, checklists etc of all routine and all periodic maintenance and operational activities. The Contractor shall have to report to OIL immediately about any fault / disorder / abnormality found / identified / anticipated on any unit of the plant.

Contractor shall also submit all testing report of equipment / machinery / unit etc of the plant and also submit observations of the tests and any corrective actions required / taken in a separate hard bound book meant for these test reports.

vi) The Contractor shall generate reports for day-to-day operation and maintenance in the prescribed formats, report of cleaning and up-keepment of the entire plant, operational problems and their handling without disturbing general operation of ITF.

vii) The Contractor shall carry out all safety audits at required frequency and duration and generate reports including but not limited to Tool Box Meeting, Fortnightly Pit Level Safety Meeting, Monthly Safety Meeting, Monthly Fire Drill, Near Miss Incident etc.

The Contractor shall have to promptly report to OIL about likelihood of any unsafe working environment / condition at ITF as identified by them anytime or under Plant General Inspection.

viii) The Contractor shall also furnish all monthly reports including but not limited to monthly stock position (opening, receipt, dispatch and closing) of wet crude, dry crude, formation water generated, formation water disposed, inventory or stock position of all spares & consumables stocked by the Contractor, usage of spare items from inventory on real time basis, monthly consumption report of lube oil, HSD, chemicals, electricity, steam etc. A list of such stock will be submitted to OIL in the monthly statement to be submitted by the third day of each month.

ix) The Contractor shall furnish all other reports at different intervals like half yearly reports for Cathodic Protection system, quarterly report on status of various equipment and facilities including civil infrastructure, sheds & buildings, roads and yards, landscaping and green belts, electric and illumination and the maintenance thereof.

x) The Contractor shall submit their own holiday list for each calendar year comprises of 10 (Ten) days including all national holiday. However, all key personal should be available

in station and during any emergency, they shall be present at site with immediately. Further, the Contractor shall also furnish their employees leave structure on monthly basis.

4.2 Daily Information and reports:

Contractor – in conjunction with and as mentioned in some of the foregoing clauses - shall maintain and furnish the following data, information and reports on a daily basis:

- i) Daily report which shall cover all activities during the period starting from 6AM of the day to 6AM of the consecutive day in OIL's format. The daily report for a particular day should be ready by 7AM of the consecutive day and will be communicated to OIL's Production (oil) office over telephone every morning before 7:30 AM by the Chief Terminal Manager or his authorized representative.
- ii) Daily TMB sample test results for individual crude oil storage tanks to be furnished in Daily Report, file for which should be maintained in the Installation Manager's Office.
- iii) On site test of ETP outlet at 2 Hrs interval for the period of FW disposal from the ETP and daily clarified water storage tanks of ETP to be furnished in Daily Report, file for which should be maintained in the Installation Manager's Office.
- iv) Daily report of formation water disposal rate on individual flowline connected with OIL's disposal wells. Half hourly report of flowline pressurization on OIL's advice.
- v) Daily chemical dosing report with dosing rates in ppm of all chemical-dosing of ITF.
- vi) Charts and data sheet for average BS&W of wet crude in inlet and dry crude in plant outlet (Calculated on the basis of continuous on line record of the oil water monitor readings combined with the mass flow meter readings on 24 Hrs basis, 6AM-6AM)
- vii) Charts & data sheet for tank wise average BS&W of dry crude out from the EETs (calculated on the basis of continuous online record of oil water monitor readings), file for which should be maintained in Control Room.
- viii) Daily log sheet for various equipment of the plant as per the format enclosed in **Annexure I to V** including the day-to-day maintenance activities as per sample approved by OIL.
- ix) All routine & schedule/ preventive maintenance jobs carried out at different intervals.
- x) Any deviations / abnormalities in any aspects of O&M matter need to be documented separately and reported in writing to IM or his representative at the earliest.
- xi) Daily reports of all maintenance works carried out on a day must be given in a consolidated single report.

- xii) Daily electrical consumption report as per format to be provided by OIL.
- xiii) Daily attendance sheet of all Contractor's employees in Form-E.

4.3 The Contractor shall generate and submit the following reports as and when required:

- i) Reports on any emergency shut down of operation including the details of failure, action taken and remedial action to prevent repetition of similar shut down in future and the effect of such shut down in overall Plant operation. A chronology of such operation should be maintained. A report shall also be provided when the normal operation is resumed.
- ii) All accident reports as per statutory guidelines including but not limited to leakage or failure, oil spills, fire, structural failures, explosion, sabotage, accident reports involving loss of property or life, strikes or Contractors affecting operations. These accident reports shall be complete with detail of accident investigation, reasons leading to accidents, other related findings, and shortcomings on any quarter, remedial steps necessary to avoid recurrence of such accidents etc.
- iii) Accident reports as in clause 4.3(ii) must be generated within 6.0 (six) hours from such occurrence which will be sent to the statutory bodies like Director General of Mines Safety, Oil Industry Safety Directorate, Assam Pollution Control Board or Chief Inspector of Boilers, Assam, as the case may be by OIL. If accidents occur after working-hours of a day, report must be ready by 7:00 am of the next day. In all cases of accidents the Contractor must report verbally (over phone as the case may be) to the Installation Manager immediately after the occurrence of the accidents.
- iv) Immediate reports on any emergency situations as per Disaster Management Plan.
- v) Report of malfunctioning or under-performing or breakdown of any units of the plant that takes place at any time during the currency of this O&M contract. All complaints / reports of malfunctioning or under-performing or breakdown of any units of the plant will be entered in a log book with date and time of lodging of complaint / report and thereafter the date and time of attending the complaint with details of repairs done to restore the unit / equipment / instrument / machine etc.

In case of any incident as above occurs during normal working hours (**07:00am to 03:00pm**) of a working day, same needs to be communicated immediately verbally (in person or over phone) and in writing to IM, OIL.

In case the incident occurs beyond normal working hours or in days OIL's officers are unavailable at the plant, verbal reporting needs to be immediately given to IM, OIL by phone and its written report needs to be given **by 8:00am of the next working day**.

4.4 Report submission / reporting ways

Various aspects in submitting reports / records etc to OIL by the Contractor are:

- a) All records / reports are to be submitted to OIL at stipulated frequencies in both hard copies and in soft format via flash drive / electronic mails with OIL's confirmation of mail-receipt. List of email ids shall be provided to the Contractor.
- b) All hard copies of reports / records etc must be countersigned by all concerned persons of the Contractor. Contractor shall have to submit some of the soft copies of reports / records etc as would be advised by OIL in editable format (for OIL's requirement of using the data) with OIL acknowledging the receipt of corresponding hard copies.
- c) Reports / records etc in both forms are to be submitted during normal working hours **(07:00am to 03:00pm)** of a working day.
- d) In case OIL's officers are unavailable at the plant, reports / records etc in both forms need to be submitted **by 8:00am of the next working day.**
- e) Hard copies of reports/records etc must be well maintained / stored by Contractor.

OIL will have separate storing facilities for all hard copies of reports / records etc to be submitted by the Contractor at Administrative office under Installation Manager. However, in most of the days under normal circumstances, there shall be only the Installation Manager or his representative at the plant. In such days, the Contractor under the supervision of their administrative officer shall store the hard copies of reports / records etc on behalf of OIL in presence of Installation Manager by engaging their office staff.

- f) In case of report / records etc submitted by flash drive, virus-free conditions in all OIL's systems at control room are the Contractor's responsibility and Contractor will be accountable for any breakdown of systems on account of virus attack during data transfer.

4.5 Access to operations and Rights to Inspection & Information from the Contractor.

OIL in consultation with authorized representative of the Contractor shall at any point of time of the operations may:

- i) Inspect all records, data generated from studies, files and other information kept by the Contractor.
- ii) Have copies made of all data or information including lab analysis & charts.
- iii) Request and receive from the Contractor statements or status where reasonable as desired by OIL for any job pertaining to operation and maintenance.

4.6 Reports to Statutory bodies and approvals.

The Contractor will submit all HSE related reports / records etc to the statutory bodies as required under various Acts, Regulations and guidelines issued by such bodies as and when required. In this regards, the various acts etc and the different statutory bodies are to be referred at clause no 2.4. Report of boiler maintenance / inspection as stated in clause no 2.5.4 of TOR is one of such reports to be submitted to statutory bodies.

In respect to **clause no 4.1 to 4.6**, any one or more of the above jobs shall be deemed incomplete and monthly O&M bill payment shall be deducted accordingly for non-completion of the Contractor's job. This shall be deemed as **Penalty Clauses number-17** of **Clause no. 6.0 (ii)**.

5.1 Man power Clause

i) All personnel to be deployed 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 would submit all documents, Biodata / Qualification / Experience-details / Credential / Competence Level / Eligibility Certificates / Police Verifications / IME reports etc and other relevant data of any prospective appointments to be deployed at ITF. 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 ITF only after approval of OIL for such employees. If not approved by OIL, contractor cannot employ any of its employees at ITF. In regards to selection process of the contractor for their potential employees to be deployed at ITF, 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 or any old-ITF-employee to be re-deployed at ITF 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 3 (three) years of working continuously at ITF.

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 ITF. In this case, the Contractor - entirely on their expense - shall promptly replace such personnel with alternative personnel acceptable to OIL. New recruitment shall take over the responsibility after adequate training and familiarization during which, persons of the existing work force must have to work for 2(two) consecutive shifts in place of the expelled persons.

iv) If Contractor wants to change any of their personnel deployed at ITF 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 5.1 (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. This is in conjunction with the clause no 2.4 (ix) about safety rules 7 regulations.

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

Absence of any requisite statutory trainings including but not limited to the above for any employee shall render that employee un-employable at ITF and clause no 5.1 (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.

vi) The Chief Field manager of ITF appointed by the Contractor shall be fluent in English and local Language (both writing and speaking).

vii) Contractor shall engage Manpower required for the Operations and maintenance and determine their numbers in all concerned categories of employees (Shift engineers, maintenance gang engineers, shift supervisors, maintenance gang supervisors, competent and/or skilled work personnel and workers), selection, hours of labour and compensation as per the provisions of Mines act and other applicable laws, by-laws, regulations, Acts etc. Contractor can and shall obtain when appropriate, such occasional or part time service of experts, seconded employees for operational requirement or for having some operational advantage in Contractor's performance. But OIL's approval for such employee's deployment at ITF needs to be taken beforehand.

viii) A general guideline about deployment of **minimum number of employees** under different category / shifts is given below:

a) There must be minimum 3 (three) shifts of 8 hours each with one reliever shift.

b) In each shift following **minimum number of persons** shall have to be deployed: 1 (one) engineer, 2 (two) diploma engineers, 1 (one) certified boiler attendants, 2 (two) certified fire-fighting persons, 1 competent & skilled electrical technician cum work person and 3 (three) semi-skilled helper workman.

c) There shall a maintenance gang in morning and second shifts. A single gang shall comprise the **following persons at the minimum**: 1 (one) electrical supervisor, 1 (one) instrument supervisor, 1 (one) mechanical supervisor, 1 Instrument Technician, 3 (three) semi-skilled helper workman and 1 (one) laboratory assistant.

d) General shift shall comprise the following **minimum numbers of Key Personnel**:

e-1). Chief Field / Terminal Manager : 01 person

- e-2). Mechanical Manager : 01 person
- e-3). Instrumentation Manager : 01 person
- e-4). Electrical Manager : 01 person
- e-5). Material Manager : 01 person
- e-6). Safety Officer/ Safety coordinator cum Fire Officer : 01 person
- e-7). Administrative / Record Keeper cum Account officer : 01 person

Normal duration of General shift is wef 7:00 am to 3:00 pm. But all such key persons shall be available for 24 hours and all or anyone of them must be available at worksite as per requirement &/or as per advice of OIL in regards to any O&M work. If OIL decides that presence of all or anyone of them is necessary for safe, uninterrupted and full-capacity performances of all O&M jobs of the plant at any time beyond general shift on any days, person(s) must attend duty at site. Here decision of the necessity of the person's presence is solely OIL's and Contractor has to abide by that decision.

Further, following **minimum nos of employees** shall be deployed in General shift

- e-8). Non-API welder : 01 person
- e-9). Cleaner/ sweeper/ office boy/ welder helper (Unskilled) : 05 persons

ix) The **minimum number of persons** - as in clause no 5.1 (viii) above - shall not decrease on any reason. Shift to shift change over needs to be maintained and any person working on preceding shift cannot leave the plant unless his corresponding reliever of the next shift relieves him of his duty. This is applicable to officers and workmen alike and applicable in case of maintenance gang shift change-over between morning and second shifts. **For breakdown maintenance** the Contractor shall arrange its maintenance gang during night shifts also. However in all cases, Contractor needs to plan their work personnel in such a way that no employee must work more than 2 shifts consecutively.

The Contractor will submit a list of engaged manpower and their deployment pattern including any change in the manpower/ deployment pattern during the tenure of contract period. The deployment pattern should meet the statutory requirement as per Mines act and other Government Laws, statutory by-laws and Acts etc. Contractor shall provide the Installation Manager, OIL with roster/ deployment pattern of all its employees on a monthly basis in the first three days of the month. Contractor shall furnish actual attendance of a day to the Installation Manager or to his representative on the next working day. Failure to provide daily attendance sheet to OIL shall invite **Penalty Clause number-20** as per 6.0 (ii).

x) Contractor will intimate the Installation Manager, in writing, if any deviation particularly in the numbers of respective category of employees (Shift engineers, maintenance gang engineers, shift supervisors, maintenance gang supervisor, competent and/or skilled work personnel and workers) takes place in any shift on a day on the next working day. Contractor will highlight on their daily attendance given to the IM, if any employee had to work for 2 shifts consecutively as per the clause no 5.1 (ix) above.

xi) 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.

xii) 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.

xiii) The Contractor may choose to offer the canteen facility at ITF during working hours to all or any of its employees deployed at ITF. However, any persons availing canteen facility shall maintain proper dress codes / cleanliness / table manners. The Contractor shall do the needful to disallow any of the Contractor's employee(s) to avail canteen facility if OIL finds such person(s) unacceptable for giving the canteen service.

xiv) For those employees not availing canteen facility due to Contractor's own reasons, Contractor shall be responsible for providing necessary arrangements (table / chair / bench / filter etc) for having Tiffin's etc brought from home. The place / structure / shed / change-room etc only for the purpose of eating meal &/or changing stained clothes etc shall be provided by OIL.

xv) For all employees of the Contractor in any shifts, meal time in the canteen or otherwise shall be of half an hour included within 8 hours of shifts. Other than general shift employees, all other employees shall avail this half-hour break in staggered manner. In no case, the Contractor can claim shortage of man power at any time of a day by more than 1 person on account of lunch / Tiffin break etc.

Any shortage of man-power below the minimum number of employees as stated in clause no 5.1(viii) above due to any reason(s) under any clauses as above or any other reasons of the Contractor shall be penalized under **Penalty Clause number-20** as per 6.0 (ii) . Further Contractor's failure to submit daily attendance of Contractor's employee to Installation Manager or to his representative on the next working day on daily basis shall also invite **Penalty Clause number-20** as per 6.0 (ii) .

5.2 Job requirement and qualification of the Key Personnel

i) **Field Manager:** The incumbent shall be an Engineering Graduate in Mechanical / Chemical / Petroleum/ Reservoir Engineering with minimum Seven (7) years of experience in the operation and maintenance of oil/ gas Production installations and fields. Alternately, the person may be a science graduate with P-C-M/Diploma in (Mechanical / Chemical) and having at least 20 years experience in operation of oil & Gas fields. The person shall have overall responsibilities for safe & environmentally friendly operation & maintenance and administrative activities of the plants and establishment. The person shall be fully conversant with all the operation and maintenance activities of ITF related to but not limited to hazardous oil and gas processing, different pumps/ motors, water treatment plant, boiler, electrical systems, CP system, SCADA operation, various control loops of the processing, computer

operation etc. Additionally, he must have adequate experience and managerial skill to lead a multidisciplinary team to carry out day to day jobs. The person shall also be conversant with Oil & Gas Mines Safety Rules & Regulations and shall be in constant touch with Company representative. The Field Manager shall normally attend general shift duty but shall be available for 24 hours.

ii) **Mechanical Manager:** Mechanical Manager / Engineer must have Degree in Mechanical Engineering with minimum 5 years experience in 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 jobs operation and maintenance. The person shall have overall responsibilities for safe & environment friendly operation & maintenance of all Mechanical equipment / items of the plant. He should be confident in independently carrying out fault finding analysis, rectification of fault, operation and routine / planned / breakdown maintenance of all the Mechanical equipment / items of the plant including the air conditioners.

The Mechanical Manager should be conversant with all statutory rules and regulations such as Indian Oil Mines Regulations (1984), Mines Act, Mines Rules, and various directives, rules and regulations of Statutory bodies like DGMS (India), OISD etc. He shall, with the help of his team, shall keep and maintain all statutory Mechanical records of the plant.

The Mechanical manager shall be responsible for overall plant mechanical units including record keeping. Apart from the usual mechanical units like pumps / engines / compressor etc, the person shall be conversant with all the operation and maintenance activities of ITF related to hazardous oil and gas processing, water treatment plant, boiler, fire fighting system etc. The person shall be in constant touch with Company representative.

The Mechanical Manager shall normally attend general shift duty but shall be available for 24 hours. Additionally, he must assist the Field Manager in every possible way to run the plant smoothly, including the administrative activities of the plants and establishment.

iii) **Instrumentation Manager:** 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, preferably in Gas Production Installations. He should also be familiar with calibration and servicing of various electronics and pneumatic instruments, analyzing of P & I diagrams, control loop checking, and instrumentation standards V- SAT communication system etc. He shall, with the help of his team, shall keep and maintain all statutory Instrumentation records of the plant.

The Instrumentation Engineer shall normally attend general shift duty but shall be available for 24 hours. Additionally, he must assist the The Plant Manager in every possible way to run the plant smoothly, including the administrative, HSE (including records & reports) activities of the plants and establishment. This person shall report to Plant Manager and Installation Manager.

iv) **Electrical Manager:** Electrical Manager / Engineer must have Degree in Electrical Engineering with minimum 5 years experience in 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 jobs operation and maintenance. 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 out fault finding analysis, rectification of fault, operation and 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 & VI 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 manager 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 ITF related to hazardous oil and gas processing, water treatment plant, boiler, CP system, SCADA operation etc. The person shall be in constant touch with Company electrical engineer/representative.

The Electrical Manager shall normally attend general shift duty but shall be available for 24 hours. Additionally, he must assist the Field Manager in every possible way to run the plant smoothly, including administrative activities of the plant & establishment.

v) **Material Manager:** The person for this position must be a Graduate in commerce /science / Commuter Science or Diploma holder in any engineering discipline from a Govt. recognized institute with 3-year work experience in E&P Company. The person in this position must be able to carry out inventory management/materials management activities for ITF, Tengakhata. He must be able to maintain inventory of all the consumables and spares, preparation of specifications, part numbers list and to take procurement actions. This person shall report to Plant Manager at ITF, Tengakhata and Installation Manager.

vi) **Safety Officer cum Fire Officer:** The safety officer / safety coordinator cum Fire officer must possess any one of the following qualifications:

- a) Graduate Engineer / diploma engineer with 3 years work experience of any discipline having additional course on Industrial Safety Engineering.
- b) B (Tech) in Fire and Safety Engineering.
- c) Graduate in Fire Engineering / Fire & Safety Engineering / Fire Technology.
- d) Graduate in Science + one year diploma in Industrial Safety Engineering / Fire and Safety Engineering from an Institute recognized by State/Central Govt.

The person should have minimum physical standard of height- 150cms, weight-50 Kgs and chest-81cms with expansion 5 cms.

The person shall be able to initiate execution of all the activities stated in clause no 2.4 above. The person shall by oneself or with the league of field manager / other managers must carry out all S&E related jobs on priority basis so that the Contractor's all personnel are sensitized / aligned to carry out the jobs as primary O&M 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.

vii) **Administrative / Record Keeper cum Account officer:** The qualification of this person should be suitable for carrying out all administrative account related jobs of the Contractor only and record keeping jobs of both the Contractor and OIL. OIL's primary job requirements from this person are record keeping at Administrative office under Installation Manager. As stated in reporting **clause no 4.4**, all records / reports are to be submitted to OIL at stipulated frequencies. As stated in the same clause this officer shall be responsible for storing the hard copies of reports / records etc on behalf of OIL in presence of Installation Manager by engaging their office staff. The documents / papers are only the ones submitted by the Contractor, few of which are as hereunder:

- a) All record / report etc as stated vide reporting **clause no 4**
- b) All statutory records / report.
- c) All records of maintenance jobs / log-sheets / check list / history card etc
- d) Daily operational reports
- e) Consumption / stock position report.
- f) Daily attendance and other administrative reports.
- g) Test reports.
- h) Monthly information system

viii) **Shift Engineers:** The engineer in each shift shall be the shift-in-charge and this person will be over-all responsible for safe O&M operations of the plant in concerned shift. Though the Contractor-company is accountable for any shortcoming in safe O&M operations, the shift-in-charge will also be individually answerable to OIL.

Out of total minimum 4(four) Shift engineers, 2 (two) must have Degree in Mechanical Engineering with minimum 3 years of experience in petroleum / chemical / process plants. The other 2 (two) shift engineers must have Degree in any of streams of Electrical / Instrumentation is preferable with minimum 3 years experience in petroleum / chemical / process plants.

Three (3) shift engineers will be in rotating shifts and the reliever shall be in general shift for assisting their concerned Managers for 3 days in a week.

ix) **Shift-Diploma-Engineers:** Four (4) out of the total eight shift-diploma-engineers must be Diploma holder in electrical discipline having minimum 5 yrs. experience in the operation and maintenance of electrical equipment preferably in petroleum/ chemical

/process plants. The person must possess valid Electrical Supervisor's Certificate of Competency [minimum parts I, II, III, IV & VI and preferably Part VIII-Mining Installations] issued by State Licensing Board, Assam or equivalent authority.

The person shall have to be able to read electrical circuit diagram, attend and rectify electrical reports / problems independently. The person shall also have hands-on experience with all types of electrical equipment / items and if required, will have to work with one's own hands.

The other four (4) shift-diploma-engineers must be Diploma holder in Instrumentation / electronics with specialization in instrumentation and having adequate knowledge in computer application and with a minimum experience of 3 years' experience or ITI certificate holder in instrumentation/electronics with specialization in Instrumentation discipline with minimum 5 yrs. Experience in execution of Control & Instrumentation and in the operation and maintenance of SCADA/ DCS system in a continuous process plant, preferably in operation and maintenance of Gas Production installations. He must also be experienced in use of various test equipments, calibration and servicing of electronic (including SMART) and pneumatic instruments in continuous process plant etc. The person shall report to Instrumentation Manager.

Three (3) shift-diploma-engineers of electrical stream will be in rotating shifts and the reliever shall be in general shift for assisting Electrical Managers for 3 days per week.

Three (3) shift-diploma-engineers of instrumentation stream will be in rotating shifts and the reliever shall be in general shift for assisting the Instrumentation Managers for 3 days in a week.

x) **Shift Electrical Technicians:** Three electrical shift technicians will be deployed for assisting the shift engineers in carrying out shift maintenance / operation of the electrics of the plant. In addition, another shift technician shall be employed as reliever. The three (3) shift technicians will be in rotating shifts and the reliever shall be in general shift for assisting the Electrical Managers for 3 days in a week.

The shift technician shall be an ITI certificate holder in electrical discipline having minimum 3 years experience in the operation and maintenance of electrical equipment preferably in similar process industry. The shift technician must possess valid Electrical Workman's Permit [minimum parts: 1 (Wiring), 2 (Motor-Generator)] issued by State Licensing Board or equivalent authority.

The shift 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.

xi) **Boiler Attendant:** Three boiler attendants shall have to be deployed in rotating shifts for doing all O&M jobs of boilers. In addition, another boiler attendant shall be deploy as reliever who shall be in general shift for assisting the managers for 3 days in a week. The primary jobs of the boiler attendants include but not limited to the following sets of jobs:

a) To perform routine maintenance on the equipment and systems in a facility.

- b) To use hand or power tools when performing tasks like replacing defective valves filters or steam gauges on a heating system.
- c) To be vigilant at all time during one's shift duty about quality of boiler feed water, test the same at regular frequencies and take all corrective actions (like balancing with chemicals etc) and must avoid corrosive deposits and its damaging consequences a boiler system.
- d) To be vigilant in monitoring process parameters like steam pressure, water temperature, water levels etc at all time.
- e) To follow Standard Operating Procedures (SOPs) and to test safety and relief valves etc and maintain all safety aspects of boiler operations and activities.
- f) To record and maintain service data in logs whenever free but done at a place close to the boiler for avoiding detection of abnormality at any time.

Boiler attendants shall have to possess valid Boiler Operating License as issued by Chief Inspector of Boiler (CIB), Govt. of Assam on passing written examination & tests. The attendants must have general manual dexterity, basic mathematical knowledge and mechanical aptitude. They must have minimum qualification of matriculation with ITI pass (Fitter certificate). The Contractors must have minimum experience of 2 years, which may be of apprenticeship for 2 years after passing ITI with fitter certificate.

xii) **Fire fighting person:** Six (6) Fire Fighting Personnel with a pair in each shift shall be deployed. In addition, another pair of Fire Fighting Personnel shall be employed as reliever. The 3 pairs of the Fire Fighting Personnel will be in rotating shifts and the reliever pair shall be in general shift for assisting the Safety Officer / Managers for 3 days in a week.

The primary job of the Fire Fighting Personnel is to do run the fire fighting system whenever required. All the personnel must also have basic / preliminary knowledge about pumps and engines etc of the fire fighting system or must have competence to learn about the same. The personnel must be able to detect any fault in the mechanical units during running of the same and report to Safety Officer / Managers.

The persons must be 10+2-pass in any Stream from Govt. recognized board institute / University with minimum six months "Basic Fire Fighting course" from an Institute recognized by State/Central Govt.

The persons should have minimum physical standard of height 150cms, weight-50 Kgs, and Chest-81cms with expansion 5 cms.

xiii) **Supervisors:** Total minimum two (2) electrical supervisors shall have to be deployed in two (2) maintenance gangs for carrying out any maintenance of all the electrics of the plant under managers / engineers in shifts.

The electrical supervisors shall be an ITI certificate holder in electrical discipline having minimum 5 years experience in the operation and maintenance of electrical equipment preferably in similar process industry. The persons must possess valid Electrical Workman's Permit issued by State Licensing Board or equivalent authority.

The electrical supervisors 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.

Total minimum two (2) instrumentation supervisors shall have to be deployed in two (2) maintenance gangs for carrying out any maintenance jobs of all the instruments of the plant under managers / engineers in shifts.

Diploma holder in Instrumentation / electronics with specialization in instrumentation and having adequate knowledge in computer application and with a minimum experience of 3 years' experience or ITI certificate holder in instrumentation/electronics with specialization in Instrumentation discipline with minimum 5 yrs. Experience in execution of Control & Instrumentation and in the operation and maintenance of SCADA/ DCS system in a continuous process plant, preferably in operation and maintenance of Gas Production installations. He must also be experienced in use of various test equipments, calibration and servicing of electronic (including SMART) and pneumatic instruments in continuous process plant etc. The person shall report to Instrumentation Manager.

Total minimum two (2) mechanical supervisors shall have to be deploy in two (2) maintenance gangs for carrying out any maintenance jobs of all mechanical units of the plant of the plant under managers / engineers in shifts.

The mechanical supervisors must be an ITI certificate holder in mechanical / boiler having adequate knowledge in pumps, engines, compressor, boiler etc with a minimum of 5 years of experience in operation and maintenance of such units preferably in continuous process plants etc.

xiv) **Instrumentation Technicians:** Two (2) instrumentation shift technicians will be deployed for assisting the instrumentation supervisor in carrying out any maintenance jobs of all the instruments of the plant under managers / engineers in shifts.

The instrumentation supervisors must be must be ITI certificate holder in Instrumentation or Electronics with specialization in Instrumentation and having adequate knowledge in computer application and with a minimum experience of 3 years experience in execution of Control & Instrumentation and in the operation and maintenance of SCADA/ DCS system in a continuous process plant, preferably in operation and maintenance of Gas Production installations. He must also be experienced in use of various test equipments, calibration and servicing of electronic (including SMART) and pneumatic instruments in continuous process plant etc. The person shall report to Instrumentation Engineer.

xv) **Laboratory assistant:** The persons must be minimum 10+2-pass in HS (Science) Stream from Govt. recognized board institute / University. The person must be knowledgeable to handle different chemicals and to carry out sample testing at ITF laboratory.

xvi) **Welder:** The person - at minimum - should be able to carry out normal day to day running maintenance type non-API welding jobs.

xvii) **Semi-skilled and Unskilled helper/workers:** All the persons under this category must be competent and intelligent enough to understand work advice of their seniors and to carry out such advices.

Qualifications of these personnel shall be as per prevailing ALC circulars.

6.0 Imposition of Penalty

i) If the desired performance level as defined in Clause 2.5.1 (i) of TOR is not achieved, the plant will be treated as shutdown for the period of non-performance. For this period shutdown, zero rates and penalty as applicable will be imposed as following:

Sr. No	Period of shutdown on account of non-achievement of desired performance	Amount deductible	Note
1	Upto a total of 48 hours in a calendar month	20% of the daily O&M charge or part thereof on pro-rata basis	Daily O&M charge = Monthly O&M charge / number of days in the month
2	More than 48 hours upto a maximum of 7 days in a calendar month	Daily O&M charge or part thereof for the entire shutdown period shut	In such cases serial no. 1 will not be applicable but entire shut down period will applicable under this clause.
3	More than 7 days in a calendar month	Daily O&M charge or part thereof for the entire shutdown period shut PLUS a penalty of 15 % of Daily O&M charge for the shutdown period will be levied.	The Company reserves the right to terminate the contract if period of shutdown extends beyond 30 days.

ii) Penalty shall be imposed on the Contractor for failure of the Contractor 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	Amounts
1.	2.4 (xi) Safety Gadgets	i) Non-availability of all required safety gadgets, tools & equipment.	20% of One day O&M Charge/ Week until its compliance
2.	2.4 (xii) FF system failure.	i) Contractor's Failure to keep entire Fire Fighting system in full operational condition during all time. ii) Contractor's Failure to maintain Ring main line pressure (min of 7 Kg/cm ²).	20% of One day O&M Charge/day

		iii) Contractor's failure to comply all other terms of clause no 2.4 (xii) & 2.4(xiii).	
3.	2.5.1 (ii) Sampling & testing.	i) Contractor's failure to do required formation Water sampling & testing of &/or disposal of FW without confirmation of test results.	5% of One day O&M Charge/day
4.	Deleted		
5.	2.5.1(iv) Boiler Pr & Heater Temp	i) Contractor's Failure to maintain critical intermediate processing parameters to achieve desired performance level. (Bath heater temp. / Boiler steam pr.)	5% of One day O&M Charge/day
6.	2.5.1(v) ETP maintenance	i) Contractor's Failure to do all O&M of ETP in clean & safe manner. ii) Contractor's Failure to maintain and upkeep of ETP area.	5% of One day O&M Charge/day
7.	2.5.3 (i) OWS Maintenance	i) Contractor's Failure to maintain OWS system as per specifications.	5% of One day O&M Charge/day
8.	2.5.3 (ii) to (iv) Oil spillage/ Drains	i) Contractor's Failure to maintain cleanliness and oil-free state in the entire plant surface area and drains.	5% of One day O&M Charge/day
9.	2.5.5 Drinking/ boiler water quality	i) Contractor's Failure to supply good quality water at ITF as per specifications.	5% of One day O&M Charge/day
10.	2.5.2 Mechanical maintenance	i) 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.	5% of One day O&M Charge/day
11.	2.7 Electrical Maintenance	i) 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.	5% of One day O&M Charge/day
12.	2.8.1 Instrument Maintenance	i) Contractor's Failure to carry out all types of Inst maintenance as per Check lists / log-sheets / maintenance schedules attached in tender documents &/or to be provided by OIL.	5% of One day O&M Charge/day

13.	2.6.2 & 2.6.3 Shortage of spare parts / consumable	i) Contractor's failure to manage / plan for procuring on behalf of OIL to maintain min inventory as given by OIL. ii) Contractor's failure to supply consumable under Contractor's scope of O&M	i) Penalty equal to handling charge / price of the item. ii) Subsequent loss to OIL due the shortage / lack of items. iii) Price of item and loss to OIL to be determined by OIL Tech Committee.
14.	2.6.4 (iv) Improper b/down maintenance	i) Contractor's failure to do restore shutdown equipment's/item beyond reasonable permission period (as decided by OIL). ii) Contractor's failure to engage adequate numbers of skilled /competent persons for break down maintenance jobs.	Equal to 10% of the One day O&M Charge/week X no(s). of unit shutdown, until its compliance
15.	2.6.4 (v) Loss to OIL on a/c poor maintenance	i) OIL may incur loss due to under-performing of the plant resulting from Contractor's lack of routine &/or break down maintenance jobs.	Penalty on actual loss to OIL to be determined by OIL Technical Committee
16.	2.6.4 (vi) Recovery on a/c OIL doing by self	i) OIL cannot wait for the Contractor's delayed start of maintenances and may do jobs on its own.	Penalty on actual expenses to be incurred by OIL to be determined by OIL Technical Committee
17.	2.9 General Upkeepment	i) Contractor's failure to carry out daily general upkeepment jobs as per specifications.	5% of One day O&M Charge/day
18.	2.10.1 CODP operation	i) Contractor's failure to run the CODPs at time of need.	i) Pro-rata hourly O&M rate based on monthly O&M bill for failure to start CODP. ii) Any consequent OIL's loss.
19.	2.10.2 New item maintenance	i) Contractor's failure to do O&M on minor additional new equipment / unit etc requiring no extra man power burden.	To be determined by OIL Technical Committee.
20.	5.1 Shortage of man-power	i) Contractor's failure to deploy minimum numbers of employees on each day. ii) Contractor's failure to submit daily attendance of their employees at ITF.	Equal to 1.4% of One day O&M Charge/day X no(s). of manpower shortage for each day of the month.
21.	2.6.4 (v) AMC/OEM service	Contractor's Failure to engage AMC /OEM services within stipulated period as per the contract clauses.	Equal to 10% of the One day O&M Charge/week X no(s). of unit breakdown, until its compliance
22.	4.1 to 4.6 Reporting clause	Contractor's Failure to provide reports/information as mentioned in	5% of One day O&M Charge/Week

		the clause 4.1 to 4.6	
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7.0 In Case the Contractor fails to arrange for a reliever/replacement of Key Persons /contractor Employee for continuous absent beyond 21 Days (penalty as per clause will be applicable for the 21 Days). The same will be recorded as under performance of the contractor, which the contractor has to reply on 22nd Day. Such under performance shall be recorded for a maximum of 3 Times of the Contract period, after which OIL Management shall have liberty to decide upon the action to be taken. "

**To,
CGM-CONTRACTS (HoD)
OIL INDIA LIMITED
DULIAJAN-786602**

SUB: SAFETY MEASURES

Description of service: Hiring of Services for Operation and Maintenance of ITF-Tengakhat for a period of 06 (six) years with a provision for extension by another 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:

i) _____

ii) _____

iii) _____

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

c) Due notice would be given for any change of personnel under item (b) above.

d) We hereby accept the responsibility for the safety of all the personnel engaged by us and for the safety of the Company's personnel and property involved during the course of our working under this contract. 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.

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

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 Services for Operation and Maintenance of ITF-Tengakhat for a period of 06 (six) years with a provision for extension by another 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 credibility 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

'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 intentions.

.....
For the Principal

.....
For the Bidder/Contractor

Witness 1:

Witness 2:

Place.

Date .

Clause No 2.6.2 (ii) (b) of Terms of Reference**Clause No 2.6.2 (ii) (b) Annexure-A, (Inventory of Mechanical Spares)****1.0 Caterpillar engine driven Pump Sets, 2 Units, Duty: Crude Pumping;****i) Engine Model: G3408TA:**

Sl. No.	Item Description	Unit	Quantity
Electric Starting System			
01	Terminal, Battery	No	1
02	Starting Switch, Engine	No	1
03	Cable, Battery	No	1
04	Terminal Clamps, Battery	No	1
05	Belt, Drive Charging Alternator	No	1
06	Carbon Brush, Charging Alternator	No	1
07	Slip Ring, Charging Alternator	No	1
08	Regulator, Charging Alternator	No	1
09	Wire, Charging Alternator	Meter	5
10	Distilled Water, Sand paper, Petroleum Jelly under operator’s scope to supply for DAILY upto MONTHLY interval-maintenances.		
Ignition system			
11	Coupling, Drive Altronic	No	1
12	Plug, Spark	No	1
13	Ring, Adopter Sleeve Spark Plug	No	1
14	Diaphragm, Carburetor	No	1
15	Linkages, Governor to Carburetor	No	1
Engine Control Panel			
16	Gauges, Control Panel engine	No	1
17	Gasket, Filler cap Radiator	No	1
18	Air Cleaner Assembly	Set	1
19	Service Indicator, Air Cleaner Engine	No	1
20	Gauges, Fuel Filter Differential	No	1
21	Gauge, Instrument Panel	No	1
Fan Drive Assembly			

22	Belt, Fan Drive	No	1
23	Belt, Charging Alternator Drive	No	1
24	Element, Oil Filter	No	1
25	Gasket, Oil Filter	No	1
26	Gasket, Exhaust piping	No	1
27	Seals, Exhaust piping	No	1
28	Gas Pressure Regulator	No	1
29	Diaphragm, Gas Pressure Regulator	No	1
30	Gasket, Gas Pressure Regulator	No	1
31	Seal, Gas Pressure Regulator	No	1
32	Hoses, Gas Pressure Regulator	No	1
33	Clamps, Gas Pressure Regulator	No	1
34	Hoses, Radiator Assembly	No	1
35	Clamps, Radiator Assembly	No	1
36	Linkage assembly, Actuator Linkage	No	1
37	Butter Fly Valve Assembly, Carburetor	No	1
38	Pins, Carburetor	No	1
39	Pivots, Carburetor	No	1
40	Filter Element, Engine Oil Filter Auxiliary	No	1
41	Seal, Engine Oil Filter Auxiliary	No	1
42	Gasket, Engine Oil Filter Auxiliary	No	1
43	Gauges, Engine Oil Filter Auxiliary	No	1
44	Fuses, Charging Alternator	No	1

ii) **Pump: National Oilwell, Model:300TP-8C Triplex Plunger Pump:** Gear Oil-220EP, Grease, Oil for 3- Feed Lubricator and Fasteners for the pumps are under the scope of the operator to supply (within the contract cost).

iii) **Power Take Off Unit: SP314:**

Sl. No.	Item Description	Unit	Quantity
01	Plate, Driving	No	1
02	Pin, Cotter	No	1

03	Lever, Sliding assembly	No	1
04	Pin, Link Lever	No	1
05	Grease and Fasteners for the PTO unit are under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

iv) Falk Type T10 Steelflex Tapered Grid Coupling:

Sl. No.	Item Description	Unit	Quantity
01	Seal, Steelflex Coupling	No	1
02	Gasket, Steelflex Coupling	No	1
03	Metric fasteners, Steelflex Coupling	No	1
04	Lube Plug, Steelflex Coupling	No	1
05	Fasteners for the coupling are under operator's scope to supply for DAILY upto MONTHLY interval-maintenances		

v) Universal Transmission Shaft assembly:

Sl. No.	Item Description	Unit	Quantity
01	Yoke, Universal Coupling	No.	1
02	Fasteners for the transmission shaft are under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

vi) Lufkin Gear Box:

Sl. No.	Item Description	Unit	Quantity
01	Seal Lip Type	No	1
02	Lube Oil, Grease and Fasteners are under the operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

vii) Pulsation Dampener:

Sl. No.	Item Description	Unit	Quantity
01	Nitrogen Gas, Cylinder	No	1

viii) Suction Charge Pump, 5 Units: Model 2500 Supreme (6X4X14)

Sl. No.	Item Description	Unit	Quantity
01	Gasket, Casing	No	1
02	Gland Assembly, Packing/Seal, Mechanical	No	1

03	Sleeve, Shaft	No	1
04	Seal, Shaft Sleeve	No	1
05	Gasket, Inboard Bearing Cover	No	1
06	Labyrinth Seal, Inboard Bearing Cover	No	1
07	O-Ring, Out Board bearing Cover	No	1
08	Labyrinth Seal, Out Board Bearing Cover	No	1
09	20W40 Motor Oil, Grease & Fasteners are under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

2.0 Cummins engine driven Pump Sets, 1 Unit, Duty: Crude Pumping

i) Engine: Model-G1710P:

Sl. No.	Item Description	Unit	Quantity
01	Switch, Temperature	No	1
02	Hose, Radiator	No	1
03	Clamp, Hose	No	1
04	Gasket Kit, Taper Cover	No	1
05	O-ring, Adopter Spark Plug	No	1
06	Starting System:		1
07	Terminal Clamp, Brass Battery Cable	No	1
08	Switch, Engine Starting	No	1
09	Carbon Brush, Charging Alternator	No	1
10	Slip Ring, Charging Alternator	No	1
11	Regulator, Charging Alternator	No	1
12	Wire Cable	Meter	1
13	Coupling, Drive Altronic	No	1
14	Plug, Spark Ignition	No	1
15	O-Ring Adopter Spark Plug	No	1
16	Distilled Water, Engine oil, Grease and Fasteners under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

ii) BPCL Plunger Pump: 83 – 20R 368FS:

Sl. No.	Item Description	Unit	Quantity
01	Clamp, Plunger	No	1
02	Shim sets, Steel Coupling	No	1
03	Bolt, Shim Coupling	No	1
04	Link Plate, Clutch Assembly	No	1
05	Packing, Gland Plunger	No	1
06	Seal, Wiper Plunger	No	1
07	Gear oil, Grease and Fasteners are under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

iii) Power Take Off: SP314:

Sl. No.	Item Description	Unit	Quantity
01	Plate, Driving	No	1
02	Pin, Cotter	No	1
03	Lever, Sliding assembly	No	1
04	Pin, Link Lever	No	1
05	Grease and Fasteners are under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

iv) Extension Shaft Assembly:

Sl. No.	Item Description	Unit	Quantity
01	Hub, AMR Coupling Assembly	No	1
02	Shim Set, Steel AMR Coupling Assembly	No	1
03	Bolt, High Tension AMR Coupling Assembly	No	1

3.0 Crude Oil circulation Pump, 3 Units : Model CHEMFLO (6X4X10.5):

Sl. No.	Item Description	Unit	Quantity
01	Gasket, Casing	No	3
02	Gland Assembly, Packing/Seal, Mechanical	No	3
03	Sleeve, Shaft	No	3
04	Seal, Shaft Sleeve	No	3

05	Gasket, Inboard Bearing Cover	No	3
06	Labyrinth Seal, Inboard Bearing Cover	No	3
07	O-Ring, Out Board bearing Cover	No	3
08	Labyrinth Seal, Out Board Bearing Cover	No	3
09	20W40 Motor Oil, Grease & Fasteners are under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

4.0 Ingersoll-Rand SSR UP5 – 7.5 Air Compressor : 2 Units

Sl. No.	Item Description	Unit	Quantity
01	Connector, Pneumatic	No	2
02	Air tube	No	2
03	Kit – Ultraplus Check P/N 88168265	No	2
04	Kit- Ultraplus Check P/N 88176383	No	2
05	Element, Air Filter, P/N 88171913	No	2
06	Filter, Coolant P/N39329602	No	2
07	Cartridge, Separator, P/N22388045	No	2
08	Pushbutton, Re-Set, P/N22441489	No	2
09	Button, Emergency Stop P/N22384952	No	2
10	Indicator (Green) P/N22384929	No	2
11	Valve, Safety 16Bar (PED) P/N 22401590	No	2
12	Silencer, Valve Blowdown P/N2235987	No	2
13	Fuse, 1A (Time Delay) P/N39193289	No	2
14	Fuse, 1A (Non Time Delay) P/N32203176	No	2
15	Start Up kit, P/N 38339297	No	2
16	Maintenance kit, P/N38339495	No	2
17	Cartridge, Thermal Valve P/N 22282024	No	2
18	Gauge, Belt Tension “Krikit II”, P/N 38343521	No	2
19	Belt, Drive	Set	2
20	UltraPlus coolant is under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

5.0 (i) Formation Water Disposal Pump Set: 2 units (Flowserve Pumps)

S.No.	Item Description	Unit	Quantity
01	Sleeve, Shaft	No	2
02	Hub, Coupling	No	2
03	Flexible Rubber, Coupling Hubs	No	2
04	Bearings, Pump (Inward; nearer impeller)	No	4
05	Bearings, Pump (Outward)	No	4
06	Gland Packing, Pump	No	2
07	Lubricant for bearings, Grease & Fasteners under operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

(ii) Formation Water Disposal Pump Set (Roto RMAA608JOZZ3D): 2 units

Sl. No.	Item Description	Unit	Quantity
01	Stator, High Nitrile 4A	No	2
02	Coupling Rod, Duplex 4A	No	2
03	Shaft, Duplex 4A	No	2
04	PumpHousing, 4A	No	2
05	End Cover, 4A	No	2
06	Stuffing Box, Duplex 4A	No	2
07	Gland Duplex, 4A	No	2
08	Shim Coupling, Flexible Spacer Coupling	Set	2
09	Grease is under the operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

6.0 Fire Fighting System:**i) Fire Fighting Pump Engine : 3 Units ; KOEL Type 6SL9088TA 155HP @ 2100RPM**

Sl. No.	Item Description	Unit	Quantity
01	Belts, Fan	Set	2
02	Belts, Alternator	Set	2
03	Oil filter, Main	No	4

04	Insert, Pre Filter Fuel	No	2
05	Starter, Engine	No	2
06	Alternator, Charging	No	2
07	Regulator, Alternator	No	2
08	Terminals, Battery	No	2
09	Clamps, Terminal	No	2
10	Engine Oil and Fasteners are under the operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

ii) Fire Fighting Pumps: 3 Units

Sl. No.	Item Description	Unit	Quantity
01	Pump Bearing	No	2
02	Gland Packing	No	2
03	Sleeve, Shaft	No	2
04	Seal, Shaft Sleeve	No	2

iii) Jockey Pump

Sl. No.	Item Description	Unit	Quantity
01	Motor / Pump Bearing	No	2
02	Gland Packing	No	2
03	Coupling	No	2

iv) Foam Pump

Sl. No.	Item Description	Unit	Quantity
01	Motor / Pump Bearing	No	2
02	Coupling	No	2

7.0 Storm Water Pump set (Oily Water Sludge Separator Sump): 2 Units

Sl. No.	Item Description	Unit	Quantity
01	Sleeve, Shaft	No	1
02	Hub, Coupling	No	1
03	Flexible Rubber, Coupling Hubs	No	1

04	Bearings, Pump	No	1
05	Gland Packing, Pump	No	1
06	Grease and Fasteners are under the operator's scope to supply for DAILY upto MONTHLY interval-maintenances.		

8.0 Effluent Treatment Plant's units

Sl. No.	Item Description	Unit	Quantity
Influent Feed Pump			
01	Motor / Pump Bearing	No	1
02	Mechanical Seal	No	1
03	Rubber Coupling	No	1
Skimming Pump			
04	Motor / Pump Bearing	No	1
05	Mechanical Seal	No	1
06	Rubber Coupling	No	1
Booster Pump			
07	Motor / Pump Bearing	No	1
08	Mechanical Seal	No	1
09	Rubber Coupling	Set	1
Back Wash Pump			
10	Motor / Pump Bearing	No	1
11	Mechanical Seal	No	1
12	Rubber Coupling	No	1
Air Blower			
13	Motor / Pump Bearing	No	1
14	V Belt	No	1

Note: Quantity-column of the table defines the minimum quantity of each item to be maintained / made available in the inventory at any point in time during the contract.

9.0 Boiler Loco Type (1 tonne capacity) : 2 Units

Sl. No.	Item Description	Unit	Quantity
01	Pressure Indicator	No	2

ANNEXURE – A

02	Level Gauge	No	4
03	Blow down valve	No	1
04	Strainer	No	2
05	Pressure regulating valve	No	1
06	Solenoid valve	No	1
07	Slam shut off valve	No	1
08	Pressure switch	No	1
09	Pressure safety valve	No	1
10	Feed check valve	No	2
11	Steam stop valve	No	2
12	Level controller	No	1
13	Globe valve 1/2"	No	1
14	Globe valve 3/4"	No	1
15	Globe valve 1"	No	1
16	Globe valve 2"	No	1
17	Globe Valve 1 1/4"	No	1
18	Ball valve 1"	No	1
19	Ball valve 1 1/2"	No	1
20	Ball valve 2"	No	1
21	Non return valve 2"	No	2
22	Needle valve	No	2
23	Gas flow regulator	No	1
24	Cock sleeve for gauge glass	No	5
25	O-rings of different size (for each size)	No	2(each)

Clause No 2.6.2 (ii) (b) of Terms of Reference**Clause No 2.6.2 (ii) (b) Annexure-B, (Inventory of Electrical Spares)**

Sl. No.	Item	Description	Qty Reqd per Year
01	SFU	Type : SP04, Ie: 200A, 415V, 50Hz, TSF : 200(max.), 23A, Current:200A	5
02	Switch disconnecter	Type : SP03, IE: 125A, AC23A, 415V, Make : GE	6
		Type : SP32-EIT, SDF, 415V, 50Hz, Current: 32A, AC: 23A, Make : GE	5
03	Contactor 3 Pole	Type : CL04, 415V, Current : 60A, Make : GE	10
		Type : CL02, 415V, Current : 32A, Make : GE	10
		Type : CL06, 415V, Current : 90A, Make : GE	10
		Type : CL09A300M, 415V, Current : 140A, 50Hz, Make :GE	10
		Type : CL06, 415V, Current : 90A, 50Hz, Make : GE	10
		Type : CL07, 415V, Current : 110A, 50 Hz, Make : GE	10
		Type : CL04A310M, 415V, Current : 60A, 50Hz, Make : GE	10
		Type : MNX-40A, Coil volt, 230V, Make : L & T	10
04	Overload Relay	Type : RT2C, Ie:18.5-25A, 415V, 50 Hz, Make : GE	10
		Type : RT2D, Ie : 24-32A, 415V, 50Hz, Make : GE	10
		Thermal relay range: 100-250A,415V,50/60hz,CAT.A Icu :50KA, Ics:100% Icu: IS13947-2, IEC 60947-2,EN 60947-2,CE-DSINE,DN2-250N, L&T; 3Pole	2
		Thermal relay range: 100-250A, 415V, 50/60hz, CAT.A Icu:50KA, Ics:100%, Icu: IS13947-2, IEC 60947-2,EN 60947-2 CE DSINE,DN2-250N, L&T; 4Pole	2
05	Aviation	Transformer- Neon aviation Obstruction Light, I/P: 230V, O/P: 2.5KV, 30mA	6
06	MPCB	Cat. No. AC-3, 415V, 50Hz, Current: 9-13A, Make : GE / Standard offer	10
		Cat. No. AC-3, 415V, 50Hz, Current: 9-13A, Make : GE / High performance	10
07	Ammeter	0A-1200A, 96 Sq.mm. standard gold	3
08	Voltmeter	0-500V, 96 Sq.mm. standard gold	3
09	MCB	DP-6A, 10A,16A, 25A& 32A, Make : Havells	10
		SP- 32A, Make : Havells	10
10	Panel Indicator	Red, Yellow, Blue, LED Type	100

ANNEXURE – B

	Light		
11	Earth Leakage Detection Relay	Earth leakage relay, Type : EL03, Make : Prok dv's	10
12	Main switch	Cat. No –A/AC-3, Ui: 690V, 50Hz, Ie: 9-13A; Made in Japan.	3
		Cat. No –A/AC-3, Ui: 100V, 50Hz, Ie: 28-40A.Made in Japan.	3
13	Battery (UPS)	12V , 180Ahr	7
14	ELCB	415V, C-16, Icn : 1000A, 100mA	25
		415V, C-16, Icn : 1000A, 63mA	25
15	Terminal Connector	6 square mm	20
		10 square mm	20
		16 square mm	10
		35 square mm	10
16	HM Lamp Holder	BINANI HDF 1100	20
17	MCCB	Type: LM 250B, V-415, Ic-50 KA, Ics : 75%, I : 250A, Make : GE 50; 3 Pole.	2
		Type: LM 250B, V-415, Ic-50 KA, Ics : 75%, I : 250A, Make : GE 50; 4 Pole.	2
		Type: LM 125C, V-415, Ic-25 KA, Ics : 75%, I : 125A, Make : GE; 3 Pole.	2
		Type: LM 125C, V-415, Ic-25 KA, Ics : 75%, I : 125A, Make : GE; 4 Pole.	2
		Type : LM 100C, 412V, 50Hz, Current :100A, Make : GE 25KA; 3 Pole	3
		Type : LM 100C, 412V, 50Hz, Current :100A, Make : GE 25KA; 4 Pole	3

Note: Minimum quantity of items to be maintained in the inventory at any point in time shall not be less than half of the annual requirement as shown in the table.

Clause No 2.6.2 (ii) (b) of Terms of Reference**Clause No 2.6.2 (ii) (b) Annexure-C, (Inventory of Instrumentation Spares)**

Sl. No	Location	Make	Model/Type	Range	Quantity
Pressure Transmitter					
1	Crude Oil tank	Rosemount	3051L	0-11000mm Water Column	1
2	Fire System	Yokogawa	DP Harp transmitter EJA 438W	0-10 Kg/cm2	1
3	Natural gas at EET	Rosemount	3051T	0-8 Kg/cm2	1
4	Clarified Water Disposal	Rosemount	3051T	0-30 Kg/cm3	1
5	Crude discharge	Rosemount	3051T	0-100Kg/cm2	1
6	CODP Suction End	Druck	PTX1240	0-200 p.s.i	1
Temperature Transmitter					
7	Emulsified Wet Crude Oil to inlet of Heat Exchangers	Rosemount	3144P	0-100 degree C	1
8	Wet Crude Oil From Storage Tank to Indirect Bath Heater	Yokogawa	YTA-110	0-100 degree C	1
9	CODP Engine	Weed Instrument	Sensor -Mate ,Model 4100 Series		1
Thermocouple					
10	Crude Oil Outlet from Heater	General Instruments	K-Type (Chromel - Alumel)		4
Flow Element with Differential Pressure indication					
11	Natural Gas inlet to Heaters	Wika		0-1.0	3
12	Multimedia Filter at ETP	ABB	2600T	6-600kPa	1
Pressure Switch					
13	Jockey Pump	Indfos		4-17 Bar	2
14	Fire Header	Orion		0-8 Bar	2

15	V-100A	Switzer	GH 204 05/ A4K 55	.08-.4 Bar	2
16	V-100A	Switzer	GH 204 05 / B7K 55	.7-7 Bar	2
17	Boiler	Indfos		0-10 Bar	2
18	Boiler	Honey well	Pressuretrol	0-300 psi	2
Level Switch					
19	Induced Gas Flotation Mechanism at ETP	Pune Tectrol Pvt. Ltd DSBESM2DR			1
20	EET	Chemtrol Samil (I) Pvt. Ltd			1
Temperature switch					
21	Bath Heaters	Switzer	GM-731-OT- Q4C-55		3
Pressure Gauge					
22	CODP pump	H-Guru	Diaphragm type	0-2 Kg/cm2	2
23	CODP	H-Guru	Diaphragm type	0-4Kg/cm2	2
24	CODP	H-Guru	Diaphragm type	0-6Kg/cm2	2
25	CODP	H-Guru	Diaphragm type	0- 120Kg/cm2	2
26	Fire Fighting Pump	H-Guru	Bourdon Tube	0- 20Kg/cm2	2
27	Fire Fighting Pump	H-Guru	Bourdon Tube	0- 25Kg/cm2	2
28	Cooling Tower Pump	H-Guru	Bourdon Tube	0- 10Kg/cm2	2
29	Instrument Air Package	H-Guru	Bourdon Tube	0- 16Kg/cm2	2
30	Natural gas line at Heaters	Wika		0-1.6 K/cm2	2
31	At EETs	Wika		0- 10Kg/cm2	2
Temperature gauge					
	Wet Crude Inlet	M Guru	6BQSWAA	0-100 degree C	2
Level Gauge					
32	Bath Heaters	Levcon Instrument Pvt.			2

ANNEXURE – C

		Limited RS448-2118			
32	Cross Flow Interceptor				1

Note: Quantity-column of the table defines the minimum quantity of each item to be maintained / made available in the inventory at any point in time

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 (Name of the Bidder) for the last 03(Three) completed accounting years upto.....**(as the case may be)** are correct.

YEAR	TURN OVER In INR	NET WORTH In INR

Place:

Date:

Seal:

Membership Number :

Signature

Registration No. :

UDIN No. :

Annexure – I
Clause No. – 2.4 (xii) & 2.5.2
Of Terms of Reference
FIRE SERVICE

Maintenance Log-Sheets
Maintenance Check-Lists

OIL INDIA LIMITED
FIRE EXTINGUISHERS INSPECTION REPORT
ITF TENGAKHAT

INSPECTION DATE.....

Sl. No.	Extinguisher No.	Refilling Date	Capacity	Hydraulic Test Date	Comments

NAMES OF FIRE FIGHTING CREW.....

.....

.....

SIGNATURE OF IN CHARGE

SIGNATURE OF OFFICER

LOG SHEET FOR FIRE ENGINE AND PUMPS

A. FIRE ENGINE AND PUMPS STATUS

Sl.No.	Lube Oil Level	Fuel Level	Water level	Air System	Suction Pressure	delivery pressure	Pump		Running hr.	Cumulative hr.	Engine RPM	Lub Oil Pressure
							start	Stop				
Engine _ I												
Engine - II												
Engine _ III												

B. JOCKEY PUMP STATUS

Jockey Pump	Status		Ring Main Pr
	On -Auto	Off	
304A			
304B			

Engine _ I		
Engine - II		
Engine _ III		
Engine _ I		
Engine - II		
Engine _ III		

C. HSD STOCK STATUS

STOCK	Opening Stock		Consumed	Receipt	Closing Stock
Engine _ I					
Engine - II					
Engine _ III					

D. TANK STATUS

Tank	Initial Value	Final Value
301 A (Fire Water		
301 B (Fire Water		
305 A (Foam Tank)		
305 B (Foam Tank)		

E. Remarks

Signature of the Chief Manager (Terminal) ,...

Signature of the Safety Coordinator...

Fire Fighting Pump Testing & Schedule

Following tests with test-frequencies on the Pumps have to be conducted:

1. Each drenching pump shall be test run at regular intervals as per the operator's technical judgment or for at least twice the number of times as per OISD standard for avoiding failure to start and/or run continuously.
2. Each drenching pump shall be checked, tested and its shut-off pressure observed **once in a month.**
3. Each drenching pump shall be checked and tested for its performance **once in six month** by opening required numbers of hydrants / monitors depending on the capacity of the pump to verify that the discharge pressure and flow are in conformity with the design parameters.
4. Each drenching pump shall be test run continuously for 4 hours at its rated head and flow using circulation line of fire water storage tanks and observations logged **once a year.**
5. The testing of standby jockey pump shall be done **once a week.**
6. Painting & Hydrostatic test of the DCP Extinguisher along with cap and hose assembly shall be done at 30kg/sq.cm **once every three years.**
7. Painting & hydrostatic test of the CO2 extinguisher shall be done before every refilling or **once in 5 years,** whichever is earlier.
8. Fire Fighting equipment (i.e. Monitors, Hose boxes, Hydrants, Foam Tanks, Inductors etc.) along with Fire water ring main to be painted **once after three years from date of LOA as per clause no 2.10.4.**

Annexure – II
Clause No. – 2.5.2
Of Terms of Reference

ROTARY EQUIPMENTS

Maintenance Schedule
Maintenance Log-Sheets
Maintenance Check-Lists

Monthly Preventive Maintenance Check List for Centrifugal Pumps
(FW Disposal Pump / Crude Oil Circulation Pump / Suction Charge Pumps / Cooling Tower Pump /
ETP's all Pumps / OWS Pump / Fire water Pump / Jockey Pumps)

Location : ITF, Tengakhat

Date:

Activity		Check	Pump – x1	Pump – x2	Pump – x3	Observation / Remarks
1	Check Bearing Temperature (Should not be more than 80 ⁰ C).					
2	Check the lubricants for bearing (Grease/Lube oil) for contamination. Change/top up if required					
3	Check the stuffing box for any leakages. Change if required					
4	Check for Pump alignment. Rectify if required.					
5	Check Pressure Gauge for proper functioning & Calibration. . Change if required					

Signature , Chief Field Manager

Signature Maintenance Engineer

Yearly Preventive Maintenance Check List List for Centrifugal Pumps

Location : ITF, Tengakhat

Date:.....

Activity		Check	Observation	Remarks
1	Pump to be Overhauling completely, check the clearance and worn out parts to be replaced.			
2	Check for effects of liquid handle on the pump components. If abnormal corrosion, erosion is observed, the components should be replaced with that of suitable material.			
3	Auxiliary pipelines as well as main pipe line should be checked for scaling, leakage etc.			
4	Measuring instruments, gauges etc should be recalibrated.			
5	Full running test may be carried out to check the performance in comparison with the original performance.			
6	Piping supports should be checked so that the pipes do not induce unwanted stresses on the pump.			

Signature , Chief Field Manager

Signature Maintenance Engineer

Monthly Preventive Maintenance Check List For Air Compressor

Location : ITF, Tengakhat

Date:

Activity		Check	Comp - I	Comp - II	Observation / Remarks
1	Check and Replace if required the coolant filter for first 150 hrs.				
2	Remove and clean package pre filter, replace if needed.				
3	Checks drive belts replace if needed.				
4	Check for corrosion of the air receiver.				
5	Check the Coolant and coolant level. Change/top up if required				

Signature , Chief Field Manager

Signature Maintenance Engineer

Yearly Preventive Maintenance Check List For Air Compressor

Location : ITF, Tengakhat

Date:

Activity		Check	Comp - I	Comp - II	Observation / Remarks
1	Replace the Ultra Plus Coolent.				
2	Replace the Filters				
3	Change the package pre-filter.				
4	Change drives belts in every 9000 hrs or when required.				
5	Replace all hoses in every 18000 hrs or when required.				

Signature , Chief Field Manager

Signature Maintenance Engineer

Maintenance Check List for Effluent Treatment Plant; Rotary Equipment

DATE:

EQUIPMENTS INSPECTED	ACTIONS TAKEN IF REQUIRED
1. INFLUENT FEED PUMP STATUS	
a. LEAKAGE OBSERVED:	
b. POWER CONSUMPTION	
c. VIBRATION OBSERVED	
2. BOOSTER PUMPS STATUS:	
a. LEAKAGE OBSERVED:	
b. POWER CONSUMPTION	
c. VIBRATION OBSERVED :	
3. BLOWERS STATUS	
a. POWER CONSUMPTION	
b. PHYSICAL CONDITION OF THE BELTS:	
4. DISPOSAL PUMPS STATUS:	
a. LEAKAGE IF ANY	
b. POWER CONSUMPTION	
c. VIBRATION IF ANY:	
d. ABNORMAL SOUND IF ANY:	
e. DISCHARGE PRESSURE:	
5. SLOP TANK STATUS:	
a. OIL LEVEL IN THE TANK	
b. PROPER STEAM INJECTIVITY PROVIDED	
c. OVERFLOW OBSERVED:	
6. SLOP PUMP STATUS:	
a. POWER CONSUMPTION	
b. VIBRATION IF ANY	
c. ABNORMAL SOUND IF ANY:	
d. LEAKAGE IF ANY:	
7. OWS PUMPS STATUS:	
a. LEAKAGE IF ANY:	
b. POWER CONSUMPTION	

Signature , Chief Field Manager

Signature Maintenance Engineer

As per Clause no 2.10.1: During CODP regular test-running and emergency running

Log Sheet for CODP...1/2/3..... (Hourly log for 24 hrs)

Date:

Time	Start time	Stop Time	Engine RPM	Lube oil level/ Pressure (psi)	Water Level / Temp (° C)	Pedestal bearing Temp	Pedestal bearing greased	Remarks	Signature Operations Engineer
6.00 am									
7.00 am									
8.00 am									
9.00 am									
10.00 am									
11.00 am									
12.00 pm									
1.00 pm									
2.00 pm									
3.00 pm									
4.00 pm									
5.00 pm									
6.00 pm									
7.00 pm									
8.00 pm									
9.00 pm									
10.00 pm									
11.00 pm									
12.00 am									
1.00 am									
2.00 am									
3.00 am									
4.00 am									
5.00 am									
6.00 am									

Signature of In charge

Shift A
Shift B
Shift C

Daily Maintenance Schedule for CODP

OBSERVATION		Checked	Recorded	Signature of Oprn- Engr
1	Check the lubricator functioning normally and top up oil as requird			
2	Check for diaphragm leakage.			
3	Check oil seals for leakage (power frame)			
4	Check and monitor bearing noise.			
5	Check crankcase oil level.			
6	Check oil level switch gauge sight glass for signs of contamination			
7	Check for unusual / excessive pipe vibration and noise.			
8	Listen for valve noise and replace as required.			
9	Check plunger packing for tightness and adjust as required.			
10	Check pump and fluid coupling temperature.			
11	Check suction pressure.			
12	Checks pump flow.			
13	Check discharge pressure.			
14	Check crankcase oil pressure (min 100 kPa)			
15	Check for oil leaks.			
16	Check for fluid leaks.			
17	Check pump for cleanliness.			
18	Check work area for cleanliness.			

Signature of Shift In Charge

Signature of Maintenance Engineer.

Monthly Maintenance Schedule for CODP

OBSERVISION		CHECKED	RECORDED
1	Flush cradle drain lines		
2	Open power end (diaphragm) water trap and drain.		
3	Check plunger extention rod clamps.		
4	Check all fluid end and power end bolting for correct torque.		
5	Check all internal lube oil strainer and clean as required.		
6	Check plunger wear.		
7	Check crosshead extention rod for wear.		
8	Check crankcase breather.		
9	Check valves, seats and spings.		
10	Check suction stabiliser nitrogen pre- charge pressure.		
11	Check discharge dampener nitrogen pre - charge pressure.		
12	Check all safety controls for malfuntion.		

Signature of Maintenance Engineer.

CODP-ENGINE INSPECTION REPORT

ENGINE

PUMP

DUTY:

UNIT NO:

Make :

Make :

Model:

Model:

Sl. No:

Sl No:

Plunger Size:

1. Lube Oil : Changed Yes [] No []

Grade of Lube Oil : _____

Quantity : _____

2. Lube Oil Filter : _____

Quantity : _____

3. Crank Case : _____

Strainer : _____

4. Belts

a. Fan Belt : Replaced [] Not Replaced []

Size : _____

Quantity : _____

b. Water Pump Belt : Replaced [] Not Replaced []

Size : _____

Quantity : _____

c. Dynamo/Alternator Belt : Replaced [] Not Replaced []

Size : _____

Quantity	:	_____		
5. Air filter Element		Cleaned []	Replaced []	Not Cleaned []
(i)Air Filter Element Size :		_____		
6. Tappet Clearance	:	Exhaust_____		
		Inlet _____		
7. Radiator Cap	:	Fitted _____,	Not Fitted_____	
8. Gas Regulator	:	Serviced / Checked	Yes []	No []
9. Carburetor	:	Serviced / Checked	Yes []	No []
10. Injector Changed	:	Yes []	No []	
11. Fuel Filter Changed	:	Yes []	No []	
12. Fuel Tank Cleaned	:	Yes []	No []	
13. Exhaust Cleaned	:	Yes []	No []	
14. Foundation Bolt Tightened:		Yes []	No []	
15. Exhaust Flange	:			
(Indicated Condition and				
Flexible Joint and Gasket)		Good []	Satisfactory []	Bad/Leaky []

MAGTRONIC INSPECTION

- | | | | |
|-----------------|----------|---|--------|
| 1. Magtronic | Replaced | : | Yes/No |
| | Checked | : | Yes/No |
| 2. Self Starter | Replaced | : | Yes/No |
| | Checked | : | Yes/No |

3. Spark Plug Replaced : Yes/No
Service : Yes/No
4. Ignition Transformer Replaced : [1] [2] [3] [4] [5] [6]
5. Safety System : LLOP : Checked/Replaced
HWT Safety Switch : Checked/Replaced
Ignition Switch : Checked/Replaced
6. Battery Pole Terminal Cleaned: Yes / No
Distilled Water Poured : Yes / No
7. Changing System : OK [] Faulty []
If faulty Replaced repaired : _____

INSTRUMENT PANEL READING

1. Lube Oil Pr. : _____
2. Lube Oil Temperature : _____
3. Water Temperature : _____
4. Amp. Meter : _____

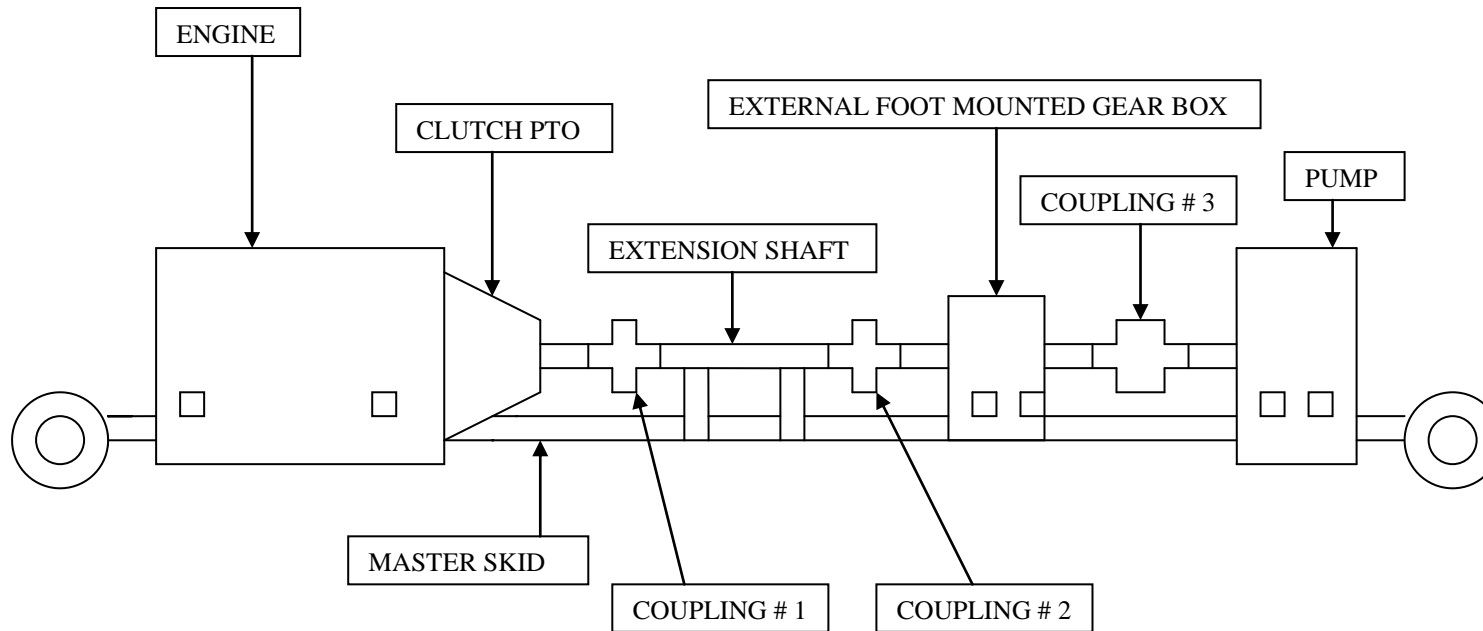
Remarks: _____

Workman
Regd. No

Technician, Magtronic
Regd. No

INSPECTION TRANSMISSION CHAIN: (Location:

Unit:)



I. CLUTCH ASSEMBLY (Make & Model)

- i. Check clutch shoes and pressure plates

Action taken:

- ii. Check clutch links & levers

Action taken:

- iii. Check Shifter, Yoke & Hand lever

Action taken:

- iv. Check condition of Pilot Bearing & Bearing Housing

Action taken:

- v. Grease Clutch Bearings

Action taken:

- vi. Adjust Clutch and perform functional test on load:

Action taken:

II. COUPLING # 1 : (Make & Model)

- i. Check coupling nuts and bolts for looseness / wear.

Action taken:

- ii. Check Coupling Hubs for looseness / ovality of bolt holes

Action taken:

- iii. Check element (Tyre / Shims) for wear / damage

Action taken:

III. COUPLING # 2 (Make & Model)

- i. Check coupling nuts and bolts for looseness / wear.

Action taken:

- ii. Check Coupling Hubs for looseness / ovality of bolt holes

Action taken:

- iii. Check element (Tyre / Shims) for wear / damage

Action taken:

IV. EXTENSION SHAFT

- i. Check Pedestal Bearings

Action taken:

- ii. Check Pedestal bearing housing

Action taken:

- iii. Check pedestal bearing support

Action taken:

VII. Check the overall ALIGNMENT of the Transmission Train

Action taken:

Inspected By:

Inspected On:

Designation:

Checked By:

Designation:

Signature , Chief Field Manager

Signature Maintenance Engineer

EQUIPMENT HISTORY CARD

Description of the Equipment : **Sl. No** :
Location : **Tag No** :
Make : **Date of Commissioning:**

Maintenance/ Modification done	Date	Remarks	Signature

Signature , Chief Field Manager

Signature of Maintenance Engineer.

Annexure – III
Clause No. – 2.5.2
Of Terms of Reference
STATICS

**(Bath Heaters, EETs, Strainers, Tanks, ETP-Facilities,
Boiler, Water Supply System)**

Maintenance Schedule
Maintenance Log-Sheets
Maintenance Check-Lists

Daily Maintenance Check List for Effluent Treatment Plant: Stationary Parts

DATE:

EQUIPMENTS INSPECTED	ACTIONS TAKEN IF REQUIRED
1.OIL ACCUMULATION IN HOLDING TANK	
2. CPI STATUS	
a. OIL ACCUMULATION	
b. QUALITY OF INFLUENT FORMATION WATER	
c. WHETHER INTERCEPTOR VESSEL DRAINED	
d. WHETHER PACKS INSPECTED	
3. DEPURATOR STATUS:	
a. OIL CONTAMINATION	
b. INJECTION OF CHEMICALS PROCESS OK	
c. PROPER FUNCTIONING OF THE SKIMMING BLADES	
d. OIL CONTAMINATION ON THE BLADES.	
e. PROPER AERATION PROVIDED.	
f. POWER CONSUMPTION OF THE AERATION MACHINE	
4. MULTIMEDIA FILTERS STATUS:	
a. DIFFERENTIAL PRESSURE OBSERVED	
b. FILTER MEDIA IF NEED TO BE REPLACED	
c. BACKWASHING OF THE FILTERS	
5. CLARIFIED WATER TANK STATUS:	
a. OIL ACCUMULATION IF ANY:	
b. LEAKAGE FROM THE VALVES:	
6. SLOP TANK STATUS:	
a. OIL LEVEL IN THE TANK	
b. WHETHER PROPER STEAM INJECTION PROVIDED	
c. OVERFLOW OBSERVED:	
7. GRAVITY SEPARATOR STATUS:	
a. OIL LEVEL :	

Signature , Chief Field Manager

Signature Maintenance Engineer

LOG SHEET FOR BOILER

Date:

Shift	Boiler No.	Start	Stop	Total R. Hr.	Fuel Pr.	Steam Pr. At Boiler	Steam Pr. On line	Feed Pump No.	Mobary check	Blowdown check	Chemical dosing qty.	Water hardness & pH	Level of water in Tank
A	Boiler - I												
	Boiler - II												
B	Boiler - I												
	Boiler - II												
C	Boiler - I												
	Boiler - II												

Stock Status:-

Shift	Item	Opening	Used	Balance
A	MAXTREAT 3223			
	MAXTREAT 3100L			
	NaCl			
	Hardness Checking Reagent			
B	MAXTREAT 3223			
	MAXTREAT 3100L			
	NaCl			
	Hardness Checking Reagent			
C	MAXTREAT 3223			
	MAXTREAT 3100L			
	NaCl			
	Hardness Checking Reagent			

Observation / Remarks :-

Signature of Operator:-

Signature of Shift Incharge

Shift A

Shift B

Shift C

6th Monthly Maintenances Jobs of Loco Boiler

Location : ITF, Tengakhat

Boiler – I / Boiler - II

Date:

Activity		Observation / Remarks
1	Isolating Boiler connection	
2	Renewal of tube holes	
3	To replace the stay tube of Loco Boiler	
4	To replace the plain tube of Loco Boiler	
5	Replacement of plain/ stay tubes:	
6	Internal cleaning of boiler	
7	Check the Fuel Strainer for cleanliness. Clean if required.	
8	Check Ignition electrode, Burner nozzles etc for cleanliness. Clean if required.	
9	Check & clean contact of all electrical items.	
10	Check operation of all Safety equipments and rectify if required.	
11	Check refractory etc. with torch inside combustion chamber; rectify if required	
12	DP test of whole tube plate	
13	Hydraulic test of boiler	

Signature , Chief Field Manager

Signature Maintenance Engineer

Job under Emergency Maintenances of Loco Boiler

Location : ITF, Tengakhat

Boiler – I / Boiler - II

Date:

Activity		Observation / Remarks
1	Isolating Boiler connection	
2	Renewal of tube holes	
3	To replace the stay tube of Loco Boiler	

Signature , Chief Field Manager

Signature Maintenance Engineer

3(three) Monthly Maintenances Jobs of EETs / Bath heaters

Location : ITF, Tengakhat

Boiler – I / Boiler - II

Date:

Activity		Observation / Remarks
1	Sand and sludge cleaning of EET	
2	Safe transportation of sand/ sludge near ETP for temporary storage	
3	Checking of Entrance bushings and rectifications if required	
4	Checking of Electrode rods and their connections and rectifications if required	
5	Checking and cleaning of all internals / spreader of EET	
6	Checking and cleaning of all pipe internals.	
7	Checking and resetting of SRVs if required.	
8	Checking and cleaning of all valves.	
9	Carrying out all other maintenance jobs (monthly ones) on electrical / instrumentation attached to the EETs	
10	Checking & cleaning of burners / spark plug / fuel-air proportioner of BathHeaters	
11	Checking and cleaning of flame arrestors of Bath Heaters	
12	Checking and cleaning of chimneys stack of Bath Heaters	
13	Checking of density of Glycol and addition of glycol if required.	
14	Checking of vapour dome / level gauges / leakage if any	

Signature , Chief Field Manager

Signature Maintenance Engineer

Note: Following activities are to be carried out as and when required.

Checking and cleaning of inter-phase column (if required frequently to be done)

Checking of gas quality and draining of liquid at gas scrubber at required frequencies

OIL INDIA LIMITED

Crude Oil dehydration Plant & ITF, OIL, Tengakhat.

LOG SHEET FOR ALL WATER SUPPLY SYSTEM

Water supply facility for drinking, service and process water.

Date:

1. All types of pumps deployed in the system (starting from bore well , filtering and supplying pumps)
2. All storage facilities including ground water reservoirs for fire fighting and drinking service water and other process water (boiler, cooling tower etc)
3. All treatment and filtering system including dosing pumps, various chemicals, filtering media , testing equipment etc.

Signature of Operator:-

Signature of Shift Incharge

Shift A

Shift B

Shift C

Annexure – IV
Clause No. – 2.7
Of Terms of Reference

ELECTRICAL

Maintenance Schedule
Maintenance Log-Sheets
Maintenance Check-Lists

MAINTENANCE SCHEDULE OF ITF ELECTRICAL EQUIPMENT (EQUIPMENT WISE)

SL. NO.	TYPE OF MAINTENANCE	NATURE OF MAINTENANCE/ INSPECTION	PERIOD						RECORD / DOCUMENT IN	REMARKS
			EVERY SHIFT	DAILY	F'NIGHTLY	MONTHLY	YEARLY	OTHERS		
1	BOOSTER TRANSFORMERS									
	Routine	Check tank and radiator for unusual noise, oil water leaks	√						Shift log book	
		Check relief valves whether normal or open	√						Shift log book	
		Check for oil and winding temperature and confirm normal condition	√						Shift log book	
		Check for oil level in main tank and conservator		√					Daily work progress register	
		Check for load		√						
		Check for overall cleanliness Check for any oil leakage Check for silica gel condition				√			Equipment maintenance register	
	Preventive	Check condition of silica gel and replace/take corrective action if found moisture				√			Equipment maintenance register	
		Cleaning including breather					√			
		Checking IR Value including cables					√			
		Tightening of connections					√			
Testing oil (for BDV, acidity, sludge, water content etc.)						√				

SL. NO.	TYPE OF MAINTENANCE	NATURE OF MAINTENANCE/ INSPECTION	PERIOD						RECORD / DOCUMENT IN	REMARKS
			EVERY SHIFT	DAILY	F'NIGHTLY	MONTHLY	YEARLY	OTHERS		
2	EET TRANSFORMERS									
	Routine	Check tank and radiator for unusual noise, oil and water leaks	√						Shift log book	
		Check relief valves whether normal or open	√						Shift log book	
		Check for oil and winding temperature and confirm normal condition	√						Shift log book	
		Check for oil level in main tank and conservator		√					Daily work progress register	
		Check for load		√					Daily work progress register	
		Check for overall cleanliness Check for any oil leakage				√			Equipment maintenance register	
	Preventive	Cleaning including breather					√		Equipment maintenance register	
		Checking IR Value including cables					√			
		Tightening of connections					√			
		Testing oil (for BDV, acidity, sludge, water content etc.)					√			

SL. NO.	TYPE OF MAINTENANCE	NATURE OF MAINTENANCE/ INSPECTION	PERIOD						RECORD / DOCUMENT IN	REMARKS
			EVERY SHIFT	DAILY	F'NIGHTLY	MONTHLY	YEARLY	OTHERS		
3	LIGHTING TRANSFORMERS									
	Routine	Check for load	√						Shift log book	
		Check for overall cleanliness		√					Daily work progress register	
		Check for overheating		√		√			Daily work progress register	
	Preventive	Cleaning thoroughly				√			Equipment maintenance register	
		Checking IR Value including cables					√			
		Tightening of connections					√			
4	A. C. MOTORS:									
	Routine	Check for overheating		√					Shift log book	
		Check for abnormal noise and vibration		√					Shift log book	
		Check for overall cleanliness		√					Shift log book	
		Cleaning				√			Equipment maintenance register	
		Greasing					√	√		As required
		Connections (tightening)					√	√		As required
		IR Value							Commissioning report	
		Overhauling						EVERY 3 YEARS	Maintained at W/Shop	Preferably
	Preventive	Checking of flange gap and shaft gap of FLP motors					√		Equipment maintenance register	

SL. NO.	TYPE OF MAINTENANCE	NATURE OF MAINTENANCE/ INSPECTION	PERIOD						RECORD / DOCUMENT IN	REMARKS
			EVERY SHIFT	DAILY	F'NIGHTLY	MONTHLY	YEARLY	OTHERS		
5	LT AC PANEL IN CONTROL ROOM AND MCC PANELS (#1, 2, 3, 4 & FUTURE)									
	Routine	Operation of emergency lights	√						Shift log book	
		Overheating of Panels (From outside)	√							
		Cleaning of panels (Outside, including floor mats)		√						
		Check for external damages				√	√		Equipment maintenance register	
		Check for effectiveness of ventilation system				√	√			
		Check for corrosion effect (external and internal)				√	√			
		Testing of RCDs				√			RCD test record register	
	Preventive	Cleaning panels (interior)				√	√	√	Equipment maintenance register	Subject to availability of shutdown
		Checking of panels				√	√			
		Tightening of all connections including TBs				√	√	√		
		Check cable TBs				√	√			
		Check for overall cleanliness				√	√	√		
		Check breaker handle ok/not				√				
		Check for accessibility of maintenance/operation				√	√			
		Major overhauling						As required		

SL. NO.	TYPE OF MAINTENANCE	NATURE OF MAINTENANCE/ INSPECTION	PERIOD						RECORD / DOCUMENT IN	REMARKS
			Each Shift	DAILY	F'Nightly	Monthly	YEARLY	OTHERS		
6	AIR CONDITIONERS:									
	Routine	Check for proper operation	√						Shift log book	
	Preventive	Servicing						Every 3* months	Eqmt maintenance register	* or as required
7	EARTHING:									
	Routine	Checking of connections			√	√		√	Eqmt maintenance register	* or as required
		Measurement of earth resistance					√		Commissioning Report	
8	CABLES: CABLES/CABLE DUCT/TRENCH/SUPPORT									
	Routine	Check for cleanliness					√	6 monthly*	Equipment maintenance register	* or as reqd
		Check for sealing cable ducts/ trenches (prevention of entry foreign matls, vermin, water, chemicals, dirt, reptiles ducts)					√	Six monthly*		* or as required
	Preventive	Checking of IR Value						As reqd		
		Checking of overheating					√	√		
		Check for damages to cables, conduits, wires, clamps, cable supports; Check for corrosive effect on conduit & junctionBx					√	√		
9	LIGHT FITTINGS (Including high mast systems)									
	Routine	Checking and cleaning (Lantern Carriage operation)		√		√	√	Six monthly*	Daily work progress register	* high mast
		Replacement of bulb, ignitor, ballast etc.						As reqd.	Shift log book	
10	UPS AND BATTERY									
	Routine	Cleaning of cabinet				√	√		Equipment maintenance register	
	Preventive	Check Battery bank voltage			√	√				

Annexure – V
Clause No. – 2.8.1
Of Terms of Reference

INSTRUMENTATION

Maintenance Schedule
Maintenance Log-Sheets
Maintenance Check-Lists

Monthly maintenance for Motor Operated Valve-----

Month & Year

Sl. No.	Tag no.	MOV-01	MOV-02	MOV-03	MOV-04	MOV-05	MOV-06	MOV-07	MOV-08	MOV-09	MOV-10	MOV-11	MOV-12	MOV-13	MOV-14	MOV-15	MOV-16	MOV-17	MOV-18	MOV-19	MOV-20	MOV-21	MOV-22
	Activities																						
1	Change the Oil																						
2	Clean the grease of the Spindle and re-grease it																						
3	Check and if required tightened the bolts of the flange between valve and actuator																						
4	Check the opening and closing of the valve in local mode and manually																						
5	Check the opening and closing of the valve in auto mode																						
	Done by																						
	Checked																						
	Date																						
	Tag no.	MOV-23	MOV-24	MOV-25	MOV-26	MOV-27	MOV-28	MOV-29	MOV-30	MOV-31	MOV-32	MOV-33	MOV-34	MOV-35	MOV-36	MOV-37	MOV-38	MOV-39	MOV-40	MOV-41	MOV-42	MOV-43	
	Activities														***								
1	Change the Oil																						
2	Check and if required tightened the bolts of the flange between valve and actuator																						
3	Tightened the bolts of the flange between valve and actuator																						
4	Check the opening and closing of the valve in local mode and manually																						
5	Check the opening and closing of the valve in auto mode																						
	Done by																						
	Checked																						
	Date																						

Remarks:

Monthly maintenance for ON/ OFF Valves											
Month & Year											
Sl. No.	Tag No	Tags									
		UV-1101A	UV-1101B	UV-1201A	UV-1201B	UV-1301A	UV-1301B	UV-1401A	UV-1401B	UV-1501A	UV-1501B
1	Check the 24 VDC										
2	Check the function of Solenoid										
3	Clean the Globe and Seat										
	Done by										
	Checked										
	Date										
	Tag No										
		UV-1100A	UV-1100B	UV-1100C	UV-1100A	UV-1100B	UV-1100C	UV-1100A	UV-1100B	UV-1100C	UV-1101A
1	Check the 24 VDC										
2	Check the function of Solenoid										
3	Clean the orifice and Spindle										
	Done by										
	Checked										
	Date										

Remarks :

Monthly maintenance for Control Valves-----

Month & Year

Sl. No.	Activities	PCV-101	PCV-102	LCV-101	LCV-102	LCV-103	TCV-100	TCV-200	TCV-300	TCV-400	TCV-500	01TCV001	01TCV002	01TCV003	01TCV004	01TCV005	01TCV006	01TCV007	01TCV008	01TCV009
	Monthly maintenance.																			
1	Check for any leakage between the flange and tighten the bolts of the flange if required.																			
2	Check the function of isolation valve and the drain valve.																			
3	Check the 24V supply																			
4	Check and tighten the connection of I/P convertors.																			
5	Check for gland leakage.																			
	Done by																			
	Checked																			
	Date :																			

Remark:

Monthly maintenance for Pressure Relief Valves

Month & Year

[illegible]

Monthly maintenance for Water in Oil Monitor-----

Month :

Sl. No.	Activities	Tags				
		01WM001	01WM002	01WM003	01WM004	01WM005
1	Check for zero drift.					
2	Calibrate it if required.					
3	Verify the analyzer reading by performing the lab test.					
4	Calibrate it if required					
5	Check for any moisture content in the sensor and analyzer					
6	Display Value					
7	Lab Test Value					
	Done by					
	Checked					
	Date					

Monthly maintenance for Pressure Switch	
---	--

Month :

[illegible]

<u>Remarks</u>

Month :

Monthly maintenance for Level Switch

	Activities	LSH-1701	LSL-1701	LSH-1702	LSL-1702	LSLL-102	LSLL-103	LSLL-104	LSLL-105	LSLL-106	LSLL-107	LSLL-108	03LSL-302A	03LSL-302B	03LSL-302C	<u>Remarks</u>
1	Check for any leakages in valves,ends															
2	Check 24VDC															
	Date															
	Last Date of Calibration															
5	Range															
6	Set point of pressure switch															
	Done by															
	Checked by															

Monthly maintenance for Temperature Switch

	Activities	TSH-101	TSH-102	TSH-103	TSH-104	TSH-105	<u>Remarks</u>
1	Check the Thermowell against dirt /Defect						
2	Check the tightness of the bolts						
3	Check 24VDC						
	Last Date of Calibration						
4	Range						
5	Set point of pressure switch						
	Date						
	Done by						
	Checked by						

Monthly maintenance for Pressure Gauge

Month :

Sl. No.	Activities	Tags																					
		01PG -004	01PG -005	01PG -006	01PG -007	01PG -008	01PG -009	01PG -012	01PG -013	01PG -014	01PG -015	01PG -016	01PG -017	01PG -018	01PG -019	01PG -020	01PG -021	01PG -022	01PG -023	01PG -024	01PG -025	01PG -026	01PG -027
1	Check the function of Isolating Valves																						
2	Check the proper qty of dampening liquid and if required fill it																						
3	Check the zero shifting																						
4	If required calibrate it																						
5	Range																						
6	Display of value																						
	Done by																						
	Checked																						
	Date																						

Remarks

Sl. No.	Activities	Tags																					
		01PG -028	01PG -029	03PG -003	03PG -004	03PG -005	03PG -006	03PG -007	03PG -008	03PG -009	03PG -010	03PG -011	03PG -021	03PG -022	03PG -023	04PG -030	04PG -031	04PG -032	04PG -033	05PG -001	05PG -002	05PG -003	05PG -004
1	Check the function of Isolating Valves																						
2	Check the proper qty of dampening liquid and if required fill it																						
3	Check zero shifting																						
4	If required calibrate it																						
	Done by																						
	Checked																						
	Date																						

Remarks

	Activities	Tags																					
		05PG-009	05PG-010	05PG-012	05PG-036	05PG-037	05PG-038	PI-1701	PI-1702	PI-1703	PI-1704	PI-1705	PI-1706	PI-1707	PI-1708	PI-1709	PI-1710	PI-1711	PI-1712	PG-101	PG-102	PG-103	PG-110
1	Check the function of Isolating Valves																						
2	Check the proper qty of dampening liquid and if required fill it																						
3	Check the zero shifting																						
4	If required calibrate it																						
	Done by																						
	Checked																						
	Date																						
	Activities	Tags																					
		PG-111	PG-130	PG-131	PG-132	PG-133	PG-134	PG-135	PG-136	PG-137	PG-138	PG-139	PG-140	PG-141	PG-142	PG-143	PG-144	PG-145	PG-146	PG-147	PI-1501	PI-1503	PI-1504
1	Check the function of Isolating Valves																						
2	Check the proper qty of dampening liquid and if required fill it																						
3	Check the zero shifting																						
4	If required calibrate it																						
	Done by																						
	Checked																						
	Date																						
Remarks																							

Monthly maintenance for Temperature Gauge

Month :

Sl. No.		Tags										
		01TG-001	05TG-001	05TG-002	05TG-003	TG-102	TG-103	TG-104	TG-105	TG-106	TG-108	TG-109
1	Check the Thermowell against dirt /Defect											
2	Check the tightness of the bolts											
3	Range											
4	Display of value											
	Done by											
	Checked											
	Date											
		TG-110	TG-111	TG-112	TG-113	TG-114	TG-115	TG-116	TG-117	TG-118	TG-119	TG-120
1	Check the Thermowell against dirt /Defect											
2	Check the tightness of the bolts											
	Done by											
	Checked											
	Date											

Remark:

Monthly maintenance for Differential Pressure Gauge
Month :

Sl. No.		TAGS				
		DPI-101	DPI-102	DPI-103	DPI-104	DPI-105
1	Check the function of Isolating Valves /Manifolds					
2	Check the proper qty of dampening liquid and if required fill it					
3	Check any leakages in Impulse Piping					
4	Check the zero shifting					
5	If required calibrate it					
6	Range					
7	Display of value					
	Done by					
	Checked					
	Date					

Remark:

Monthly maintenance for BMS						
Month :						
Sl. No.	Activities	Tags				
		BMS 100	BMS 200	BMS 300	BMS 400	BMS 500
1	Check Proper 24VDC					
2	Check the functionality of MCB					
3	Check 24VDC to Ignition Supply					
4	Status of pilot/main SOV					
5	Status of main line PRV					
6	Status of flame quality (B/Y)					
7	Status of inlet air duct					
	Done by					
	Checked					
	Date					

Remarks :

Monthly maintenance for Pressure Transmitter-----

[illegible]

Monthly maintenance for Temperature Transmitter-----

[illegible]

Monthly maintenance for Control Panel

Month :

Sl. No.	Activities	Tags					
		ABB	CODP-1	CODP-2	AB	Boiler -1	Boiler -2
1	Check for proper 230 VAC						
2	Check for proper 24 VDC						
3	Check the functionality of MCB						
4	Check the Lighting System						
5	Check all the fuses						
6	Check the condition of mimic panel						
	Done by						
	Checked						
	Date						
	Remarks:						

Monthly maintenance for Work Station

Month :

Sl. No.	Activities							
		Server-1	Server-2	Client-1	Client-2	TFMS	Printer -1	Printer -2
1	Check for proper 230 VAC							
2	Check the spike Buster							
3	Check the virtual Memory of CPU							
4	Check for any excess memory in database of Server							
5	Status of air cooling system							
	Done by							
	Checked							
	Date							
	Remark:							

Monthly maintenance for Tank Farm Management System (TFMS)

Month :

Sl. No.	Activities	Tank-1	
1	Check for any difference in Local and Entis Readings		
2	Display of local/EntisXL Value		
3	Manual Value of tank level		
	If required Calibrate		
4	Check 24VDC in CIU		
5	Check 48VDC in the Radar Gauges		
6	Check for Interior Cleanliness of Radar Gauges		
	Done by		
	Checked		
	Date		
<u>Remarks :</u>			

Monthly maintenance for Uninterrupted Power Supply						
Month :						
Sl. No.	Activities	Tags				
		UPS-1	UPS-2			
1	Cleaning of the cabinet					
2	Battery Bank Voltage					
	Done by					
	Checked					

Date _____

Monthly Maintenance-Cable/Cable Duct/Trench/Tray support															
Month :															
Sl. No.	Activities	Tags													
1	Check for cleanliness														
2	Check for Sealing cable trenches /ducts (prevention of entry of foreign materials-vermin, water, chemicals, dirt, reptiles, etc into trenches, ducts)														
3	Check for damages to cables,conduits,wires clamps/cable supports														
4	Check for Corrosive effects on conduits & junction boxes.														
	Done by														
	Checked														
	Date														
Remarks															

Remarks

Clause No. – 2.10.4 Of Terms of Reference**Broad Scope of Painting Job of ITF TENGA KHAT**

S/No.	Description	Constructed facilities to be painted	Total Area (in sq. mtr)
1	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade. Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	Crude Oil Storage Tanks	11200
		Formation Water Holding Tanks	350
		Clarified Water Tank	500
		Static water overhead tank	1500
		Roof-CI Sheets of CODP , FWDP-House, EET, Bath Heater, Chemical Dosing, Air Compressor, MOV, ETP etc	5550
		Fire ring main, Water Monitors, TPC Valves	3800
		Pipes and Valves	1100
		ETP	150
		Fencing, staircase, support	650
		Watch Tower	400
2	White Washing with lime to give an even shade. Old work (two or more code)	CISF Barrack	1200
		Dyke Wall	2500
		Boundary Wall	3900
		Canteen	250
		Workshop cum godown	450
		Fire Tender Station	750
		Boiler Shed	150
3	Removing white or colour wash by scraping and sand papering and preparing the surface smooth including necessary repairs to scratched etc. complete		

ANNEXURE – VI

4	Removing dry or oil bound water proofing cement paint and the like by scrapping, san papering and preparing the surface smooth including necessary repairs to scratches etc complete.		
5	Distempering with dry distemper of approved brand and manufacture (1 or more coats) and of required shed on old work to give an even shape	Canteen	
		CISF Barrack	
		Fire Tender Station	
		MCC shed	
		WSS shed	
		Control room	
6	Distempering with oil bound washable distemper of approved brand and manufacture (1 or more coats) to give an even shape	Admin Bldg	
7	Fixing double scaffolding system (cup lock type) on the exterior side, upto 7 story height made with 40mm dia MS tube 1.5 meter center to center horizontal and vertical tubes joining with cup & lock system with MS tubes, MS tube challies, MS clamps and MS stair case system in the scaffolding for working platform etc and maintaining it in a serviceable condition for the required duration as approved and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workman etc. Complete as per directions and approval of engineer in charge.		

**FORMAT FOR UNDERTAKING (IN TERMS OF BEC CLAUSE NOS. 1.3 OF
TENDER NO. CDO3622P20)**

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

**To
CHIEF GENERAL MANAGER (CONTRACTS-HoD)
OIL INDIA LIMITED
DULIAJAN**

**UNDERTAKING/DECLARATION BY THE BIDDER AND THE OEM(S)/AUTHORIZED
DEALER(S) OF EQUIPMENT(S) SPECIFIED IN BEC/BRC CLAUSE NO. 1.3 IN
RESPECT OF TENDER NO CDO3622P20**

Dear Sirs,

This is in connection with the Bid submitted by _____ against Tender No. _____ for "Operation and Maintenance Contract of ITF-Tengakhat for a period of 06 (six) years extendable by another 01(one) year".

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 BEC/BRC Clause no. 1.3.

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:-

PROFORMA - A

**LIST OF ITEMS (EQUIPMENT, TOOLS, ACCESSORIES, SPARES & CONSUMABLE) TO BE IMPORTED IN CONNECTION WITH
EXECUTION OF THE CONTRACT SHOWING CIF VALUE**

Sl.No	Item Description	Qty/Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re- exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	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".

Authorised Person's Signature: _____

Name: _____

Seal of the Bidder:

OIL INDIA LIMITED
(A Government of India Enterprise)
Duliajan, Assam

DESCRIPTION OF WORK/SERVICE: Hiring of Services for Operation and Maintenance of ITF-Tengakhat for a period of 06 (six) years with a provision for extension by another 01 (one) year.

PRICE BID FORMAT for E-TENDER No. CDO3622P20

<u>NAME OF BIDDER</u>								
<u>Bidder's GST No.</u>								
<u>SAC/HSN Code</u>								
<u>Select the benefit sought under the Policy</u> <u>(Use Drop Down List)</u>								
Item No.	Description of Services (For detailed description of Services Refer SOQ)	UOM	Estimated Quantity	Rate (Rs.) to be quoted Excluding GST	Applicable GST Rate in %	Applicable GST (Select from Drop down List)	Total Amount (Rs.) Excluding GST	Total Amount (Rs.) Including GST
			A	B	C		D = A * B	E = D+(D * C)
10	O&M Service-Charge 1 st Year	MON	12				0.00	0.00
20	O&M Service-Charge 2 nd Year	MON	12				0.00	0.00
30	O&M Service-Charge 3 rd Year	MON	12	#DIV/0!			#DIV/0!	#DIV/0!
40	O&M Service-Charge 4 th Year	MON	12	#DIV/0!			#DIV/0!	#DIV/0!
50	O&M Service-Charge 5 th Year	MON	12	#DIV/0!			#DIV/0!	#DIV/0!
60	O&M Service-Charge 6 th Year	MON	12	#DIV/0!			#DIV/0!	#DIV/0!
Total (Rs)							#DIV/0!	#DIV/0!
								The above cost should be maintained under "Total Bid Value" in the E-Tender Portal

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) 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.
6. Bidder may seek benefits under Public Procurement Policy for MSEs – Order 2012.
7. Refer to GCC for detail of GST
8. Refer to SOQ & SCC for Item detail Description
9. Mobilisation Period: 30 (Thirty) days from the date of issue of LOA

BID FORM

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

Sub: IFB No. CDO3622P20

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 quoted in the Price Bid Format 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 submit the Performance Security Deposit as specified in the tender document 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 _____ 2020.

Authorised Person's Signature: _____

Name: _____

Designation: _____

Seal of the Bidder:

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 (HOD)
OIL INDIA LIMITED
P.O. DULIAJAN-786602
Assam, India**

Sir,

SUB: OIL's IFB No. CDO3622P20

I/We _____ confirm that Mr. _____ (Name and address) as authorised to represent us during bid opening on our behalf with you against IFB No. **CDO3622P20** for **Hiring of Services for Operation and Maintenance of ITF-Tengakhat for a period of 06 (six) years with a provision for extension by another 01 (one) year.**

Yours Faithfully,

Authorised Person's Signature: _____

Name: _____

Signature of Bidder: _____

Name: _____

Date: _____

PROFORMA LETTER OF AUTHORITY

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

Dear Sir,

SUB: OIL's IFB No. CDO3622P20

We _____ of _____
Confirm that Mr. _____
_____ (Name and Address) is authorised to represent us to Bid,
negotiate and conclude the agreement on our behalf with you against IFB No.
CDO3622P20 for **Hiring of Services for Operation and Maintenance of ITF-**
Tengakhat for a period of 06 (six) years with a provision for extension by
another 01 (one) year for any commercial/Legal purpose etc.

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

Authorised Person's Signature: _____

Name: _____

Yours faithfully,

Signature: _____

Name & Designation _____

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.

FORM OF BID SECURITY (BANK GUARANTEE FORMAT)

To
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:

1. If the Bidder withdraws their Bid within its original/extended validity; or
2. The Bidder modifies/revises their bid suomoto; or
3. The Bidder does not accept the contract; or
4. The Bidder does not furnish Performance Security Deposit within the stipulated time as per tender/contract; or
5. 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

Witness _____

Address _____

(Signature, Name and Address)

Date: _____

Place: _____

* 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.

Note:

The Bank Guarantee issuing bank branch shall ensure the following:

- a. The Bank Guarantee issued by the Bank must be routed through SFMS platform as per 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 (indicating the Tender No.) by the BG issuing Bank branch to HDFC Bank, Duliajan Branch, IFS Code – HDFC0002118; SWIFT Code - HDFCINBBCAL. Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.

- b. Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

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

Name:

FULL Address:

Phone Number:

Mobile Number:

E-mail address:

Fax Number:

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

Bank Name:

Branch:

Address of the Bank:

Bank Code:

IFSC/RTGS Code of the Bank:

NEFT Code of the Bank:

PAN Number:

GST Registration Number:

Signature of Bidder with Official Seal

FORM OF PERFORMANCE BANK GUARANTEE

(TO BE FURNISHED BY THE CONTRACTOR IN CASE OF SUBMITTING PERFORMANCE SECURITY IN THE FORM OF BANK GUARANTEE AFTER ISSUE OF LOA)

**To
M/s OIL INDIA LIMITED,
CONTRACTS DEPARTMENT
DULIAJAN, ASSAM, INDIA, PIN-786602**

WHEREAS _____ (Name and address of Contractor) (hereinafter called "Contractor") had undertaken, in pursuance of Contract No. _____ to execute _____ (Brief Description of the Work) (hereinafter called "the Contract").

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 cease us from any liability under this guarantee, and we hereby waive notice of such change, addition or modification.

This guarantee is valid until the _____ day 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:

Contd.... P/2

Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____

Designation _____

Name of Bank _____

Address _____

Witness _____

Address _____

Date: _____

Place: _____

Note:

The Bank Guarantee issuing bank branch shall ensure the following:

- a. The Bank Guarantee issued by the Bank must be routed through SFMS platform as per 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 (indicating the Contract No.) by the BG issuing Bank branch to HDFC Bank, Duliajan Branch, IFS Code – HDFC0002118; SWIFT Code - HDFCINBBCAL. Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.

- b. Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

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,

WHEREAS the Company desires that Services _____ (brief description of services) should be provided by the Contractor as detailed hereinafter 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. _____ and the Contractor accepted the same vide Letter No. _____ dated _____.

WHEREAS, the Contractor has furnished to Company the performance security in the form of DD/BC/BG for Rs. _____ (being 10% of annualized Contract value) with validity of 90 (Ninety) days beyond the contract period.

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.

NOW WHEREAS, in consideration of the mutual covenants and agreements hereinafter contained, it is hereby agreed as follows –

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.

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 this agreement viz.:

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- (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.

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.

Format of undertaking by Bidders towards submission of authentic information/documents (To be typed on the letter head of the bidder)

Ref. No _____

Date _____

Sub: Undertaking of authenticity of information/documents submitted

Ref: Your Tender No. CDO3622P20

**To,
The CGM-Contracts (HoD)
Contracts Department,
OIL, Duliajan**

Sir,

With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory

Name :

Designation :

Phone No.

Place :

Date :

(Affix Seal of the Organization here, if applicable)

**(TO BE EXECUTED BY THE AUTHORIZED SIGNATORY OF THE BIDDER ON THE
OFFICIAL LETTER HEAD OF THE BIDDER)**

CERTIFICATE OF COMPLIANCE TO FINANCIAL CRITERIA

**Ref : Note 'b.' under Clause 1.1 Financial Criteria of BEC/BRC of
Tender No. CDO3622P20**

I _____ the authorized signatory(s) of
_____ (Company or Firm name with address) do
hereby solemnly affirm and declare/ undertake as under:

**The balance sheet/Financial Statements for the financial year _____
have actually not been audited as on the Original Bid Closing Date.**

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

Note: Please note that any declaration bearing date after the Bid Closing Date will not be considered and will be rejected. This certificate is to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the Original Bid Closing Date.

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Bidder's Name: _____

Sl. No.	Clause No. of BEC/BRC	Description	Compliance		Bidder to indicate Relevant Page No. of their Bid to support the remarks/ compliance
			Yes	No	
1	1.0	<u>BID EVALUATION CRITERIA (BEC)</u> 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.			
<u>1.1 FINANCIAL CRITERIA</u>					
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. 4,40,24,800.00 (Rupees Four Crore Forty Lakh Twenty Four Thousand Eight Hundred only) .			
3	1.1.2	Net worth of the bidder must be Positive for the preceding financial/accounting year. Note: The Net worth to be considered against Clause 1.1.2 above, should be read in conjunction with the definition of Net worth as mentioned in			

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		Section 2 (57) of The Companies Act, 2013.			
4	Note to BEC Clause 1.1 above	<p>a. For proof of Annual Turnover & Net worth (refer clauses 1.1.1 & 1.1.2), any one of the following documents/photocopies must be submitted along with the bid:</p> <p style="padding-left: 40px;">(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.</p> <p>Note: Mention of UDIN (Unique Document Identification Number) is mandatory for all Certificates issued w.e.f. February 1, 2019 by Chartered Accountant in Practice.</p> <p>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 undertaking in support of the same along with their technical bid as per Proforma-X.</p> <p>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</p>			

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		documentary evidence for the same.			
		<p>d. In case the bidder is a Government Department, they are exempted from submission of document mentioned under para a. and b. above.</p> <p>e. Bid will be rejected if not accompanied with adequate documentary proof in support of Annual turnover and Net worth, as mentioned in Para 1.1.1 & 1.1.2.</p>			
<u>1.2 TECHNICAL CRITERIA</u>					
5	1.2	The bidder shall have experience in successfully executing/completing at least one 'SIMILAR WORK' under single contract during the last 07 (seven) years reckoned from the original bid closing date in Central Govt./State Govt./Public Sector Undertaking/State Govt. Enterprise/Any E&P company or Downstream Oil and/or Gas Company.			
6	Note to BEC clause 1.2 above	<p>a. " Similar Work" mentioned in Para 1.2 above means Operation & Maintenance of following:</p> <p>i. Handling of Production Facility/Process Facility/Tank Farm with a minimum work experience of Rs. 4,40,24,800.00 (Rupees Four Crore Forty Lakh Twenty Four Thousand Eight Hundred only) for a minimum period of 03 (Three) years.</p> <p style="text-align: center;">OR</p> <p>ii. Handling of Natural Gas-Production/Gathering/Processing/Compression facility with a minimum work experience of 01 (One) MMSCUMD or more for a minimum period of 03 (Three) years.</p> <p style="text-align: center;">OR</p> <p>iii. Handling of Petroleum Production facility for a minimum production of 300 m³ per Day.</p> <p style="text-align: center;">OR</p> <p>iv. Handling of "Crude Oil"/"Petroleum Products" of Tank Farm with minimum storage capacity of 25,000 cubic meters.</p>			

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		<p>b. For proof of requisite Experience (refer Clause No. 1.2), the following documents/ photocopy (self-attested/attested) must be submitted along with the bid:</p> <p>I. <u>In case work experience is against OIL's Contract:</u> Bidder must submit Job Completion Certificate issued by the company indicating the following:</p> <p style="margin-left: 40px;">A. Work order no./Contract no. B. Gross value/quantity of job done C. Period of Service D. Nature of Service</p> <p>II. <u>In case work experience is not against OIL's Contract:</u> Bidder must submit the following:</p> <p style="margin-left: 40px;">A. Contract document showing details of work, AND B. Job Completion Certificate showing: (i) Gross value/quantity of job done (ii) Nature of job done and Work order no./Contract no. (iii) Contract period and date of completion OR C. SES (Service Entry Sheet)/Certificate of Payment (COP) issued by the company indicating the following: (i) Work order no./Contract no. (ii) Gross value/quantity of jobs done (iii) Period of Service (iv) Nature of Service</p> <p>c. Only Letter of Intent (LOI)/Letter of Award (LOA) or Work Order(s) are not acceptable as evidence.</p> <p>d. Mere award of contract(s) will not be counted towards experience.</p>			
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TECHNICAL EVALUATION SHEET FOR BEC
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		<p>Successful completion of the awarded contract(s) to the extent of volume & value, as stipulated respectively under Clause Nos. 1.2 will only be treated as acceptable experience.</p> <p>e. Following work experience will also be taken into consideration:</p> <ul style="list-style-type: none"> (i) If the prospective bidder has executed contract in which similar work is also a component of the contract. (ii) In case the start date of the requisite experience is beyond the prescribed 07(seven) years reckoned from the original bid closing date but completion is within the prescribed 07(seven) years reckoned from the original bid closing date. (iii) If the prospective bidder is executing similar work which is still running and the contract value/quantity executed prior to original bid closing date is equal to or more than the minimum prescribed value in the BEC. <p>Proof of work experience against Para e. (i) and (ii) above, to satisfy a) similar work b) minimum prescribed value/qty c) prescribed period of 07 years, to be submitted as below:</p> <ul style="list-style-type: none"> I. <u>In case requisite experience is against OIL's Contract:</u> Bidder must submit the breakup of similar work and its value/quantity mentioning SES No. and copies of all relevant SES. II. <u>In case requisite experience is not against OIL's Contract:</u> Bidder must submit the breakup of similar work and its value/quantity executed within the prescribed period of 07 (seven) years reckoned from the original bid closing date. The breakup must be certified by the end user or a certificate issued by a practicing Chartered/Cost Accountant Firm (with Membership Number & Firm Registration Number). 			
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		<p>Proof of work experience against Para e. (iii) above, to satisfy a) similar work b) minimum prescribed value/qty c) prescribed period of 07 years, to be submitted as below:</p> <p>I. <u>In case requisite experience is against OIL's Contract:</u> Bidder must submit the following:</p> <p style="padding-left: 40px;">A. Breakup of similar work</p> <p style="padding-left: 40px;">B. SES (Service Entry Sheet)/Certificate of Payment (COP) issued by the company indicating the following:</p> <p style="padding-left: 80px;">(i) Work order no./Contract no.</p> <p style="padding-left: 80px;">(ii) Gross value/quantity of job done</p> <p style="padding-left: 80px;">(iii) Period of Service</p> <p style="padding-left: 80px;">(iv) Nature of Service</p> <p>II. <u>In case requisite experience is not against OIL's Contract:</u> Bidder must submit the following:</p> <p style="padding-left: 40px;">A. Breakup of similar work</p> <p style="padding-left: 40px;">B. Contract document showing details of work.</p> <p style="padding-left: 40px;">C. LOA/LOI/Work order showing:</p> <p style="padding-left: 80px;">(i) Gross value/quantity of job awarded</p> <p style="padding-left: 80px;">(ii) Nature of job awarded</p> <p style="padding-left: 80px;">(iii) Contract no./Work order no.</p> <p style="padding-left: 80px;">(iv) Contract period</p> <p style="padding-left: 40px;">D. Certificate of Payment (COP)/SES (Service Entry Sheet) up to the previous month of the original bid closing date of this tender issued by the company indicating the following:</p> <p style="padding-left: 80px;">(i) Work order no./Contract no.</p> <p style="padding-left: 80px;">(ii) Gross value/quantity of job done</p>			
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		<p>(iii) Period of Work done</p> <p>(iv) Nature of Service</p> <p>f. In case of similar work executed through ‘sub-contracting’, the bidder shall submit relevant documents as mentioned under para ‘b’ and/or ‘e’ above, issued directly by the client organization/end user, along with confirmation towards consent of the client organization/end user for allowing ‘sub-contracting’.</p> <p>g. SIMILAR work executed by a bidder for its own organization/subsidiary cannot be considered as experience for the purpose of meeting BEC.</p> <p>h. Bids submitted for part of the work will be rejected. Bid will be rejected if not accompanied with adequate documentary proof in support of Work experience as mentioned in Para 1.2.</p>			
7	1.3	The bidder shall submit a undertaking from each of the following OEM’s along with the technical bid, that they will provide backup support for entire period of contract, including Annual Maintenance Contract (AMC) of DCS (ABB Make), TFMS (Honeywell Make), MOV (Limitorque Make), MOV (Rotork Make), Rim Seal Fire Protection System, Boiler PLCs (Seimens Make), UPS’s (Hitachi make) etc. The format for undertaking is enclosed as <u>Annexure XP</u> .			
8	1.4	The Bidder must submit an undertaking along with the Technical Bid indicating that they have undergone through the scope of work and visited the work site on _____ for assessment of jobs involved.			
9	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.			

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10	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.			
11	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.			
12	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.			
13	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.			
14	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.			
15	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.			
16	1.12	<p><u>PURCHASE PREFERENCE CLAUSE:</u> 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:</p> <p>1.12.1 In case participating MSEs Quote price within price band of</p>			

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		<p>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.</p> <p>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.</p> <p>1.12.3 <u>Documentation required to be submitted by MSEs:</u> 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.</p>			
17	1.13	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).			
18	1.14	<p>OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.</p> <p>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.</p>			
19	1.15	Price Bid uploaded without giving any of the details of the taxes			

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		(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.			
20	1.16	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.			
21	1.17	Based on the evaluation of techno-commercially qualified bidders, the job will be awarded to L-1 bidder.			
2.0 <u>BID REJECTION CRITERIA (BRC):</u>					
22	2.1	The bids are to be submitted in single stage under Two Bid System i.e. Un-priced Techno-Commercial Bid and Price Bid together. Only the Price Bid should contain the quoted price.			
23	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.			
24	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.			
25	2.4	Bid Documents/User Id & Password for OIL's E-Tender portal are not transferable.			

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26	2.5	Any bid received in the form of Physical document/Telex/Cable/Fax/E-mail will not be accepted.			
27	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.			
28	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.			
29	2.8	Any bid containing false statement will be rejected and action will be taken by Company as per Bid Document.			
30	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.			
31	2.10	<p>Bidder must accept and comply with the following provisions as given in the Tender Document in toto, failing which offer will be rejected:</p> <ul style="list-style-type: none"> (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 			

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		<p>(ix) Liquidated Damages clause</p> <p>(x) Tax liabilities</p> <p>(xi) Arbitration/Resolution of Dispute Clause</p> <p>(xii) Force Majeure</p> <p>(xiii) Applicable Laws</p> <p>(xiv) Specifications</p> <p>(xv) Integrity Pact</p>			
32	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.			
33	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.			
34	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 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.			
35	3.0	<p><u>GENERAL:</u></p> <p>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 BEC/BRC.</p>			

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		<p>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 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.</p> <p>3.3 If any of the clauses in the BEC/BRC contradict with other clauses of bidding document elsewhere, the clauses in the BEC/BRC shall prevail.</p> <p>3.4 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.</p> <p>3.5 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.</p> <p>3.6 The originals of documents [furnished by bidder(s)] shall have to be produced by bidder(s) to OIL as and when asked for.</p>			
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