Tender Document

For

Construction of Crude Oil Pump House Including Procurement, Fabrication & Erection, Civil, Structural, Piping, Instrumentation, Electrical, Pre-Commissioning and Commissioning Works for Bhaskar-I Field

Tender No.: SunPetro/Bhaskar/Crude Oil Pump House/2026-27/SPPL-293

SUN PETROCHEMICALS PRIVATE LIMITED (SunPetro)

8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road,
Powai, Mumbai - 400 072, Maharashtra, BHARAT.
CIN: U24219MH1995PTC464242
Tel: +91 22 69325300
Website: www.sunpetro.com;

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SECTION- I

NOTICE INVITING TENDER (NIT)

Sun Petrochemicals Private Limited
Corporate Office: 8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road,
Powai, Mumbai - 400 072, Maharashtra, BHARAT.
CIN: U24219MH1995PTC464242
Tel: +91 22 69325300, + 91 22 28470484
Website: www.sunpetro.com; Email Id: info.sunpetro@sunpetro.com

Ref No.: SunPetro/Bhaskar/Crude Oil Pump House/2026-27/SPPL-293 **Date: 30.10.2026**

INVITATION TO BID (ITB)

Tender No. SunPetro/Bhaskar/Crude Oil Pump House/2026-27/SPPL-293

Subject: Construction of Crude Oil Pump House Including Procurement, Fabrication & Erection, Civil, Structural, Piping, Instrumentation, Electrical, Pre-Commissioning and Commissioning Works for Bhaskar-I Field.

Dear Sir / Madam,

1.0 **Sun Petrochemicals Private Limited** (hereinafter referred to as **SunPetro / Company)** is a major private operating company, engaged in Exploration & Production of Oil & Gas in the fields / blocks spread over in onshore and offshore including in the Cambay & Kutch basin.

2.0 **SunPetro** is pleased to invite you to submit the Bid for the subject tender in accordance with the requirements & details as stated in the Tender Document, under **TWO ENVELOPE SINGLE STAGE BIDDING SYSTEM** in following two Envelopes:

ENVELOPE-A: Technical & Un-Priced Commercial Bid
ENVELOPE-B: Priced Commercial Bid

Bidders are requested to read the instructions and requirements in the Tender Document carefully and accordingly to submit the Technical & Un-Priced Commercial Bid in one envelope and Priced Commercial Bid in another envelope as stated above, each in a separate wax-sealed envelope. Both envelopes are required to be placed in one wax-sealed envelope and be sent to the tendering office address. Bids should be completed in all respects, as per the requirements of the relevant SECTIONS & Annexures.

3.0 SALIENT FEATURES OF THE TENDER

1]	**Tender No.**	SunPetro/Bhaskar/Crude Oil Pump House/2026-27/SPPL-293
2]	**Title of Tender**	Construction of Crude Oil Pump House Including Procurement, Fabrication & Erection, Civil, Structural, Piping, Instrumentation, Electrical, Pre-Commissioning and Commissioning Works for Bhaskar-I Field
3]	**Brief Description of Work**	Design, Engineering, Procurement, Supply, Fabrication, Civil, Structural, Piping Equipment Erection, Electrical, Instrumentation works, Inspection, Testing and Commissioning of Crude Oil Transfer Pump House along with all associated works at Bhaskar-I Field, Gujarat. Refer Section-III for detailed scope & Specification
4]	**Location of Work**	Bhaskar - I Field in Gujarat
5]	**Type of work**	Design, Engineering, Procurement, Supply, Fabrication, Civil Works, Erection, Inspection, Testing and Commissioning of Crude Oil Transfer Pump House along with all associated works.
6]	**Type of Tender**	Open Tender
7]	**System Of Bidding**	Two Bid System (Single Stage) ENVELOPE-A Technical & Un-Priced Commercial Bid ENVELOPE-B Priced Commercial Bid

8]	**Bid Validity**	120 days
9]	**Bid Security / Bid Bond**	Bidders are required to furnish Bid Bond along with Technical & Un-Priced-Commercial Bid in ENVELOPE-A in the format as attached herewith at Annexure # 2 drawn from a Nationalised/Scheduled bank as listed at Annexure-9 for an amount as specified below (A)Amount: Indian Rupees: 15,00,000 OR USD: 15,780 (B) Validity: Bid validity + 30 days
10]	**Last Date & Time for Seeking Clarification by Bidders**	Within 15 days of date of NIT
11]	**Date Of Pre-Bid Conference & Venue**	Date, Time & Venue shall be informed to the bidder.
12]	**Tender Closing / Submission Date & Time**	**24/11/2026 at 1500 Hrs IST**
13]	**Delivery & Completion Period**	Entire work as per SOW is to be completed within 12 months from the date if LOA / LOI / PO. However, Bidder to quote best delivery / completion period.
14]	**General Conditions of Contracts (GCC) and Special Conditions of contracts (SCC)**	(A)GCC - SECTION-VIII (B)SCC - SECTION-VIII
15]	**Performance Bank Guarantee (PBG)**	(A) Amount of PBG Indian bidder: INR (₹) @ 10% of order / contract value (B) Validity of PBG: Defect Liability Period + 90 days
16]	**Address of Tendering office / Bid Submission office / Correspondence**	Office of Head-Commercial & Supply Chain Management, SUN PETROCHEMICALS PVT. LTD. (SunPetro) 8th, 9th & 10th floor, ATL Corporate Park, Opp. L&T Gate no. 7, Saki Vihar Road, Chandivali, Powai Andheri (E), Mumbai – 400072, Maharashtra [BHARAT], INDIA Tel: (022)-69325300, Ext: 5300
17]	**Emails for Correspondence**	e-mail: rb.abhijith@sunpetro.com, aryan.saini@sunpetro.com, scm.coordinator@sunpetro.com CC: dheeraj.paroch@sunpetro.com scm.secretary@sunpetro.com
18]	**Mode of Tender submission**	As specified at SECTION-II
19]	**Date of Mobilization**	As per SOW & Intimation from SunPetro
20]	**Contract Validity**	Validity of the contract shall be 2 Years, however, the entire work to be completed within 12 months from the date of LOA / LOI.
21]	**Terms & Conditions of Contract**	As per Section-VIII of this tender Document
22]	**Payment Terms**	As mentioned in the Format of Price schedule at SECTION-VII
23]	**Concessional Custom Duty / GST**	Against Essentially Certificate (EC) from DGH, if applicable (Bidder is responsible to refer relevant latest statutes, Rules /guidelines/circular regarding eligibility & applicability)
24]	**Special Mention**	Receiving the Tender Document tender from Company does not qualify the bidder automatically for their bid consideration. The bidder has to qualify tender terms & conditions including Bid Evaluation Criteria (BEC) described in the tender.

4.0 Acknowledgement of Tender Document

Bidder(s) receiving this Notice Inviting Tender (NIT) are required to confirm in writing whether they intend to bid or not, within three (3) working days from electronic issue of this document, stating the reasons if declining to bid in this instance. Bidders not conforming to this requirement risk being barred from future inquiries.

5.0 Pricing Strategy

Bidder is to quote strictly as per the 'Price Schedule' (SECTION-VII) of this Tender document.

6.0 Evaluation Strategy

6.1 Bidders should submit documentary proof regarding their eligibility with the Techno-Commercial Unpriced bid (ENVELOPE -A).

6.2 Evaluation of Bids for awarding will be based on the most advantageous offer to SunPetro reflecting a combination of technical acceptance, qualification as per Bid Evaluation Criteria (BEC) and Cost. Evaluation of the bid shall be carried out based on the Total Cost to company.

6.3 However, Company reserves the right to reject or accept, in whole or in part, any Bid, waive formalities in the bidding process, to negotiate terms and conditions with any individual bidder as deemed fit by Company in their best interest. Company shall be under no obligation to provide reasons for accepting or rejecting any Bid.

7.0 Award Strategy

Single Award or Multiple awards will rest with SunPetro's discretion.

8.0 Check List

Bidders should review and submit the check list (as per format at ANNEXURE-3) along with bid in the ENVELOPE-A **(Technical & Un-Priced Commercial Bid)**.

9.0 Submission of Bids

9.1 Your wax sealed bid (ENVELOPE-A and ENVELOPE-B) also separately sealed), complete in every respect & strictly in accordance with the Terms & condition in the Tender Document, are to be submitted through one waxed envelope containing both envelopes as described above, at the reception of "Tendering Office" as detailed above, on or before Due date of Submission.

9.2 Bidders to note that non-compliance with the bidding instructions, except as permitted in the Bid and/or late arrival of Bid shall result in Bid not being considered.

9.3 Only bids submitted by bidders who have been issued bid documents by the Company shall be considered whereas unsolicited bids shall not be considered.

10.0 Further details are available in the Tender Document for the compliance.

11.0 Please acknowledge receipt of the tender document per ANNEXURE#1 within 3 days from the date of this NIT.

SunPetro looks forward to receiving your most competitive bid complete in all respects on or before due date and time of bid submission at the tender submission office.

Regards,

Dheeraj Paroch
Head - Supply Chain Management & Commercial
SUN PETROCHEMICALS PVT. LTD. (SunPetro)

SECTION –II

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

1.0 QUALIFICATION CRITERIA

Refer BEC for details.

2.0 ISSUE OF BID DOCUMENT

Bid shall also be accepted from those bidders who has been issued Tender Document and the **bidder who have submitted the duly filled bid participation form.**

This is to further note that Issuing of the Tender Document by the Company does not qualify the bidder automatically for their bid consideration and bids from Eligible Bidder will only be considered.

3.0 TRANSFER OF BIDDING DOCUMENT

The Bidding document is not transferable.

4.0 ORIGIN OF GOODS AND SERVICES

4.1 The Bidder will mention in its bid the origin of the Goods and the place from which Services are to be supplied under the contract.

4.2 For the purpose of this clause, “Origin" means the place where Goods are mined, grown or produced or from where ancillary services are supplied. Goods are produced when through manufacturing, processing or substantial and major assembling of components, a commercially recognised product results that is substantially different in basic characteristics or in components or utility from its components.

4.3 The origin of Goods and services is distinct from the nationality of the Bidder.

5.0 COST OF BIDDING

The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

6.0 CONTENT OF THE TENDER DOCUMENTS

6.1 The works required, bidding procedures and terms & conditions of work are described in the Tender Document.

6.2 The Bidder is expected to examine all instructions, forms, terms and specifications in the tender/ bidding documents. Failure to furnish all information required by the bidding documents or submission of bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid without seeking any clarifications.

7.0 AMENDMENT TO BIDDING DOCUMENTS

7.1 At any time prior to the deadline for submission of bids, the Tendering office may, for any reason, whether at its own initiative or in response to clarification(s) requested by the prospective Bidder(s), modify the bidding documents by amendment(s).

7.2 All prospective Bidders that have received the bidding documents will be notified of the amendments in writing or by cable.

7.3 In order to allow prospective Bidders reasonable time in which to take the amendments into account in preparing their bids, the Tendering office may, at its discretion, extend the deadline for the submission of bids.

7.4 Bids from agent/ agent’s representatives will not be accepted, unless backed by valid Letter of Authorization from the bidder’s Company.

7.5 Bids submitted only by fax/email will summarily be rejected. Responsibility for the timely delivery of the Bid package before the Bid Due Date rests solely with the Bidder.

7.6 All prices and terms and conditions should be valid for entire period of Contract Period as well as Delivery period and installation & commissioning.

7.7 Sun-Petro reserves the right to place repeat order for similar goods/services within a period of one year from the date of award of contract at the same rates, terms and conditions, subject to mutual acceptance by the contractor

7.8 The complete bid along with price Bid shall be duly signed and sealed by the Authorized Representative of the Bidder.

8.0 LANGUAGE AND SIGNING OF BID

8.1 The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the Bidder and the Tendering office, shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English duly authenticated by local Chamber of Commerce of bidder's country, in which case, for purposes of interpretation of the bid, the translation shall prevail.

8.2 The Prices along with price related conditions shall be filled in the Price-Bid format available in the tender document.

8.3 Prices shall be quoted strictly as per the Price Schedule format provided in the Tender Document.

8.4 The bid proforma referred to above, if not attached in unpriced bid folder or if attached but not duly filled in, then bid shall be liable to be rejected.

8.5 The Bidders are advised in their own interest to ensure that all the Contract points brought out in the check list enclosed are complied with in their bid failing which the offer is liable to be rejected.

8.6 The bids can only be submitted in the name of the Bidder in whose name the Tender Document was issued by SunPetro or participation to tender submitted to SunPetro. The bid papers duly filled in and complete in all respects shall be submitted together with requisite information and Annexures/Appendices. It shall be complete and free from ambiguity, change or interlineations.

8.7 The bidder should indicate at the time of quoting against this tender their full Contract postal and telegraphic/telex addresses/e-mail and similar information in respect of their authorised agents in India, if any.

8.8 The bidder shall clearly indicate their legal constitution and the person digitally signing the bid shall state his capacity and also source of his ability to bind the Bidder.

8.9 The Power of attorney or authorisation, or any other document consisting of adequate proof of the ability of the signatory to bind the bidder, shall be submitted with unpriced bid. SUNPETRO may reject outright any bid not supported by adequate proof of the signatory's authority.

9.0 COMPLIANCE WITH THE REQUIREMENTS OF BID EVALUATION CRITERIA (BEC) AND ALL OTHER TENDER CONDITIONS:

9.1 Advice to bidders for avoiding rejection of their offers:

SunPetro to finalise its procurement within a limited time schedule. Post bid clarifications may be sought, if any, however it may not be feasible at all times for SunPetro to seek clarifications in respect of incomplete offers.
Prospective bidders are advised to ensure that their bids are complete in all respects and conform to SunPetro's terms, conditions and bid evaluation criteria of the tender, for avoiding rejection of their offers.

9.2 Pre-bid conference (PBC)

9.2.1 In order to avoid clarification/confirmation after opening of bids, wherever specifically mentioned in NIT, Pre-bid conference shall be held, if required, so as to provide an opportunity to the participating bidders to interact with SUNPETRO with regard to various tender provisions/tender specifications, before the bids are submitted.

9.2.2 After pre-bid conference, the specifications & other tender conditions will be frozen. No change in specifications and tender conditions will be permissible after bid opening.

9.2.3 The bidders meeting following requirement shall only be considered for attending the pre-bid conference:

a. Those vendors who has been issued Tender Document or have confirmed participation shall only be allowed to participate in Pre-Bid conference.

b. Bidders should depute their employees (preferably) / representative who are competent to present their queries in the Pre-Bid Conference.

9.3 In cases where pre-bid conference is not held, bidders can submit relevant queries to the tender inviting office within 15 days from the date of NIT in case of open tenders or issuance of bid document in case of Limited Tenders.

9.4 **Post bid conference**

In order to avoid delay in processing of tenders SUNPETRO may hold post bid conference with the responsive bidders.

For holding post Bid conference following process shall be followed:

i) Clarifications / confirmations / deficient documents required, if any, from bidders shall be conveyed to the bidders.

ii) To address bidders' doubts, if any, only on the clarifications / confirmations / deficient documents being sought, a post bid conference shall be held by SUNPETRO with bidders who seek to have the meeting on one-to-one basis. Interested bidders may attend the same. No issues other than the listed queries pertaining to clarifications / confirmations / deficient documents sought by SUNPETRO shall be discussed in post bid conference.

iii) In case bidder chooses not to seek/request for a post bid meeting, it will be noted by SUNPETRO that such bidder(s) has well understood the query of SUNPETRO.

iv) Accordingly, in case bidder has completely understood the queries and they have no doubts, they may submit their replies within the date specified for submission of clarifications.

v) Bidders shall depute their competent employee(s) /authorised representative(s) for the post-Bid Conference.

vi) Only those bidders from whom clarifications are being sought shall be eligible for post bid conference.

vii) Bidder(s) shall be required to provide details (Name, Designation/status, mobile no. etc) of its employee/(s)/authorised representative(s), who will attend post Bid Conference, and that person(s) only will be permitted to attend the post-bid conference.

viii) In cases where post-bid conference is not held, SUNPETRO can seek clarifications / confirmations / deficient documents over e-mail.

10.0 DOCUMENTS COMPRISING THE TECHNO-COMMERCIAL UNPRICED BID (TO BE SUBMITTED IN ENVELOPE-A)

The bid prepared by the Bidder shall comprise the following components, duly completed along with TECHNO-COMMERCIAL UNPRICED BID:

a) Proof of submission of Tender fee (if applicable)

b) Documentary evidence establishing that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted. The documentary evidence of the Bidder's qualifications to perform the Contract if its bid is accepted, shall establish to the SunPetro 's satisfaction:

(i) that, in the case of a Bidder offering to supply works under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorised by the good's Manufacturer or producer to supply the works in India.

(ii) that the Bidder has the financial, technical and production capability necessary to perform the Contract.
(iii) that, in the case of a Bidder not doing business within India, the Bidder is or will be, if awarded the Contract, represented by an Agent in India equipped and able to carry out the Supplier's maintenance, repair and spare parts stocking obligations prescribed in the Conditions of the Contract and/or Technical Specifications; and

c) Documentary evidence that the works and ancillary services to be supplied by the Bidder are eligible works and services and conform to the requirements of bidding documents.
(i) The documentary evidence of the eligibility of the works and services shall consist of a statement in the price schedule on the country of origin of the works and services offered which shall be confirmed by certificate of origin from the concerned Chamber of Commerce at the time of shipment.
(ii) The documentary evidence of conformity of the works and services to the bidding documents may be in the form of literature, drawings and data and shall consist of:
1) A detailed description of essential technical and performance characteristics of the works.
2) A list giving full particulars including available sources and current prices of spare-parts, special tool etc. necessary for the proper and continuing functioning of the works for a period of one year.
3) An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the works and services to those specifications, or a statement of deviations and explanation to the provisions of the technical specifications.

d) Bid security /EMD / Bid Bond

e) Back-up Authority Letter along with warranty cover of manufacturer in case the bid is from sole selling agent/ authorised distributor/ authorised dealer/authorised supply house.

f) Bid submitted by foreign Bidder shall include a detailed description of the relationship between the bidder and its Local Agent/ Consultant / representative/ retainer including specific services to be rendered, permanent income tax account number of agent/consultant/representative/retainer, permanent income tax account number of foreign bidder and amount of commission or other payments.

g) Bid must accompany necessary literature/catalogue of the equipment as well as of the spare parts catalogue thereof failing which the bid will be rejected.

h) Bidding Document Acknowledgement Form

i) Bid Submission Form

j) Bid submission Agreement Form.

k) Check List.

l) Exceptions/Deviations Form

m) Bidder's past supplies Form

n) Form on Information on Bidder

o) Bidders should be registered under GST law and submit copy of valid registration certificate.

In case of foreign bidders, if GST registration certificate is not available at the time of submission of bid, the bidder shall submit an undertaking to provide copy of the same at least two weeks before submission of first invoice.

(Foreign bidder supplying Goods and services from outside India without visiting India for providing services is not required to obtain registration under GST law. Such bidder shall provide an undertaking to this effect. However, foreign bidder shall have to obtain registration under GST law in case they have to visit India for providing services in India.)

p) Copy of original of "Power of Attorney" or authorization, or any other document consisting of adequate proof of the ability of the signatory to bind the bidder when the Contract power of attorney is a special "Contract power of Attorney" relating to the specific tender of SUNPETRO only, However, SUNPETRO

reserves right to seek original Contract power of Attorney (when the Contract power of attorney is a special "Contract power of Attorney " relating to the specific tender of SUNPETRO only) / notarized true copy (when Contract power of Attorney is a general Contract power of Attorney) at any time during the processing of tender and execution of contract.

q) Bidder shall be required to indicate SUNPETRO 's Vendor code in the bid. The bidders, who do not have SUNPETRO's Vendor code, will require to submit following documents for creation of vendor code:
I. Company/ Firm registration copy,
II. GST registration copy,
III. PAN detail copy
IV. Valid email ID, Contact No.
V. Complete Address

r) Blank Price Schedule format (duly signed as token of acceptance of Priced bid format)

11.0 DOCUMENTS COMPRISING THE PRICE SCHEDULE (To be submitted with PRICED COMMERCIAL BID: ENVELOPE -B)

11.1 The Bidder shall fill in completely all fields in the price bid format provided in the tender document in respect of items quoted including but not limited to prices and pricing conditions.

11.2 **Bid Prices**

11.2.1 The bidders shall indicate on the online price bid format, the price element for unit quantities and the quantities quoted.

11.2.2 The bidders must quote the following information also in the Bidders Response sheet:

i) The Port of Embarkation and Currency in which the Letter of Credit is to be opened / payment to be made.

ii) Gross weight and volume of each item.

11.2.3 FOB/C&F/CIF prices should be inclusive of Indian Agent's commission, if any, which should be indicated in the specified field. The Indian Agent's commission will be paid in non-convertible Indian currency.

11.2.4 Indian Bidders must quote firm FOR destination price by rail or road.

11.2.5 The terms ex- works, CIF, CIP etc. shall be governed by the rules prescribed in the current edition of INCOTERMS published by the International Chamber of Commerce, Paris.

11.2.6 SUNPETRO reserves the right to place the order either on FOB or C&F/CIF basis or as per any other INCOTERMS.

11.2.7 Prices quoted by the bidder shall be firm and fixed during the entire period of contract and shall not be subject to escalation on any account.

11.2.8 **Offer for whole as well as reduced quantity**
Bidders must quote for the full quantity of works for each of the tendered item or category or group, in case the Bid Evaluation Criteria stipulated by SUNPETRO provides for evaluation of bids separately for such item or category or group of items.

Bidders can however quote for part quantity of the tendered item /category /group, if the Bid Evaluation Criteria specifically provides for doing so. In such event, the bidders can send EMD/ Bid security according to the quantity offered, (not exceeding the EMD/ Bid bond/ Bid security specified for entire tender). The amount of EMD/ Bid bond for part quantity must be as indicated in Bid Evaluation Criteria.

11.3 **(A) Payment of GST (on ultimate Works and/or Services)**

'GST legislations' means any or all of the following legislation as may be applicable to the Bidder and SunPetro:

(i) The Central Works & Services Tax Act, 2017.
(ii) The Integrated Works & Services Act, 2017.
(iii) The Union Territory Works & Services Tax Act, 2017.
(iv) The Goods & Services Tax (Compensation to States) Act, 2017.
(v) The respective State Works & Service Tax Acts'
(vi) The Customs Act and the Customs Tariff Act
(vii) **Any rules, notifications, circulars, amendments, or re-enactments thereof, including any new GST or indirect tax legislation enacted by the Government of India or any State Government from time to time.**

11.3.1 **For supply of works only:**

(i) All taxes and duties leviable on the Contractor's inputs and input services, including any variation, shall be to the Contractor's account and deemed to be included in the quoted price.

(ii) GST applicable on the final supply of Goods and Services under this Contract shall be payable by SunPetro at actuals against valid tax invoice, subject to Contractor's compliance with GST laws and SunPetro's eligibility to avail Input Tax Credit (ITC). Any variation in GST rate after the tender closing date shall be to SunPetro's account, subject to provisions contained herein

(iii) Indian bidders while quoting, need to take into account all the GST input credit available to them and quote accordingly.

(iv) Depending on upon the delivery conditions governed by INCOTERMS, liability to pay Customs Duty shall be discharged.

11.3.2 **For cases involving supply of works along with services like installation / commissioning, training, AMC etc.:**

(i) All taxes and duties leviable on the Contractor's inputs and input services shall be to the Contractor's account..

(ii) GST applicable on the final supply of Goods and/or services shall be payable by SunPetro at actuals against valid tax invoice, subject to Contractor's compliance with GST laws and SunPetro's eligibility to avail ITC. Any variation in GST rate after the tender closing date shall be to SunPetro's account, subject to provisions contained herein

(iii) Indian bidders while quoting need to take into account all the GST input credit available to them and quote accordingly.

(iv) In respect of foreign bidders, depending on upon the delivery conditions governed by INCOTERMS, liability to pay Customs Duty shall be discharged.

(v) For providing services in India, foreign bidder (not having GST registration in India) must obtain GST registration as "non-resident taxable person". Subject to provisions contained in the succeeding paragraphs, any variation in the rate of GST on supply of service portion after the closing date of tender shall be to SUNPETRO's account.

(vi) 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 or Public Body which becomes effective after the date of tender closing, but within the contractual delivery/completion period, any variation in the value of supply order / contract due to any increase / decrease in the rate of taxes/duties on supply of works and/or services will be to the account of SUNPETRO. Any claim or reduction on account of any increase / decrease in the rate of taxes/duties on supply of works and/or services shall be accompanied with undertaking that the provisions of anti-profiteering clause under GST Act have been complied with.

(vii) The bidder(s) will indicate separately in their bid the HSN code of Material, applicable GST Rate and amount of GST on supply of works and/or services, as applicable at bidding stage.

(viii) Wherever the scope of supply involves rendering of services like installation / commissioning, training, AMC etc. along with supply of works/materials and the value of the same has been sought separately, then the bidder should quote separate break-up for cost of works and/or services and accordingly quote GST on the cost of works and/or services as applicable.

(ix) In case, the above information subsequently proves wrong, incorrect or misleading: -

a) Payment towards GST shall be restricted to the GST amount as charged on the 'Tax-Invoice' or the quoted GST rate, whichever is lower unless the same is due to applicability of change in law clause. SUNPETRO shall have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side.

b) SUNPETRO will have the right to recover the difference in case the rate of GST finally assessed is on the lower side.

(x) Any increase in the rate of taxes & duties on supply of works and / or services to SUNPETRO or introduction of any new taxes/duties/levy by the Govt. of India or State Government(s) or Public Body, during extended period of the contract / supply order will be to SUPPLIER's / Contractor's account where such an extension in delivery of the material / completion of the project is due to the delay attributable to the SUPPLIER/ Contractor. However, any decrease in the rate of taxes and duties on supply of works and/or services to SUNPETRO during extended period of the contract/ supply order will be to the account of SUNPETRO.

11.3 **(B)CONCESSIONS PERMISSIBLE UNDER STATUTES** (Against EC for eligible Works & supplies for Oil & Gas sector)

Bidder, while quoting against this tender, must take cognizance of all concessions permissible under the statutes including the benefit under GST legislations, failing which it will have to bear extra cost where bidder does not avail exemptions/concessional rate of GST. SUNPETRO will not take responsibility towards this. However, wherever required and applicable, SUNPETRO shall provide the necessary documents as required under the notification (s) for the bidders to obtain such concessions.

Bidders must also consider benefits of input tax credit under the GST legislations, as amended from time to time on Input works/Capital works / Input Services, while quoting the prices.

Any increase in 'net impact' of any variation in Excise Duty/VAT/Sales Tax/Customs Duty/Service Tax or introduction of any new taxes/duties/levy by the Govt. of India or State Government(s) or Public Body, during extended period of the contract / supply order will be to Suppliers 's account where such an extension in delivery of the material / completion of the project is due to the delay attributable to the SUPPLIER/ Contractor. However, any decrease in 'net impact' of any variation in Excise Duty / VAT / Sales Tax / Custom Duty / Service Tax during extended period of the contract/ supply order will be to the account of SUNPETRO.

11.4 **INCOME TAX LIABILITY**

The bidder will have to bear all Income Tax liability both corporate and personal tax.

11.5 **DISCOUNT**

Bidders are advised not to indicate any separate discount. Discount, if any, should be merged with the quoted prices. Discount of any type, indicated separately, will not be considered for evaluation purpose. However, in the event of such an offer, without considering discount, is found to be lowest, SunPetro avail such discount at the time of award of contract.

12.0 BID CURRENCIES

12.1 The Bidders are to quote firm prices. They may bid in any currency(including Indian Rupees). Payment will be made accordingly. However, the payment towards GST will be made by SUNPETRO in Indian Rupees as per actuals. For this purpose, the amount of GST paid as per the invoice signed by the officer duly authorized for this purpose will be taken into account

The freight and insurance elements must be quoted by Indian bidders in Indian Rupees only and payment will be made accordingly.

Currency once quoted will not be allowed to be changed.

13.0 TERMS OF PAYMENT

The Payment terms shall be governed by terms as detailed in GTC (General Terms & Conditions) / STC (Special Terms & Conditions) or specifically in the Tender Document at Price Schedule format.

14.0 MODE OF PAYMENT

In all cases, except the cases involving payment through 'Letter of Credit' or payment in foreign currency, SUNPETRO shall make payments only through Electronic Payment mechanism (viz. NEFT/RTGS /ECS). Bidders should invariably provide the following particulars along with their offers:

1. Name & Complete Address of the Supplier / Contractor as per Bank records.
2. Name & Complete Address of the Bank with Branch details.
3. Type of Bank account (Current / Savings/Cash Credit)
4. Bank Account Number (indicate 'Core Bank Account Number', if any).
5. IFSC / NEFT Code (11-digit code) / MICR code, as applicable, along with a cancelled cheque leaf.
6. Permanent Account Number (PAN) under Income Tax Act.
7. GST registration number.
8. e-mail address of the vendor / authorized official (for receiving the updates on status of payments)."
9. The bank/branch in which the bidder is having account and intends to have the payment should be an NEFT enabled bank.
10. Each invoice shall be accompanied by detailed breakup of each element of the price such as basic price, basic excise duty, additional excise duty, educational cess, VAT/CST etc as applicable.

15.0 NA

16.0 NA

17.0 SPECIFICATIONS

In case in tender SUNPETRO asks for "Maker's Design" or alternative specifications, the Bidder will clearly indicate as to how the material being offered will serve SunPetro' s purpose and in what respect the offer differs from the required specifications.

18.0 NAME OF MANUFACTURER AND CERTIFICATE OF ORIGIN

The name of the manufacturer and country of origin should be clearly mentioned in the offer. In case of acceptance of his offer the Bidder shall have to furnish a certificate of origin from the concerned Chamber of Commerce of the exporting country along with negotiable shipping documents.

19.0 OFFERS FROM INDIGENOUS MANUFACTURERS.

Indigenous manufacturers quoting against this tender should clearly indicate: -

i) If the product offered is to be manufactured as per indigenous know-how/design or under concluded collaboration. In case of collaboration the name of collaborator should be indicated.
ii) Details of manufacturing and testing facilities and quality control procedures available with them.
iii) Number of qualified persons and total employees etc.
iv) Details of latest Income Tax Clearance
v) GST Registration.

20.0 DELIVERY TERMS:

20.1 The delivery of the items stipulated as per SOW & Price schedule are required as stated at NIT. Any deviation must be clearly mentioned.

21.0 VAGUE AND INDEFINITE EXPRESSIONS

21.1 Bids qualified by vague and indefinite expressions such as "Subject to prior sale" etc. will not be considered.

22.0 CATALOGUE/LITERATURE OF THE EQUIPMENT AND SPARE PARTS

22.1 Bid must accompany all technical catalogues, drawings, data sheets and relevant technical documentation for all equipment and materials proposed.

23.0 PERIOD OF VALIDITY OF BIDS

23.1 The Bids shall be valid for acceptance for a period of One Hundred & twenty (120) days from the Bid Due Date of submission. Company, however, reserves the right to seek extensions of the validity period as may be required. In the event of extension of the validity period of the Bid, all other terms and conditions including the provisions relating to Bank Guarantee shall also continue to be valid for the period of such extension.

23.2 The Bidder will undertake not to vary/modify the bid during the validity period or any extension agreed thereof.

24.0 BID SECURITY

24.1 The Bid Security is required to protect the purchaser against the risk of Bidder's conduct which would warrant the security's forfeiture.

24.2 Central Government Departments and Central Public Sector Undertakings are exempted from payment of Bid Security.

24.3 The Bid Security shall be denominated in Indian Rupees by Indian bidders and in US Dollars by the foreign bidders.

24.4 Bid Security from foreign bidders shall also be acceptable in Indian Rupees. In case any foreign bidder is submitting EMD in INR, the formality required to be completed as per APPLICABLE Indian law is to be fulfilled by the concerned foreign bidder.
In such cases, the refund (as applicable) to foreign bidders will be in Indian Rupees only and for that Foreign bidder should have Bank account in India.

24.5 The Bid Security shall be acceptable in any of the following forms:

(i) Electronic Bank Guarantee (e-BG) in the prescribed format, valid for 60 days beyond the date of required validity of offer. The e-bank guarantee by Indian bidder will have to be given e-stamping as per stamp duty applicable at the place from where the bid has emanated. The e-stamping should be either in the name of the issuing bank or the bidder.

The bidders will give Electronic Bank Guarantee from any of the following categories of Banks:

Any Scheduled Bank incorporated rated in India, Bank Guarantee issued by foreign branches / foreign offices of such Scheduled Banks be counter guaranteed by the Indian Branch of any Scheduled Bank incorporated in India.
OR
Any Branch of an International Bank situated in India and registered with Reserve Bank of India as scheduled foreign bank.
OR
Any foreign Bank which is not a Scheduled Bank in India provided the Bank Guarantee issued by such Bank is counter guaranteed by any Branch situated in India of any Scheduled Bank incorporated rated in India.

Bidders will be required to provide the details of e-BG such as Number, Date, Name of issuing bank, Expiry, Claim period and amount in their bid. The e-BG in pdf format should also be submitted by bidder in its e-bid in the e-bidding portal.

(ii) Confirmed irrevocable Letter of Credit, as per prescribed format valid for 60 days beyond the validity of the bid, duly confirmed by Indian Nationalised/Scheduled bank will be acceptable only from foreign bidder.

Bidders should note that acceptance of their offer is subject to remittance of Bid Security/EMD amount to designated account of SUNPETRO on or before due date and time of Tender closing. If required, SUNPETRO reserve right to obtain confirmation regarding date and time of credit of Bid Security/EMD amount to its account from concerned bank. The decision of SUNPETRO in this regard shall be final and binding on the bidder. In case amount has been credited to Sun Petro's designated account after tender closing, such amount shall be refunded after finalization of Tender.

Note: In their own interest bidders submitting EMD/Bid Security via NEFT/RTGS/Electronic fund transfer are advised to complete the transaction at least 24 hours before bid closing date.

24.6 SUNPETRO shall not be liable to pay any bank charges, commission or interest on the amount of Bid Security.

24.7 Subject to provisions in para 24.2 above, offers without Bid Security liable to be ignored.

24.8 Bid bond Format is attached as Annexure#2.

24.9 The Bid Security shall be forfeited by SUNPETRO in the following events:

a) If Bid is withdrawn during the validity period or any extension thereof duly agreed by the Bidder.

b) If Bid is varied or modified in a manner not acceptable to SUNPETRO during the validity period or any extension of the validity duly agreed by the Bidder.

c) If a Bidder, having been notified of the acceptance of its bid, fails to furnish Security Deposit / Performance Bond within 15 days from the date of issue of LOA/NOA.

d) In case at any stage of tendering process, it is established that bidder has submitted forged documents/certificates/information towards fulfilment of any of the tender/contract conditions.

24.10 The Bid Security of unsuccessful Bidders will be returned on finalisation of the bid. The Bid Security of successful bidder will be returned on receipt of Security Deposit/Performance Bond (Performance Security). Note: The bid security received via NEFT/RTGS/Electronic fund transfer, shall be refunded/returned as per tender conditions, to the same account from which payment of bid security was made to SUNPETRO.

24.11 Bidders may also request for release of EMD/bid bond/bid security before tender finalisation against submission of an undertaking as per format given at 25.10.1. However, bidder's request may be considered only under following situations:

i. Bidder(s) whose bid has been rejected and in case rejection of bid is not an incident that attracts forfeiture of bid security as per tender proviso.

ii. Bidder(s) whose bid has been rejected on account of non-extension of bid validity and in case rejection of bid is not an incident that attracts forfeiture of bid security as per tender proviso.

iii. TA/CA bidder(s) who are not in contention / reckoning for award of contract/Procurement Order after price bid opening.

24.11.1 Format for undertaking to be submitted by the bidder along with request for release of EMD/bid bond/bid security under para (i),(ii) and (iii) above:

"I .....(name and designation of authorized signatory) on behalf of M/s .....(the name of bidder) hereby request to release the bid security submitted with the offer against tender No.....(tender no. to be indicated by bidder). It is undertaken that any aspect of the tender evaluation process will not be challenged before any forum / authority and the recourse allowed under the bidding conditions for representing / raising dispute will be deemed to have been foregone by M/s .....(the name of bidder)."

25.0 Bidder should ensure to submit original documents in accordance with the bidding document

26.0 Bids submitted should be signed by authorised person only failing which the same shall be rejected.

27.0 SUBMISSION AND OPENING OF BIDS

27.1 The bid along with all appendices and copies of documents (except copies of the documents required in physical form) should invariably be submitted before the scheduled date and time

a) The Techno-commercial bid shall contain all details without indicating prices of the quoted items. However, a suitable response shall be selected of the given options against each item of the format of the Price Bid/BOQ.

b) The Price bid shall contain only the prices duly filled in the price format

27.2 The Bid should be submitted in sealed envelope prescribing Tender No, Closing Due date &Time and name &address of the Bidders addressed to Tendering office containing separately sealed following envelopes:
Envelope-A: Unpriced Techno-commercial Bid and
Envelope -B: Priced Commercial bid

28.0 LATE BIDS

Bidders are advised in their own interest to ensure that bid should reach well before the closing date and time of the bid. Late bids will not be considered.
The Company reserves the Right to reject / accept the bid submitted after the deadline for submission of bids prescribed by the Company.

29.0 Deadline for Submission of Bids

The due date mentioned in the "Invitation to Bid" (ITB) shall be deadline for submission of bids. In case of the unscheduled holiday in Mumbai, (India) being declared by Company on the prescribed closing day of the tender, the next working day will be treated as the scheduled prescribed day of closing of the tender.

30.0 Splitting of work

The Company shall have a Right to split the work/supply between two or more bidders at its sole discretion.

31.0 Payment Terms

Compensation to the Bidder shall be made as per the prices quoted and in accordance with terms of the payments as may be finalized with Bidder and stipulated in the LOI/Contract. Invoices shall be raised on approved milestones or stage completion as defined in the Contract. No payment will be due to the Contractor /Supplier prior to signing of the Contract.

Price in Words & Figures: In case of discrepancy between words and figures, the advantage in favour of Company will apply.

32.0 Taxes, Duties and Approvals

The Bidders shall quote their prices inclusive of any or all taxes and duties that are applicable including transport insurance on a CIF basis at the designated port of delivery or Site Location in India. Except Good and Service tax (if applicable to services provided under this Contract), the prices shall reflect delivery inclusive of all applicable fiscal charges including but not limited to taxes, fees, duties, cess, licenses, import duties, personal income tax, corporate tax, excise tax and similar rates and fees, freight, insurance, and similar expenses. The Goods and Services tax, if applicable, shall be paid by the Company at actual.

33.0 MODIFICATION AND WITHDRAWAL OF BIDS

No bid may be modified after the deadline for submission of bids.

34.0 OPENING OF BIDS

34.1 The unpriced bid will be opened at 17.00 Hrs. (IST) on the date of opening indicated in "Invitation for Bid". of bid or at any time or date, as per SUNPETRO's discretion.

34.2 In case of unscheduled holiday on the closing/opening day of bid, the closing/opening date shall be re-fixed to next working day, the time notified remaining the same.

34.3 **The opening of Price bids and reverse Auction:**

SUNPETRO reserves right to go for Reverse Auction process or may finalize the tender without Reverse Auction, if required. However, the decision to conduct Reverse Auction or not will be conveyed to short-listed & technically qualified bidders. Reverse Auction shall be conducted on the specific date and time to be conveyed by SUNPETRO to short listed bidders

35.0 EVALUATION AND COMPARISON OF BIDS

35.1 Evaluation and comparison of bids will be done as per provisions of Bid Evaluation Criteria (BEC) to be supplied separately along with bidding document against individual tenders.

35.2 **CLARIFICATIONS OF BIDS**

35.2.1 During evaluation of bids, Purchaser may at its discretion ask the Bidder for clarifications/ confirmations/ deficient documents of its bid. The request for clarification and the response shall be in writing and no change in the price of substance of the bid shall be sought or permitted.

36.0 UNSOLICITED TENDER MODIFICATIONS:

36.1 In case certain clarifications are sought by SUNPETRO after opening of bid then the reply of the Bidder should be restricted to the clarification sought. Any bidder who modifies his bid (including all modifications which have the effect of altering his offer) after the closing date, without any specific reference by SUNPETRO, shall render his bid liable to be ignored and rejected without notice and without reference to the bidder.

37.0 EXAMINATION OF BID

37.1 The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are generally in order.

37.2 Prior to detailed evaluation the purchaser will determine the substantial responsiveness of each bid to the bidding documents. Bids falling under the purview of "Rejection criteria" of the Bid Evaluation Criteria of the bidding document will be rejected and may not subsequently be made responsive by Bidder by correction of the inconformity.

38.0 SPECIFICATIONS

38.1 Unless otherwise asked for, the Bids of "Maker's Design" or for alternative specification, the Bidder must note that its Bid will be rejected in case the tender stipulations are not complied with strictly or the works offered do not conform to the required specifications indicated therein.

38.2 The lowest Bid will be determined from among those Bids which are in full conformity with the required specifications.

39.0 CONVERSION TO SINGLE CURRENCY

To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in various currencies in which bid prices are payable utilising the currency, source.

40.0 Performance Bank Guarantee

The Successful bidder shall furnish to Company, a Performance Bank Guarantee for 10% of the Order value within 15 days of issue of the LOI/Contract(whichever is earlier) in the format as given in *Annexure #8* from any of the nationalised or scheduled private banks as listed in the tender document *Annexure#9*. If the bidder does not submit the Performance Bank Guarantee as stipulated above, Sun Petro reserves the Right to take appropriate measures to secure the interest of the Company and right to cancel the award of LOI without thereby holding / incurring any liability towards bidder for any work / material / services already done / provided by the bidder / supplier.

41.0 Change Orders & Rates: Company shall have the right to make changes, including additions to or deletions from the quantities originally ordered or in the specifications. A checklist for post award of work is placed at Annexure # 11. The quoted and finally negotiated rates shall be valid & firm from issue date of LOI up to the completion of the contract.

41.1 Company will issue written orders to Bidder for any change or extra work, except in the event of an emergency which in the opinion of Company requires immediate attention, Company will also be entitled to issue oral orders to the Bidder for any work required by reason of such emergency. Company shall ensure that such oral orders shall be followed up with written communication.

41.2 All changes in quantities / specifications will be performed at a mutually agreed delivery Schedule in the Contract period and price of such works shall be finalised / derived in terms and rates elsewhere in the Contract documents.

42.0 For any additional goods/service, not specified herein, but needed for operations, the Bidder shall be required to provide, on agreed time, these additional goods & services, at agreed cost or actual costs + 5% handling fees.

43.0 Mobilization Period/ Delivery Period/Completion Period

Time is essence of the Contract and Contractor shall Supply/ perform the Work and Services diligently in accordance with the Bidder's **promised Mobilisation/Delivery period as set forth in schedule or agreed.** In the event it becomes apparent that the Mobilization/Delivery date cannot be met, the Contractor shall, at its own cost, take all necessary steps to expedite the process, failing which the provisions of Liquidated Damages as specified in the Contract shall be applicable. The Company may also terminate the LOI or Contract immediately invoking the available remedies for protecting the interest of the Company. Company will have the right to reject any bid not meeting the schedule Mobilization time.

44.0 Installation & Commissioning

The Contractor shall be fully responsible for complete Design, Engineering, Procurement, Supply, Fabrication, Civil Works, Erection, Inspection, Testing and Commissioning of Crude Oil Transfer Pump House Along with All Associated Works as per scope of work.

45.0 Bid Bond

Bid Bond shall be returned to all unsuccessful bidders within one month after completion of tendering process (however, in case of the successful bidder, Bid Bond will be returned after submission of Performance Bond and failure to submit Performance Bond will lead to forfeiture of Bid bond)

46.0 Annexures

Please note that all ***Annexures are placed at the end of this document***

47.0 CONTACTING THE PURCHASER

No bidder shall contact the Purchaser on any matter relating to its bid, from the time of the opening to the time the contract is awarded.

48.0 AWARD CRITERIA.

Purchaser will award the contract to the successful bidder whose bid has been determined to be substantially responsive and has been determined as the most suitable evaluated bid.

49.0 PUTTING SUPPLIER ON HOLIDAY DUE TO CANCELLATION OF PROCUREMENT ORDER.

In case of cancellation of the Procurement order(s) on account of non-execution of the order and / or annulment of the award due to non-submission of Performance Security or, failure to honour the commitments under 'Warranty & Guarantee' requirements following actions shall be taken against the Supplier:

i. SUNPETRO shall conduct an inquiry against the Supplier and consequent to the conclusion of the inquiry, if it is found that the fault is on the part of the Supplier, then they shall be put on holiday [i. e neither any tender enquiry will be issued to such a Supplier by SUNPETRO against any type of tender nor their offer will be considered by SUNPETRO against any ongoing tender(s) where contract between SUNPETRO and that particular Contractor (as a bidder) has not been concluded] for a period of two years from the date the order for putting the Contractor on holiday is issued. However, the action taken by SUNPETRO for putting that Supplier on holiday shall not have any effect on other ongoing CONTRACT (s), if any with that Supplier which shall continue till expiry of their term(s).

ii. Pending completion of the enquiry process for putting the Supplier on holiday, SUNPETRO shall neither issue any tender enquiry to the defaulting Supplier nor shall consider their offer in any ongoing tender. The report of inquiry so conducted by SUNPETRO shall remain only with SUNPETRO and shall not be shared with any third party including the bidder.

50.0 PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

SUNPETRO reserves the right to reject, accept or prefer any bid 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 or Bidders of the ground for SunPetro' s action. The SUNPETRO also reserves to itself the right to accept any bid in part or split the order between two or more bidders.

51.0 VARIATION IN QUANTITY

SUNPETRO is entitled to increase or decrease the quantities against any/all the items of the tender while placing the order.

52.0 NOTIFICATION OF AWARD

52.1 Prior to the expiration of the period of bid validity, the purchaser will notify the successful bidder in writing that its bid has been accepted.

52.2 The notification of award will constitute the formation of the contract.

52.3 Upon the successful bidder's furnishing performance security, pursuant to clause 40, the Purchaser will promptly notify each unsuccessful bidder and discharge their bid securities.

53.0 SIGNING OF PROCUREMENT ORDER (CONTRACT)/CONTRACT

52.1 At the same time as Purchaser notifies the successful Bidder that its bid has been accepted, the Purchaser will send the Bidder the contract/ LOA / Procurement order in duplicate. The CONTRACT / contract against this tender will be governed in accordance with the General Terms & Conditions (G.T.C.).

52.2 The successful Bidder will return one copy of the Procurement order/contract/LOA duly signed on each page as token of confirmation/acceptance.

54.0 PERFORMANCE SECURITY

54.1 Within 15 (fifteen) days from the date of issue of LOA/NOA from the Purchaser, the successful Bidder shall furnish the Performance Security in accordance with the conditions of the CONTRACT /contract, of the bidding documents, or another form acceptable to the Purchaser.

54.2 Failure of the successful Bidder to comply with the requirement of clause 48 above shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security.

54.3 The Performance Guarantee will be returned after the completion of Defect liability period (Project completion period + Twelve Months) + 90 days as per contract / supply order.

55.0 SUBMISSION OF FORGED DOCUMENTS

Bidders should note that SUNPETRO may verify authenticity of all the documents/certificate/information submitted by the bidder(s) against the tender. In case at any stage of tendering process or Contract/CONTRACT execution etc., if it is established that bidder has submitted forged documents/certificates/information towards fulfilment of any of the tender/contract conditions, SUNPETRO shall immediately reject the bid of such bidder(s) or cancel/terminate the contract and forfeit EMD/SD submitted by the bidder.

The bidder shall be required to give an undertaking on their letter head and duly signed by the signatory of the bid, that all the documents/ certificates/information submitted by them against the tender are genuine. In case any of the documents/certificates/information submitted by the bidder is found to be false or forged, action as deemed fit may be initiated by SUNPETRO at its sole discretion.

56.0 Supply of Brand New Materials – Compliance and Rejection of Non-Conforming Goods

All materials to be supplied under this Contract shall be brand new, unused, and of the latest make/model. The Contractor shall clearly mention the relevant part numbers, catalogue references, and technical specifications against each item in the Bill of Materials/Scope of Supply. This requirement forms an integral part of the Tender Document, and compliance thereto shall be mandatory. Any refurbished, used, reconditioned, or alternate materials not conforming to the specified requirements are liable to be rejected by the Company at the Contractor's cost, without any liability to the Company.

SECTION- III

SCOPE OF WORK

(SOW)

SCOPE OF WORK (SOW)

1.0 Introduction

Sun Petrochemicals Pvt. Ltd. (SunPetro) is an upstream Oil & Gas (E&P) company promoted by the Directors of the renowned Sun Pharmaceuticals Industries Ltd (SunPharma). SunPetro, led by a team of industry stalwarts having experience in conventional & unconventional, onshore and ultra shallow to deepwater offshore operations, has emerged as the leading energy security provider since April 2014.

So far, SunPetro has implemented around forty plus innovative concepts for the development as well as operations of Oil & Gas assets having excellence and safety centric approach.

Assets of SunPetro

Currently SunPetro has total Ten (10) assets located in Gujarat which are as under:

1. Four, Producing Fields: Baola, Modhera, Bhaskar – I & Hazira.
2. Two, Discovered Fields: Bhaskar – II & III.
3. Four, Exploratory Blocks: Prabhakar – I, II, III & IV.



Total acreage of SunPetro is around 4500 sq. km. as on date with a current production capacity of more than 14,000 BOPD (barrels of oil per day). As a prudent operator SunPetro is in process of targeting more fields / blocks through upcoming bidding rounds organized by the Government of India and through farm in merger & acquisition.

Construction of a New Crude Oil Transfer Pump House is being planned at Bhaskar-I Field of Sun Petrochemicals Pvt. Ltd. (SunPetro) located at Pandad village near Khambhat of Anand district in Gujarat along with required modifications and integration with the existing Pump House, Crude Oil Tank Farm and associated facilities.

The Contractor shall execute the works in totality as per the scope of work on integrated construction basis, including site verification, associated engineering, procurement, supply, fabrication, civil & structural works, piping, mechanical, electrical, instrumentation & control, erection, testing, pre-commissioning, commissioning and start-up support.

The scope shall include all works including but not limited to the materials, manpower, supervision, tools, tackles, equipment, consumables and temporary facilities necessary to make the New Pump House safe, operational and fully integrated with the existing facilities. Contractor shall follow all applicable statutory guidelines and standard safety protocols as per Good International Petroleum Industry Practices (GIPIP).

2.0 Scope of Work

The broad scope shall include, but not be limited to:

1. New Crude Oil Pump House

- Construction of Pump House with structure, roofing/cladding and associated civil/structural works.
- Pump foundations, equipment foundations, access platforms and associated facilities.
- Supply, installation and commissioning of EOT crane.

2. Pumping Facilities

- Installation, alignment, testing and commissioning of 2 No. Booster Pumps and 2 No. Export Pumps, which will be Free Issue Items.
- Supply, installation and integration of Oil Pit Pumps and Tank Bottom Recycle Pumps.

3. Piping & Tank Farm Integration

- Complete pump suction / discharge headers and associated process piping.
- New piping header / line to the Tank Farm from process area.
- Tank bottom recycle header and associated piping.
- Hot oil supply & return headers and associated piping
- Sampling header and associated piping.
- Oil pit pumping system.
- Export Pump discharge header connection to the existing underground export line, including field tie-in, testing and reinstatement.
- New pipe rack / Pipe sleepers / Road cross over / or pipe crossing culvert etc between the process area and Pump House with required supports and foundations.
- All required underground integration piping, piping supports and foundation within or outside piping.

4. Existing Pump House Integration

- Required piping, mechanical, electrical and instrumentation modifications to integrate the New Pump House with the Existing Pump House and Tank Farm.
- Field verification and modification of existing facilities wherever required for successful operation.

5. Electrical System

- Complete electrical system for the New Pump House, including power distribution, transformers/switchgear, motor feeders, cables, cable trays, lighting, earthing and hazardous-area installations.
- Integration/tie-in with the existing electrical system based on the approved SLD and available capacity.
- Complete power and control supply for pumps, EOT crane and auxiliary equipment.

6. Instrumentation & Control

- Supply installation and testing of complete all field instrumentation, control valves, JBs, cable trays, cabling, tubing, calibration and loop checking.
- Integration of the New Pump House with the existing DCS system, including pump status, commands, alarms, trips, permissive and interlocks.
- Complete instrumentation and control for Booster Pumps, Export Pumps, Oil Pit Pumps and Tank-Bottom Recycle Pumps.
- Supply, Installation, calibration and commissioning of the online analyser downstream of the Tank-Bottom Recycle Pump, including sample system and DCS interface.

7. Testing & Commissioning

- Complete inspection, NDT, hydrotesting, flushing, electrical testing, instrument calibration, loop checking, functional testing, interlock testing and equipment trial runs.
- Integrated commissioning of mechanical, piping, electrical and instrumentation systems.

- Start-up support and rectification of commissioning punch points.

8. Documentation & Handover

- Submission of construction records, inspection/test reports, calibration certificates, commissioning records, as-built drawings, O&M documentation and final completion dossier.

3.0 Completion Philosophy:

A. PROJECT MANAGEMENT PHILOSOPHY:

1. Preparation of Construction Methodologies ensuring safe and quality wok execution.
2. Project Management & Control Strategy shall be defined and submitted for adherence to ensure timely completion of the project.
3. Quality procedures, inspection and test plans / Quality Assurance Procedures, inspection formats and other required documents to be prepared and submitted by the contractor.
4. Preparation of Project Schedule (in MSP) up to desired detailing preferably up to level L3 or L4.
5. Preparation of Resource Histogram based on Construction Methodologies and Project schedule.
6. Preparation of Mobilization Plan, Baseline Progress S-Curve & Bar Charts for progress monitoring and tracking.
7. Preparation and of Brought out Materials Procurement Tracker and weekly update.
8. Preparation of Project Monitoring and Tracking mechanism and MIS reporting system.

B. PROJECT CONSTRUCTION AND EXECUTION PHILOSOPHY:

The Contractor shall execute the works on a single-point responsibility basis for engineering, procurement construction and integration, with appropriate coordination with the Client, PMC, Pump OEMs and existing system vendors.

The work shall be considered complete only after the New Crude Oil Pump House, associated Tank Farm piping, Main header, Export Pump connection to the existing export line, recycle system, Hot oil lines, sampling system, Oil Pit Pumps, EOT crane, electrical system, instrumentation, analyzer and DCS interfaces have been installed, tested, commissioned and demonstrated as ready for safe and reliable operation. The broad Process Flow Diagram (PFD) is attached as an Annexure.

4.0 Discipline wise Scope of Work:

A. MECHANICAL WORKS

1. General Scope

The mechanical team of contractor shall provide all necessary manpower, supervision, tools, tackles, lifting equipment, temporary facilities, consumables and other resources required for complete receipt, handling, installation, alignment, inspection, pre-commissioning, testing and commissioning support of mechanical equipment and associated mechanical items for the New Crude Oil Tank Farm Pump House at Bhaskar-I Field, Khambhat, Gujarat.

2. Major Mechanical Equipment

The Mechanical Contractor's scope shall include installation and commissioning support for:

S. No.	Equipment / Item	Qty.	Supply Responsibility
1	Booster Pump	2 Nos.	Free Issue Material
2	Export Pump	2 Nos.	Free Issue Material
3	Oil Pit Pumps	2 Nos.	As specified in SOR
4	Tank Bottom Recycle Pumps	2 Nos.	As specified in SOR
5	EOT Crane	1 Set	Contractor Supply
6	Crane accessories	1 Lot	Contractor Supply
7	Mechanical equipment accessories	1 Lot	As applicable

Final quantities and equipment details shall be as indicated in the approved SOR and equipment/vendor documents.

3. Client Free-Issue Pumps

The following pumps shall be treated as Client Free-Issue Equipment:

- Two (2) Booster Pumps.
- Two (2) Export Pumps.

The Client shall provide equipment details including, as applicable:

- Equipment GA drawings.
- Equipment datasheets.
- Equipment weights.
- Foundation loads.
- Nozzle details.
- Motor details.
- Coupling details.
- Vendor installation requirements.
- Lifting requirements.
- Vendor preservation requirements.

The Mechanical Contractor shall be responsible for receipt, unloading, internal shifting, safe storage, preservation, lifting, positioning, installation, levelling, alignment and mechanical commissioning support of the Client-supplied pumps.

4. Receipt, Unloading and Handling of Mechanical Equipment

The Contractor shall:

- Receive mechanical equipment at site.
- Verify equipment against packing lists and vendor documents.
- Inspect equipment for transportation damage.
- Report shortages or damage to the Client/Engineer.
- Unload equipment using suitable certified lifting equipment.
- Shift equipment to designated storage/installation locations.
- Provide cranes, forklifts, trailers, chain blocks, slings and lifting tackles.
- Maintain equipment identification and traceability.
- Carry out preservation during storage.
- Protect machined surfaces, shafts, couplings and other sensitive components.

The Contractor shall remain responsible for equipment under its custody until installation and formal handover.

5. Foundation and Equipment Installation Readiness

The Contractor shall carry out equipment foundation interface checks before installation.

The scope shall include:

- Verification of foundation dimensions.
- Verification of equipment centreline.
- Verification of anchor bolt location.
- Verification of foundation elevation.
- Verification of embedded plates.
- Verification of equipment orientation.
- Verification of maintenance/access clearances.
- Verification of equipment nozzle orientation against vendor drawings.
- Identification of discrepancies before equipment installation.

6. Booster Pump Installation

For the two Client-supplied Booster Pumps, the Mechanical Contractor shall:

- Position the pump/baseplate/skid.
- Install the equipment on the foundation.
- Carry out preliminary levelling.
- Install shims/packers.
- Install and tighten anchor bolts.
- Carry out grouting where specified.
- Complete final levelling after grout curing.
- Install pump and motor.
- Carry out soft-foot checks.
- Carry out precision pump-motor alignment.
- Install coupling.
- Install coupling guard.
- Complete lubrication requirements.
- Carry out Manual shaft rotation checks.
- Record final alignment.

7. Export Pump Installation

For the two Client-supplied Export Pumps, the Mechanical Contractor shall carry out:

- Equipment receipt and handling.
- Positioning.
- Baseplate/skid installation.
- Levelling.
- Grouting.
- Final alignment.
- Soft-foot checks.
- Coupling installation.
- Coupling guard installation.
- Lubrication.
- Shaft rotation check.
- Final mechanical inspection.
- Commissioning/start-up support.

The Mechanical Contractor shall provide the equipment-side interface information and coordinate final pump nozzle connection.

8. Oil Pit Pump Procurement & Installation

The Mechanical Contractor shall install the Oil Pit Pumps including:

- Receipt and handling.
- Positioning.
- Installation on supports/foundation.
- Levelling.
- Alignment where applicable.
- Coupling installation.
- Lubrication.
- Motor/equipment interface checks.
- Rotation check.
- Mechanical inspection.
- Functional testing.
- Commissioning support.

9. Tank Bottom Recycle Pump Procurement & Installation

The Mechanical Contractor shall install the Tank Bottom Recycle Pumps including:

- Equipment receipt.
- Unloading and shifting.
- Positioning.
- Foundation/support checks.
- Levelling.
- Alignment.
- Coupling installation.
- Lubrication.
- Rotation checks.
- Mechanical inspection.
- Functional checks.
- Commissioning support.

10. EOT Crane - Procurement, Installation and Testing

The Mechanical Contractor shall procure, supply, install, test and commission the EOT Crane for the New Pump House.

The scope shall include:

- EOT crane bridge.
- End carriages.
- Hoist.
- Trolley.
- Long-travel mechanism.
- Cross-travel mechanism.
- Motors and gearboxes.
- Electrical/control panel associated with crane.
- Pendant/control arrangement.
- Festoon/cable arrangement.
- Limit switches.
- Hook assembly.
- Crane rails and accessories where included in SOR.
- Installation and alignment.
- No-load testing.
- Load testing.
- Functional testing.
- Third-party inspection/certification where required.
- Submission of test certificates.

11. EOT Crane Maintenance and Equipment Handling Interface

The Contractor shall ensure that the EOT Crane provides suitable:

- Safe Working Load.
- Hook height.
- Long-travel coverage.
- Cross-travel coverage.
- Access to pump maintenance areas.
- Equipment lifting clearances.
- Maintenance access.
- Safe operating envelope.

The Contractor shall coordinate with the Mechanical and Piping teams to ensure that the crane operating envelope is not obstructed by piping, structural members, cable trays or other permanent installations.

12. Equipment Alignment

The Mechanical Contractor shall carry out precision alignment of rotating equipment.
The scope shall include:

- Pump-motor alignment.
- Soft-foot checks.
- Baseplate levelling.
- Shaft alignment.
- Coupling alignment.
- Thermal growth consideration where specified by OEM.
- Final alignment after piping connection, where required.
- Recording of alignment readings.

13. Lubrication

The Mechanical Contractor shall:

- Fill bearing housings.
- Fill gearboxes where applicable.
- Provide specified installation lubricants.
- Verify lubricant grade.
- Verify lubricant quantity.
- Check lubrication points.
- Check lubrication systems.
- Rectify lubrication-related deficiencies.

14. Mechanical Equipment Accessories

The Mechanical Contractor shall install equipment accessories supplied with the equipment, including, as applicable:

- Couplings.
- Coupling guards.
- Baseplates.
- Skids.
- Mechanical seals.
- Seal systems.
- Bearing housings.
- Gearboxes.
- Auxiliary mechanical systems.
- Local mechanical gauges supplied with equipment.
- Vendor-supplied mechanical accessories.

15. Mechanical Equipment Testing

The Mechanical Contractor shall carry out equipment-related testing and checks, including:

- Equipment inspection.
- Manual rotation.
- Lubrication verification.
- Coupling inspection.
- Alignment verification.
- Seal inspection.
- Bearing inspection.
- Motor/equipment interface verification.
- Equipment vibration checks during operation.
- Bearing temperature checks.
- Mechanical leakage checks.
- Equipment operational checks.

16. Commissioning Support

The Mechanical Contractor shall provide competent mechanical personnel for:

- Equipment start-up.
- Initial operation.
- Rotation verification.
- Vibration monitoring.
- Bearing temperature monitoring.
- Mechanical seal monitoring.
- Lubrication monitoring.
- Abnormal noise monitoring.
- Equipment performance observation.
- Rectification of mechanical deficiencies.
- Assistance during performance testing.
- Start-up and shutdown support.

17. Interface with Piping team during commissioning:

The Mechanical Contractor shall coordinate with the Piping team to ensure:

- Equipment is mechanically ready before piping connection.
- Piping is adequately supported before final connection.
- Pump nozzle loads are acceptable.
- Piping flushing is completed before pump start-up.
- Temporary strainers/blinds are removed as required.
- Correct permanent gaskets are installed.
- Equipment suction/discharge valves are in the correct position.
- Equipment is ready for commissioning.

18. Painting and Protection of Mechanical Equipment

The Mechanical Contractor shall:

- Touch up damaged equipment coating.
- Protect machined surfaces.
- Protect shafts and couplings.
- Protect mechanical seals.
- Maintain equipment cleanliness.
- Apply approved touch-up coating where required.
- Remove temporary protective materials prior to commissioning.

19. Lifting and Rigging

The Mechanical Contractor shall provide all lifting arrangements required for mechanical equipment installation.

The scope shall include:

- Mobile cranes.
- Forklifts.
- Chain blocks.
- Slings.
- Shackles.
- Spreader beams.
- Hydraulic jacks.
- Certified lifting tackles.
- Rigging manpower.
- Lifting plans.
  All lifting equipment shall have valid inspection/certification.

20. Tools, Tackles and Consumables

The Mechanical Contractor shall provide:

- Hand tools.
- Torque wrenches.
- Hydraulic torquing tools where required.
- Laser alignment equipment.
- Precision alignment instruments.
- Hydraulic jacks.
- Scaffolding at all required locations for safe working
- Lifting tackles.
- Grouting tools.
- Mechanical installation tools.
- Lubricants.
- Shims.
- Mechanical installation consumables.
- Cleaning materials

21. Mechanical Equipment Documentation

The Mechanical Contractor shall submit:

- Equipment receiving reports.
- Equipment inspection reports.
- Foundation interface inspection reports.
- Installation checklists.
- Alignment reports.
- Soft-foot reports.
- Grouting records.
- Coupling inspection records.
- Lubrication records.
- Equipment rotation records.
- EOT crane test certificates.
- EOT crane load test reports.
- Mechanical commissioning checklists.
- Equipment punch-list records.
- Final mechanical completion dossier.

22. Coordination With Other Contractors

The Contractor shall coordinate with:

- Piping, Civil & Structural, Electrical, Instrumentation Team.
- Pump OEM/Vendor.
- EOT Crane Vendor.
- Client Operations Team.
- PMC/Engineer.

Particular coordination shall be required for:

- Equipment foundations.
- Pump nozzle orientation.
- Pump/piping interface.
- EOT crane operating envelope.
- Electrical motor interfaces.
- Instrument interfaces.
- Equipment maintenance clearances.
- Commissioning activities.

23. Existing Pump House Interface

Where mechanical equipment from the New Pump House interfaces with the existing pump house, the Mechanical Contractor shall:

- Verify equipment interface requirements.
- Review existing equipment information made available by Client.
- Coordinate equipment operational requirements.
- Participate in joint walkdowns.
- Provide mechanical equipment-related information required for integration.
- Support commissioning and operational trials.

24. Mechanical Punch List and Completion

The Contractor shall clear all mechanical punch points related to:

- Pumps.
- Motors/mechanical interfaces.
- Couplings.
- Guards.
- Bearings.
- Mechanical seals.
- Lubrication.
- Baseplates.
- Grouting.
- EOT Crane.
- Oil Pit Pumps.
- Tank Bottom Recycle Pumps.
- Mechanical equipment accessories.

25. Final Mechanical Completion

The Contractor's scope shall be considered complete when:

- All Client-supplied pumps are received and installed.
- Pumps are levelled and aligned.
- Couplings and guards are installed.
- Lubrication is completed.
- Equipment mechanical checks are completed.
- Oil Pit Pumps are installed and ready for operation.
- Tank Bottom Recycle Pumps are installed and ready for operation.
- EOT Crane is installed and tested.
- Equipment-related punch points are cleared.
- Equipment documentation is submitted.
- Mechanical commissioning support is completed.
- Equipment is ready for operation following completion of piping works by the Piping Contractor.

B. PIPING Work

1. General Scope

The piping team of Contractor shall provide all necessary manpower, supervision, welding equipment, fabrication facilities, tools, tackles, lifting equipment, consumables, temporary facilities and other resources required for complete fabrication, erection, installation, testing, flushing, reinstatement and commissioning support of piping systems associated with the Crude Oil Tank Farm Pump House and its integration with the existing facilities at Bhaskar-I Field, Khambhat, Gujarat.

The scope shall be executed in accordance with the latest approved P&IDs, piping layouts, isometrics, piping material specifications, line list, valve list, support drawings, tie-in schedule, equipment/pump vendor drawings, project specifications and applicable codes/standards.

The overall objective of the piping works shall be to establish a complete and operational crude oil transfer system, including connectivity between the new tank farm, existing tank farm, new pump house, existing pump house and the existing export pipeline towards IOCL.

2. Piping Systems Covered Under Scope

The Contractor's scope shall include, but shall not be limited to, the following:

- Complete piping fabrication and erection within the new Crude Oil Pump House.
- Suction and discharge piping for Two (2) Booster Pumps – P-101C/D.
- Suction and discharge piping for Two (2) Export Pumps – P-102C/D.
- Common pump suction and discharge headers.
- Interconnecting piping between pumps and common headers.
- Pump minimum-flow/recycle piping, where applicable.
- Crude oil piping header from process area to/from the New Tank Farm, including associated valves, fittings, supports and interconnections.
- Piping between the New Tank Farm and New Pump House.
- Export Pump discharge header from the new pump house.
- Connection of the Export Pump discharge header to the existing underground export pipeline.
- Associated above-ground piping and underground piping transition arrangements for the export connection.
- Tank-bottom recycle piping associated with Tank Bottom Recycle Pumps.
- Hot oil supply & return headers with associated piping to/for from pump house to tank farm including associated valves, fittings, supports and interconnections.
- Sampling header and associated piping including associated valves, fittings, supports and interconnections.
- Oil Pit Pump suction/discharge piping.
- Servo Gas piping
- Common crude oil transfer headers.
- Existing pump-house integration piping.
- Tie-in piping to existing tank-farm and pump-house facilities.
- Drain and vent piping.
- Open drain/closed drain piping within the defined piping scope.
- Utility piping associated with the pump house.
- Small-bore and instrument-connected piping within the piping scope.
- Temporary piping/spools required for hydrotesting, flushing and commissioning.
- All piping modifications required to achieve complete and operational integration of the new pump house with the existing facilities.

3. Drawing and Engineering Document Review

Before commencement of fabrication, the Contractor shall review the latest approved:

- P&IDs.
- Piping GA/layout drawings.
- Piping isometrics.
- Piping Material Specifications.
- Line list.

- Valve list.
- Pipe support drawings.
- Tie-in schedule.
- Pump/equipment vendor drawings.
- Civil/structural drawings.
- New Tank Farm layout.
- Pipe rack drawings.
- Existing underground 10" IOCL export pipeline information available from Client.
- Applicable project specifications and standards.

The Contractor shall verify routing, constructability, support arrangement, access, tie-in locations and actual site conditions.

Any discrepancy between drawings, vendor information and actual site conditions shall be brought to the Engineer/Client's attention before fabrication.

4. Site Survey and Field Verification

Prior to fabrication of critical tie-in spools, the Contractor shall carry out detailed site verification.

The scope shall include:

- Verification of existing piping routes.
- Verification of existing pipe sizes and orientation.
- Verification of existing valve locations.
- Verification of existing underground pipeline location, wherever accessible/identifiable.
- Field measurement of existing tie-in points.
- Verification of elevations and coordinates.
- Verification of available access and working space.
- Identification of existing underground services before excavation.
- Confirmation of actual site dimensions against drawings.

Particular attention shall be given to the existing underground 10" export line towards IOCL, as the final connection spool arrangement shall be based on verified field conditions and Client-approved tie-in details.

5. Piping Material Receiving and Handling

The Contractor shall receive and handle all piping materials within its scope, including:

- Pipes.
- Fittings.
- Flanges.
- Valves.
- Strainers.
- Gaskets.
- Bolting.
- Specialty piping items.
- Pipe support materials.
- Small-bore piping materials.

The Contractor shall:

- Check materials against approved MTO/material documents.
- Verify size, rating, schedule/class and material grade.
- Maintain material traceability.
- Segregate different material grades.
- Protect materials from contamination, damage and corrosion.
- Maintain proper storage and preservation.

6. Piping Fabrication

The Contractor shall carry out complete shop/site fabrication of piping spools, including:

- Pipe cutting and bevel preparation.
- Fit-up of pipes, fittings and flanges.
- Welding in accordance with approved WPS/PQR.
- Use of qualified welders.
- Branch connection fabrication.
- Installation of vents, drains and instrument connections.
- Flange orientation and fit-up.
- Dimensional inspection.
- Weld identification and traceability.
- Preservation and protection.
- Transportation of fabricated spools to erection locations.

7. Welding and NDE

The Contractor shall provide qualified welders and execute all welding in accordance with approved procedures.

The scope shall include, as applicable:

- WPS/PQR compliance.
- Welder qualification.
- Visual examination.
- RT/UT.
- MT/PT.
- PMI.
- Hardness testing.
- PWHT.
- Weld repair and re-examination.

All NDE shall be performed in accordance with the approved ITP, project specifications and applicable codes.

8. Piping Erection

The Contractor shall:

- Shift fabricated spools to installation locations.
- Erect piping as per approved isometrics and layouts.
- Install pipes, fittings, flanges and valves.
- Install permanent pipe supports, guides, anchors and restraints.
- Supply and make scaffolding arrangement wherever required to ensure safe working at height
- Maintain specified elevations and slopes.
- Maintain required access and maintenance clearances.
- Install removable spools where required.
- Provide temporary supports during construction.
- Ensure piping is adequately supported before final welding/bolting.

9. Pump Suction and Discharge Piping

The Contractor shall execute complete suction and discharge piping for the Booster and Export Pumps.

The scope shall include:

- Pump suction piping.
- Pump discharge piping.
- Reducers/expanders.

- Strainers.
- Isolation valves.
- Check valves.
- Minimum-flow/recycle piping where applicable.
- Drains.
- Vents.
- Pressure tapping connections.
- Temporary flushing spools.
- Permanent piping supports.

The Contractor shall ensure:

- Correct flow direction.
- Proper reducer orientation.
- Correct pipe slope.
- Proper piping support.
- Adequate maintenance clearance.
- No unacceptable loads on pump nozzles.

10. Header from process area to New Tank Farm

The Contractor shall execute the complete Crude oil piping header from process area connecting to New Tank Farm and the new pump house/associated crude oil transfer system, as shown on approved P&IDs, layouts and isometrics.

The scope shall include:

- Piping fabrication and erection.
- Connection to the New Tank Farm.
- Connection to the pump-house piping/header system.
- Installation of isolation valves.
- Installation of check valves, where applicable.
- Installation of drains and vents.
- Installation of spectacle blinds/spades where specified.
- Installation of pipe supports.
- Pipe rack erection interfaces.
- Underground/above-ground transition arrangements, where applicable.
- Flanged and welded connections.
- Hydrotesting.
- Flushing and cleaning.
- Painting/coating.
- Piping identification.
- Final reinstatement.

The Contractor shall verify the final routing, elevations, support spacing, accessibility and tie-in dimensions before fabrication.

11. New Pipe Rack Between Tank Farm and Pump House

The Contractor shall install all piping routed through the new pipe rack between the storage tanks and pump house.

The scope shall include:

- Crude oil header installation.
- Other crude oil transfer lines shown on approved drawings.
- Pipe shoes.
- Guides.
- Anchors.
- Clamps.

- Secondary supports.
- Expansion/flexibility arrangements.
- Field welds.
- NDE.
- Hydrotesting.
- Painting/coating touch-up.
- Identification.

The Contractor shall coordinate with the Civil/Structural team for pipe rack readiness, elevations, structural loading and support locations.

12. Export Pump Discharge Header

The Contractor shall execute the complete Export Pump discharge header from the discharge side of the Two Export Pumps up to the designated tie-in point with the existing export system.

The scope shall include:

- Individual Export Pump discharge piping.
- Common Export Pump discharge header.
- Isolation valves.
- Check valves.
- Pressure instrumentation tapping connections as shown.
- Drain and vent connections.
- Temporary flushing connections.
- Permanent pipe supports.
- Pipe rack/structural interfaces.
- Tie-in to the existing export pipeline.
- Hydrotesting.
- Flushing.
- Reinstatement.

The Contractor shall verify the pump vendor nozzle arrangement and ensure that the common header configuration does not impose unacceptable loads on the Export Pump nozzles.

13. Connection to Existing Underground Export Line

A specific part of the piping scope shall be the connection of the new Export Pump discharge header to the existing underground export pipeline.

The Contractor shall execute the complete mechanical/piping work required for this connection, including:

A. Existing Pipeline Verification

- Confirm exact location of the existing underground 10" export pipeline.
- Verify pipeline size, material, wall thickness and available documentation based on Client records and site verification.
- Carry out field survey and identification of the existing line.
- Identify existing valves, flanges, weld joints and accessible tie-in points.
- Verify existing underground services and obstructions.

B. Excavation and Exposure

Where required for the tie-in:

- Excavate the existing pipeline under approved excavation procedures.
- Provide shoring/benching and safe access.
- Expose sufficient length of the existing 10" pipeline.
- Protect the existing pipeline from damage.
- Remove soil/debris from the work area.

- Provide dewatering arrangements where required.

C. Tie-In Execution

Subject to the final approved tie-in arrangement, the Contractor shall:

- Isolate the existing export pipeline in coordination with Client Operations.
- Verify zero pressure and safe condition before cutting.
- Execute pipeline cutting/welding or flange connection as applicable.
- Install the approved tie-in spool/branch connection.
- Install required valves and fittings.
- Complete welding and NDE.
- Carry out required PWHT/PMI/testing where applicable.
- Reinstate pipeline coating/corrosion protection.
- Reinstate underground pipeline protection and backfilling.

D. Tie-In Safety

The tie-in shall only be carried out after:

- Approved method statement.
- Approved tie-in drawing.
- Isolation certificate.
- Permit-to-work.
- Gas testing.
- Confirmation of line depressurization/draining.
- Client Operations clearance.
- Approved shutdown window.

14. Existing Underground Export Line – Reinstatement

Following completion of the export line tie-in, the Contractor shall:

- Complete NDE and pressure/leak testing as applicable.
- Reinstate the pipeline coating.
- Reinstate wrapping/coating protection.
- Provide required protective padding/marker arrangement.
- Carry out approved backfilling.
- Compact the backfill.
- Reinstate the surface/road/area disturbed during the work.
- Provide final location marking as required.
- Submit as-built coordinates and tie-in details.

No underground piping shall be backfilled until the required inspection, NDE, coating inspection and approval have been completed.

15. Tank Bottom Recycle Piping

The Contractor shall execute complete piping associated with the Tank Bottom Recycle Pumps, including:

- Tank bottom connection.
- Pump suction piping.
- Pump discharge piping.
- Recycle return piping.
- Isolation valves.
- Check valves where applicable.
- Drains and vents.
- Strainers where applicable.
- Supports and guides.
- Tie-ins to the crude oil transfer system.

- Hydrotesting.
- Flushing.
- Final reinstatement.

Special attention shall be given to tank nozzle orientation, piping flexibility and pump nozzle loading.

16. Hot oil supply & return headers with associated works

The Contractor shall execute all piping associated with Hot oil supply and return (HoS / HoR), including:

- HoS header (line connection from process area) and piping from pumphouse to Tank farm.
- HoR header (line connection from process area) and piping from pumphouse to Tank farm.
- Isolation valves.
- Check valves where applicable.
- Drains and vents.
- Tie-ins to the Hot oil system.
- Thermal insulation where applicable.
- Supports.
- Hydrotesting.
- Flushing.
- Final connection and reinstatement.

17. Sampling header and associated works

The Contractor shall execute all piping associated with Oil Pit Pumps, including:

- Sampling header.
- Associated piping.
- Discharge connection to the designated collection/transfer system.
- Isolation valves.
- Check valves where applicable.
- Drains and vents.
- Supports.
- Hydrotesting.
- Flushing.
- Final connection and reinstatement.

18. Oil Pit Pump Piping

The Contractor shall execute all piping associated with Oil Pit Pumps, including:

- Oil pit suction piping.
- Pump suction/discharge piping.
- Discharge connection to the designated collection/transfer system.
- Isolation valves.
- Check valves where applicable.
- Drains and vents.
- Supports.
- Hydrotesting.
- Flushing.
- Final connection and reinstatement.

19. Integration with Existing Pump House

The Contractor shall execute all piping required to integrate the New Pump House with the Existing Pump House.

The scope shall include:

- Existing piping verification.
- Field measurement.
- Identification of tie-in points.
- Fabrication of new tie-in spools.
- Installation of interconnecting piping.
- Modification of existing piping where approved.
- Installation of valves and fittings.
- Shutdown tie-ins.
- Cutting and welding.
- NDE.
- Hydrotesting/leak testing.
- Flushing.
- Final reinstatement.

All tie-ins shall be executed under approved permits, isolation procedures and method statements.

20. Valve and Specialty Item Installation

The Contractor shall install all piping valves and specialty items, including:

- Isolation valves.
- Check valves.
- Control valves.
- ESD valves.
- Drain/vent valves.
- Strainers.
- Spectacle blinds.
- Spades/blinds.
- Specialty piping items.

The Contractor shall verify:

- Valve orientation.
- Flow direction.
- Accessibility.
- Maintenance clearance.
- Correct rating/class.
- Proper gasket and bolting installation.
- Valve support arrangement.

21. Pipe Supports

The Contractor shall fabricate and install all supports required for the piping systems, including:

- Pipe shoes.
- Guides.
- Anchors.
- U-bolts.
- Clamps.
- Structural attachments.
- Secondary steel.
- Temporary supports.

Particular attention shall be given to:

- New Tank Farm header.
- Export Pump discharge header.
- Existing pump-house tie-in piping.
- IOCL export line connection.

- Tank-bottom recycle piping.
- Pump suction/discharge piping.

The source requires correct support elevation/orientation and coordination with structural/civil works.

22. Hydrostatic and Pressure Testing

The Contractor shall perform pressure testing of all piping systems in accordance with approved procedures.

The scope shall include:

- Test pack preparation.
- Test boundary identification.
- Temporary blinds/spades.
- Hydrostatic testing.
- Pneumatic testing where specifically approved.
- Leak testing.
- Calibrated pressure gauges.
- Filling and venting.
- Pressure holding.
- Draining.
- Test documentation.
- Reinstatement.

Special attention shall be given to separately defining test boundaries for:

- Pump piping.
- New Tank Farm header.
- Export Pump discharge header.
- Export line tie-in.
- Tank-bottom recycle piping.
- Existing pump-house tie-ins.

23. Flushing and Cleaning

The Contractor shall carry out complete flushing and cleaning following pressure testing.

Activities shall include:

- Water flushing.
- Air blowing where specified.
- Temporary strainer/screen installation.
- Removal of foreign material.
- Inspection of strainers.
- Cleaning of pump suction piping.
- Cleaning of Export Pump discharge piping.
- Cleaning of New Tank Farm header.
- Cleaning of tie-in piping.
- Removal of temporary flushing spools.
- Installation of permanent components.
- Final reinstatement.

Special care shall be taken to prevent debris entering the Client-supplied Booster and Export Pumps.

24. Painting, Coating and Corrosion Protection

The Contractor shall execute coating work for piping within its scope, including:

- Surface preparation.
- Primer.
- Intermediate/topcoat.
- Field weld touch-up.
- Coating repair.
- Piping identification.
- Flow direction marking.
- Underground pipeline coating/wrapping reinstatement after tie-in.
- Corrosion protection restoration.

25. Pre-Commissioning and Commissioning Support

The Contractor shall provide qualified piping personnel for:

- Final piping walkdown.
- Mechanical completion.
- Punch-list clearance.
- Flushing.
- Valve operation checks.
- Removal of temporary blinds.
- Final gasket installation.
- Piping reinstatement.
- Leak rectification.
- Pump piping connection checks.
- Tank Farm header commissioning.
- Export header commissioning.
- Export line tie-in commissioning.
- Existing pump-house integration testing.
- Start-up support.

26. Contractor-Supplied Consumables

Unless specifically identified otherwise in the SOR, the Contractor shall supply all consumables including but not limited to the following:

- Welding electrodes/filler wires.
- Cutting/grinding consumables.
- Inert gas.
- Gaskets.
- Bolting.
- Temporary blinds/spades.
- Flushing consumables.
- Cleaning materials.
- Marking materials.
- Touch-up paint.
- Underground coating/wrapping materials within the Contractor's scope.

27. Tools and Equipment

The Contractor shall provide all tools and equipment required for piping construction, including:

- Welding machines.
- Cutting machines.
- Grinding machines.
- Pipe alignment tools.
- Hydraulic torquing equipment.
- Cranes/forklifts.
- Chain blocks.
- Lifting tackles.
- Pipe stands.

- Hydrotest pumps.
- Calibrated pressure gauges.
- Flushing equipment.
- Measuring instruments.
- Gas detectors for tie-in activities.
- Excavation/support equipment for underground tie-in works, where required.

28. QA/QC Documentation

The Contractor shall maintain and submit:

- Material receiving reports.
- Material certificates.
- Weld maps.
- WPS/PQR/WPQ records.
- NDE reports.
- PMI reports where applicable.
- PWHT records where applicable.
- Dimensional inspection reports.
- Hydrotest records.
- Flushing records.
- Valve inspection records.
- Pipe support inspection records.
- Tie-in records.
- Underground pipeline inspection records.
- Coating inspection records.
- Punch-list records.
- As-built/red-line drawings.
- Final tie-in documentation.

29. Final Piping System Completion / Operational Readiness

The Piping Contractor's scope shall be considered complete when:

- All pump-house piping is fabricated and erected.
- Booster Pump suction/discharge piping is complete.
- Export Pump suction/discharge piping is complete.
- Common pump headers are complete.
- New Tank Farm header is complete and connected.
- New Tank Farm-to-Pump House piping is complete.
- Export Pump discharge header is complete.
- Export Pump discharge header is successfully connected to the existing underground export line.
- Tank-bottom recycle piping is complete.
- Oil Pit Pump piping is complete.
- Existing pump-house tie-ins are complete.
- New pipe-rack piping is complete.
- All valves and specialty items are installed.
- All piping supports are complete.
- Required NDE is accepted.
- Hydrotesting/pressure testing is completed.
- Flushing and cleaning are completed.
- Underground tie-in coating and backfilling are completed.
- Temporary blinds/supports are removed as required.
- Final reinstatement is completed.
- All piping punch points are cleared.
- As-built/red-line documentation is submitted.

The complete piping system is ready for safe operation and integration of the New Crude Oil Pump House with the New Tank Farm, Existing Pump House and existing IOCL export system

C. CIVIL & STRUCTURAL WORK

The Civil & Structural team shall provide all necessary materials, manpower, supervision, construction equipment, lifting arrangements, tools, tackles and consumables required for complete execution of the New Crude Oil Tank Farm Pump House and associated civil/structural works at Bhaskar-I Field.

The scope shall include, but not be limited to, the following:

1. Pump House Civil Works

- Complete excavation, disposal, backfilling and compaction for Pump House and associated foundations.
- PCC, RCC, reinforcement and formwork for:
    - Pump foundations.
    - Shed column foundations.
    - Equipment foundations/plinths.
    - Pipe-rack foundations.
    - Pipe-support foundations.
    - EOT crane supporting structure foundations.
- Installation of embedded plates, anchor bolts, sleeves and inserts.
- Non-shrink grouting of equipment/structural baseplates, where applicable.
- Pump House RCC floor/slab including suitable slope towards drainage points.
- Construction of equipment plinths and maintenance areas.
- Construction of oil pits/sumps associated with Oil Pit Pumps and Tank Bottom Recycle Pumps.
- Construction of drainage channels, floor drains, sumps and associated civil structures.
- Masonry, plastering, flooring and painting wherever required.
- Provision of equipment access, steps, platforms and other civil interfaces shown on approved drawings.
- Construction of tank farm peripheral road including pathway construction, kerb stone fixing, and storm water drain installation along with covers.

2. Pump Foundations

The Contractor shall construct complete foundations for:

- 3 Nos. Booster Pumps, including one for future pump.
- 3 Nos. Export Pumps, including one for future pump.
- Oil Pit Pumps, as applicable.
- Tank Bottom Recycle Pumps, as applicable.

Pump foundations shall be based on the latest approved vendor drawings and equipment data, including equipment weight, operating/dynamic loads, baseplate dimensions, anchor bolt arrangement and foundation requirements.

The scope shall include excavation, PCC, reinforcement, RCC, formwork, anchor bolts/templates, embedded items, foundation finishing and grouting.

Pump installation and alignment shall be by the Mechanical Contractor.

3. Pump House Shed

The Contractor shall provide the complete Pump House structure considering structural arrangement required to support the EOT crane, including:

- Design/detailing based on approved structural requirements.
- Column foundations
- Columns, rafters, bracing, purlins, girts and associated structural members.
- Crane runway beams and girders.
- Crane rail supporting arrangement.
- Brackets, connection plates, baseplates and structural fasteners.
- Structural bracings.
- Anchor bolts and embedded items.

- Fabrication and shop assembly as required.
- Transportation to site and erection.
- Structural alignment and bolting.
- Shop primer/painting and final touch-up after erection.
- Complete roof and wall cladding using approved shed drawings.
- Ridge, eave, corner and other required flashings.
- Roof gutters and downpipes, where applicable.
- Sealing of roof/wall penetrations.
- Equipment access openings, personnel doors and emergency exits as per approved drawings.

Design shall consider applicable wind, seismic, dead, live, maintenance and crane-related loads.

The design shall consider crane SWL, wheel loads, impact, longitudinal and lateral operating forces.

EOT crane supply, installation, testing and commissioning shall remain under the Mechanical Contractor's scope.

4. Pipe Rack and Pipe Support Structures

The Contractor shall provide the civil and structural works for the new pipe rack between the Tank Farm and Pump House, including:

- Pipe-rack foundations and RCC pedestals.
- Structural steel columns, beams and bracing.
- Pipe supports foundation and steelwork.
- Baseplates, anchor bolts and connection plates.
- Platforms/access arrangements where required.
- Painting/protective coating.

The structure shall accommodate the piping header to the New Tank Farm and other piping indicated on approved layouts, based on final piping/support loads.

Process piping fabrication, erection, welding, NDE, hydrotesting and flushing shall be under the Piping Contractor.

5. Oil Pit / Sump Works

Complete civil works for Oil Pit and associated pump installations shall include:

- Excavation and PCC.
- RCC base and walls.
- Reinforcement and formwork.
- Waterproofing where required.
- Pump support/foundation arrangements.
- Access covers/gratings.
- Ladders/steps.
- Drainage and pipe sleeves.

6. Equipment / Electrical Foundations

Provide RCC/PCC foundations and plinths, as applicable, for:

- Mechanical equipment.
- MCC/panels.
- Transformer.
- Local control panels.
- Other equipment identified on approved layouts.

7. Cable Trenches and Sleeves

Provide civil works for:

- Cable trenches.
- RCC trench covers.
- Equipment cable-entry foundations.
- Piping/cable sleeves.
- Underground crossing provisions.
- Required openings through foundations/walls.

8. Access roads –

Complete civil works for peripheral road of tank farm and access road for pump house and tank farm which include:

- Casting of 4 x 2 meters slabs with 150 mm depth as per SunPetro standard drawing attached.
- Ground levelling, Bed preparation, laying of slabs and levelling as per required elevation and slope.
- Testing for concrete quality for precast slabs.
- Construction of pathways and installation of kerb stones on both sides of the road.
- Supply and installation of storm water drains on both sides of the road.

9. Testing & Quality Control

The Contractor shall carry out and submit relevant:

- Soil compaction/field density tests.
- Concrete slump and cube tests.
- Reinforcement inspection.
- Cement/aggregate/material certificates.
- Structural steel material certificates.
- Structural welding/NDE records, where applicable.
- Anchor bolt and foundation dimensional survey.
- All erection inspection.
- Painting/DFT records.

10. Drawings & Documentation

The Contractor shall provide:

- All fabrication and erection drawings.
- Structural fabrication drawings/TEKLA model, where specified.
- Foundation/shop drawings.
- Anchor bolt and embedded-item drawings.
- Material test certificates.
- Concrete pour cards and cube reports.
- Inspection records.
- Structural steel inspection records.
- As-built civil and structural drawings.
- Completion dossier.

D. ELECTRICAL WORKS

Contractor's electrical team shall provide complete Site Engineering, Procurement, Supply, Installation, Testing and Commissioning (EPIC) of the electrical system required to make the New Crude Oil Pump House fully operational and electrically integrated with the existing facility.

1. Electrical Power Supply & Integration with Existing System

- Establish the electrical supply to the New Pump House from the existing electrical system in accordance with the approved SLD.
- Verify and confirm the final source of supply, including the existing 11 kV, 1250 A, 31 kA bus and/or approved incoming supply arrangement from the existing 66 kV Substation.
- Provide all required 11 kV feeder/switchgear, breakers, isolators, protection, metering and cable connections.
- Integrate the New Pump House electrical system with the existing electrical network.
- Verify available fault level, transformer loading, voltage drop and spare capacity of the existing system.
- Coordinate with Client for confirmation of the available outgoing feeder/source and termination point.
- Provide required tie/bus-coupler arrangement, where applicable.
- Provide protection, metering, interlocking and control for the new connection.
- Include modifications to the existing 11 kV/6.6 kV switchboard/MCC required for the new Pump House connection. (if required)
- Execute tie-in works under approved shutdown, isolation and energization procedures.

2. Pump Motor Feeders

Scope shall include breakers, motor protection, CTs, control circuits, local/remote control, emergency trip, cables, glands, termination and earthing.

Final motor ratings shall be based on Client/OEM data.

3. Existing 6.6 kV Bus / MCC Integration

The Contractor shall specifically investigate and execute the required interface with the existing 6.6 kV, 2500 A, 31 kA bus/MCC, including:

- Verification of spare capacity.
- Verification of existing switchgear rating.
- Confirmation of physical connection point.
- New feeder/tie arrangement.
- Protection coordination.
- Interlocking.
- Modification of existing switchboard/MCC where required.
- Cable connection to the new Pump House.
- Testing of the complete integrated system.

No modification or tie-in shall be carried out without Client approval.

4. Power & Control Cables

Provide complete cabling for pumphouse operational requirements. Scope includes:

- 11 kV cables.
- 6.6 kV cables.
- LV power cables.
- Control cables.
- Cable glands.
- Termination kits.
- Lugs.
- Cleats.
- Identification tags.
- Testing and termination.

Cable sizes shall be finalized based on load, voltage drop, short-circuit withstand and installation conditions.

5. Cable Tray & Routing System

Provide:

- Cable trays/ladders.
- Supports and brackets.
- Bends, tees and reducers.
- Tray covers.
- Expansion arrangements.
- Cable cleats.
- Cable identification.
- Earthing/bonding.
- Segregation of power, control and instrumentation cables.

6. Motor Control & Interlocking

Provide electrical control interfaces for Booster and Export Pumps, including:

- Local/remote selection.
- Start/stop.
- Emergency shutdown.
- Motor protection.
- Overcurrent/earth-fault protection.
- Under/over-voltage protection.
- Phase-failure protection.
- Process permissive.
- Running/trip/healthy indications.
- DCS/PLC interface.
- Electrical and process interlocks.

Final logic shall be based on approved Cause & Effect and control philosophy.

7. Earthing & Bonding

Provide complete earthing and bonding for:

- 6.6 kV switchgear/MCC.
- Transformer.
- Motors and pumps.
- Cable trays.
- PEB structure.
- EOT crane structure.
- Pipe rack.
- Junction boxes.
- Local control stations.
- Lighting.
- All exposed metallic equipment.

Scope includes earth grid, earth electrodes, earth pits, earth conductors, earth bars and bonding connections.

8. Lighting & Small Power

Provide complete Pump House electrical services including:

- Normal lighting.
- Emergency lighting.
- Outdoor lighting.

- Equipment/local lighting.
- Lighting DB.
- Industrial socket outlets.
- Maintenance power outlets.
- Hazardous-area suitable fixtures and accessories.

9. Hazardous Area Electrical Installation

All electrical equipment shall be suitable for the approved hazardous-area classification, including:

- Motors.
- Lighting fixtures.
- Junction boxes.
- Local control stations.
- Isolators.
- Cable glands.
- Plugs and sockets.
- Switches and other electrical accessories.

Equipment shall comply with the specified Zone/Class, Gas Group and Temperature Class.

10. Electrical & Mechanical Interface

The Electrical Contractor shall coordinate with Mechanical Contractor for:

- Motor installation and terminal-box orientation.
- Motor cable termination.
- Motor earthing.
- Pump permissive.
- Motor rotation.
- Pump trial run.
- EOT crane electrical supply.
- Auxiliary equipment supply.
- Commissioning activities.

11. Testing & Commissioning

Testing shall include, as applicable:

- 6.6 kV cable testing.
- Transformer testing.
- Switchgear testing.
- Breaker timing/contact resistance.
- CT/PT testing.
- Relay secondary injection.
- Protection trip testing.
- Earth resistance testing.
- Motor IR/winding resistance testing.
- Phase sequence/rotation check.
- MCC functional testing.
- Interlock testing.
- Local/remote operation.
- Emergency trip testing.
- Lighting testing.
- DCS/PLC interface testing.
- Transformer and 6.6 kV bus energization.
- Motor solo run.
- Pump trial run.

E. INSTRUMENTATION WORKS

Contractor's instrumentation team shall provide complete procurement, installation, testing, calibration, loop checking, commissioning and start-up support for the instrumentation and control system associated with the New Crude Oil Pump House and associated facilities.

The scope shall include all field instruments, control valves, tubing, fittings, junction boxes, instrument cables, cable trays/supports, glands, termination materials, installation accessories and other items required to make the instrumentation system fully operational and integrated with the existing DCS system.

1. Instrumentation Scope for New Pump House

The scope shall cover instrumentation associated with:

- 2 Nos. Booster Pumps.
- 2 Nos. Export Pumps.
- Tank Bottom Recycle Pumps, as applicable.
- Oil Pit Pumps, as applicable.
- Pump suction and discharge piping.
- Minimum-flow/recirculation system.
- Associated MOVs/control valves.
- Pump protection and monitoring.
- Pump House utilities.
- Tank Bottom Recycle Pump discharge and associated online analyser system.
- Interfaces with existing DCS, MCC and other existing control systems.

Final instrument quantities and tags shall be as per approved P&IDs, instrument index and I/O list.

2. Existing DCS Integration - Critical Scope

The New Pump House shall be fully integrated with the existing DCS system.

The Contractor shall be responsible for all field-side works and interfaces required to bring the new Pump House signals into the existing DCS.

The scope shall include:

- Verification of available spare DCS I/O capacity.
- Verification of existing DCS marshalling/interface arrangement.
- Identification of available termination points in the existing DCS system.
- Preparation/verification of I/O list.
- Preparation of cable schedule and termination details.
- Provision of field junction boxes.
- Instrument/control cable installation from field to existing DCS interface.
- Cable termination at JB/marshalling/DCS interface.
- Ferruling and tagging.
- Shield/screen termination.
- Signal continuity and loop testing.
- Verification of DCS indication.
- Verification of alarms.
- Verification of trips.
- Verification of status and feedback.
- Verification of remote start/stop commands where applicable.
- Functional testing of pump interlocks.
- Cause & Effect verification.
- DCS communication/interface testing.

❖ Existing DCS Interface:

The Contractor shall coordinate with the Client/Existing DCS Vendor for:

- Existing DCS panel identification.
- Available I/O channels.
- Spare marshalling terminals.
- AI/AO/DI/DO requirements.
- Signal types.
- Communication interface, where applicable.
- DCS cabinet modifications, if required.
- I/O configuration requirements.
- DCS graphics and faceplates.
- Alarm configuration.
- Trend requirements.
- Historical data requirements.

Any modification required in the existing DCS marshalling cabinet, I/O cabinet, termination cabinet or associated field interface required specifically for integration of the New Pump House shall be identified and included in the SOR/BOQ.

❖ DCS Software Boundary:

The Contractor shall provide all field-side installation, termination, loop checking and functional testing.

DCS application software/configuration, graphics development, database modification and programming shall be:

- Included, where specifically identified in the SOR; or
- Carried out by the existing DCS Vendor/Client, with the Instrumentation Contractor providing all necessary engineering inputs and commissioning support.

The final responsibility shall be clearly identified before tender award.

3. Booster & Export Pump Instrumentation

Instrumentation shall be provided for the two Booster Pumps and two Export Pumps based on approved pump vendor data and P&IDs.

Typical monitoring/protection shall include, as applicable:

Suction Side:

- Suction pressure transmitter/gauge.
- Low suction pressure alarm/trip.
- Suction valve status.
- Associated process permissive.

Discharge Side:

- Discharge pressure transmitter/gauge.
- High discharge pressure alarm/trip.
- Flow measurement, where specified.
- Discharge valve status.

Pump/Motor:

- Pump running status.
- Pump trip status.

- Motor running status from MCC.
- Motor trip feedback.
- Bearing temperature.
- Vibration monitoring, where applicable.
- Seal-related monitoring, where applicable.
- Local/remote status.
- Emergency shutdown status.

Final instrument requirements shall be based on the approved P&ID, pump datasheet, OEM recommendations and Cause & Effect.

4. Pump Control & Interlocks:

The Instrumentation Contractor shall install and test all instrumentation required for the following functions, as applicable:

- Pump start permissive.
- Pump start/stop command.
- Local/remote selection.
- Pump running feedback.
- Pump trip feedback.
- Low suction pressure protection.
- High discharge pressure protection.
- Minimum-flow protection.
- High vibration trip.
- High bearing temperature trip.
- Seal failure/trip.
- Duty/standby selection.
- Auto-start of standby pump.
- Emergency shutdown.
- Process shutdown interlocks.
- MOV permissive.
- Control valve permissive.

All functions shall be tested against the approved Cause & Effect Diagram and Control Philosophy.

5. Minimum Flow / Recirculation System

Instrumentation associated with the pump minimum-flow/recirculation arrangement shall be installed and commissioned, including as applicable:

- Flow measurement.
- Pressure measurement.
- Control valve.
- MOV/AOV status.
- Low-flow alarm.
- Minimum-flow permissive.
- Automatic recirculation control.
- DCS indication and control.

The final control philosophy shall be as per approved P&ID and Cause & Effect.

6. Tank Bottom Recycle Pump - Online Analyzer

A dedicated instrumentation package shall be provided for the online analyser located downstream of the Tank Bottom Recycle Pump.

The Contractor shall provide complete installation and integration of the analyser system, including:

- Online analyser.
- Sample take-off arrangement.
- Sample isolation valves.
- Sample conditioning system, where required.
- Sample tubing.
- SS tubing/fittings.
- Flow control arrangement.
- Pressure regulation, where required.
- Sample drain/return arrangement.
- Analyzer enclosure/panel.
- Local indication.
- Calibration arrangement.
- Analyzer power supply.
- Signal cable.
- Analyzer-to-DCS interface.
- Alarm/trip signals, where applicable.
- Analyzer fault indication.
- Sample system leak testing.
- Calibration and functional testing.

Analyzer Installation

The analyser shall be installed at the Tank Bottom Recycle Pump discharge/downstream location as indicated on the approved P&ID.

The Contractor shall verify:

- Sample pressure.
- Sample temperature.
- Sample flow.
- Required sample conditioning.
- Analyzer range.
- Process compatibility.
- Hazardous-area classification.
- Utility requirements.
- Drain/return arrangement.

The final analyser specification shall be based on the approved analyzer datasheet and process data.

Analyzer DCS Interface

The analyser shall provide, as applicable:

- Process measurement.
- High alarm.
- Low alarm.
- High-high/low-low alarm.
- Analyzer fault.
- Calibration status.
- Maintenance status.
- Remote health/status.
- Analog output.
- Digital communication, where specified.

All required signals shall be integrated into the existing DCS.

7. Field Instrument Installation

The Contractor shall install all field instruments in accordance with approved:

- P&IDs.
- Instrument index.
- Instrument datasheets.
- Hook-up drawings.
- Instrument location plans.
- Cable schedule.
- Vendor installation instructions.

Installation shall ensure:

- Correct orientation.
- Accessibility for operation and maintenance.
- Proper support.
- Correct impulse/sample connection.
- Proper tubing routing.
- Proper cable entry.
- Adequate weather protection.
- Hazardous-area compliance.
- Correct tagging.

8. Instrument Tubing & Hook-Up

Complete installation shall include:

- Instrument impulse tubing.
- Sample tubing.
- SS tubing.
- Compression fittings.
- Root valves.
- Isolation valves.
- Manifolds.
- Bleed/vent arrangements.
- Supports.
- Tubing identification.
- Pressure/leak testing.

Tubing material and fittings shall be suitable for the process service and design pressure/temperature.

9. Control Valves / MOV / AOV

The Contractor shall install, connect and commission applicable:

- Control valves.
- MOVs.
- AOVs.
- Solenoid valves.
- Positioners.
- Limit switches.
- Local control stations.

The scope shall include:

- Installation.
- Tubing.
- Cable termination.

- Glanding.
- Calibration.
- Stroke testing.
- Open/close feedback verification.
- Fail-position verification.
- DCS command verification.
- Interlock testing.

10. Instrument Cables & Junction Boxes

The Contractor shall provide complete instrument/control cabling including:

- Cable laying.
- Cable pulling.
- Cable routing.
- Cable dressing.
- Cable tagging.
- Gland installation.
- Termination.
- Ferruling.
- Shield/screen termination.
- Continuity testing.
- Insulation resistance testing.

Junction boxes shall be provided with:

- Suitable enclosure.
- Mounting supports.
- Cable glands.
- Terminals.
- Ferrules.
- Identification.
- Earthing/bonding.

11. Instrument Cable Tray

Provide complete instrument cable tray/support system including:

- Instrument trays.
- Supports.
- Brackets.
- Covers where required.
- Bends/tees/reducers.
- Cable cleats/ties.
- Earthing/bonding.
- Segregation from power cables.

Dedicated segregation shall be maintained for instrumentation, control, power and intrinsically safe circuits as required by the approved design.

12. Hazardous Area Instrumentation

All field instrumentation installed in classified areas shall be suitable for the approved:

- Hazardous area classification.
- Gas group.
- Temperature class.
- Protection concept.

This shall include instruments, JBs, solenoids, switches, cable glands, local control stations and analyzer equipment.

13. Instrument Calibration

All instruments shall be calibrated before commissioning.

Calibration shall include:

- As-found reading.
- Applied input.
- Actual output.
- Error.
- As-left reading.
- Range.
- Engineering units.
- Calibration status.

Valid calibration certificates shall be submitted.

14. Loop Checking

Complete loop checking shall be carried out from field to existing DCS and vice versa.

Typical loop:

Field Instrument → JB → Instrument Cable → Existing DCS Marshalling → DCS

and:

DCS → Marshalling → Cable → JB → MOV/AOV/Control Valve

Loop checks shall verify:

- Tag number.
- Signal type.
- Range.
- DCS indication.
- Alarm.
- Trip.
- Status.
- Feedback.
- Command.
- Fail-safe action.
- Engineering units.

15. Cause & Effect / Interlock Testing

The Contractor shall support and participate in complete functional testing of:

- Pump start permissive.
- Pump start/stop.
- Pump trip.
- Standby pump auto-start.
- Minimum-flow protection.
- MOV/AOV interlocks.
- Control valve actions.
- ESD shutdown.

- Analyzer alarms.
- Analyzer fault response.
- Process alarms.
- DCS indications.
- MCC feedback.
- Emergency shutdown interfaces.

Testing shall be performed jointly with the Client, DCS Vendor, Electrical and Mechanical Contractors.

16. DCS Graphics & Operator Interface

For the New Pump House, the Contractor shall provide engineering inputs required for existing DCS graphics, including:

- Pump status.
- Pump running/trip indication.
- Start/stop command.
- Pressure indication.
- Flow indication.
- Valve status.
- Valve command.
- Analyzer indication.
- Analyzer alarms.
- Equipment alarms.
- Interlock status.
- Permissive status.

Where DCS graphics modification is by the existing DCS Vendor, the Contractor shall provide the approved instrument index, I/O list, Cause & Effect, control philosophy and graphics requirements.

17. Pre-Commissioning & Commissioning

The Contractor shall provide complete instrumentation commissioning support, including:

- Instrument energization.
- Calibration.
- Loop checking.
- DCS communication testing.
- Analyzer commissioning.
- Control valve testing.
- MOV/AOV testing.
- Pump permissive testing.
- Pump start/stop testing.
- Interlock testing.
- Alarm testing.
- Trip testing.
- Cause & Effect testing.
- DCS integrated testing.
- Pump trial run.
- Final commissioning.

18. Documentation

The Contractor shall submit, as applicable:

- Instrument index.
- I/O list.
- Instrument datasheets.
- Hook-up drawings.

- Cable schedule.
- JB schedule.
- Instrument location drawings.
- Analyzer datasheet and vendor documentation.
- Calibration certificates.
- Cable test reports.
- Tubing test reports.
- Valve test reports.
- Loop-check sheets.
- DCS interface test records.
- Cause & Effect test records.
- Analyzer commissioning report.
- Functional test reports.
- Punch-list clearance.
- As-built documentation.
- O&M Manuals.

19. Key Scope Boundary

For avoidance of ambiguity in the tender, the following responsibility split shall apply:

Activity	Instrumentation Contractor Team	Existing DCS Vendor / Client
Field instruments	✓	—
Instrument installation	✓	—
Instrument calibration	✓	—
Instrument tubing/hook-up	✓	—
Instrument cables	✓	—
JBs	✓	—
Field loop checking	✓	Support
DCS I/O verification	✓	✓
DCS marshalling interface	✓ / Interface	✓
DCS database/configuration	As specifically included	✓
DCS graphics	Site Engineering input	✓ / As agreed
Pump interlock testing	✓	✓
Cause & Effect testing	✓	✓
Existing DCS modification	Interface/field works	✓ / As agreed
Online Water-cut Analyzer	✓	—
Analyzer DCS integration	✓ field interface	✓ DCS configuration
Analyzer calibration	✓	—
Analyzer sample system	✓	—

5.0 Quality Control & Quality Assurance and Packing for Crude Oil Transfer Pump House

1. GENERAL

1.1 All materials, equipment, components and accessories supplied and/or installed by the Contractor for the Crude Oil Storage Tank Pump House shall strictly comply with the approved technical specifications, equipment datasheets, drawings, BOQ/MTO, approved vendor list, Purchase Order/Contract requirements and applicable codes and standards.

The scope shall include, as applicable, crude oil transfer pumps, pump drivers/motors, pump auxiliaries, valves and mechanical accessories within Contractor's scope, equipment foundations, structural supports, platforms, electrical equipment, cables, instrumentation, control panels, earthing, lighting, miscellaneous accessories and all other items necessary for a complete, safe and operable Pump House.

1.2 The Contractor shall be fully responsible for Quality Assurance and Quality Control of all procurement, fabrication, construction, installation, inspection, testing, pre-commissioning and commissioning activities within its scope.

1.3 The Contractor shall prepare and submit a project-specific Quality Assurance Plan (QAP) and Inspection & Test Plan (ITP) for SunPetro approval prior to commencement of procurement, fabrication or construction activities.

1.4 The Contract/PO shall identify items and activities requiring inspection, review, witness or hold points by SunPetro and/or its authorized Third-Party Inspection Agency (TPIA).

1.5 Upon reasonable notice, the Contractor shall provide SunPetro and/or its authorized representatives unrestricted access to the Contractor's, manufacturer's and sub-vendor's workshops, fabrication yards, storage areas and project site for inspection, surveillance and testing.

1.6 Inspection or approval by SunPetro/TPIA shall not relieve the Contractor of its responsibility for compliance with the Contract, approved specifications, drawings, codes and standards.

1.7 All materials and equipment shall be new, unused, free from defects and accompanied by applicable Material Test Certificates, inspection certificates, certificates of conformity, calibration certificates, manufacturer's certificates and other quality records.

1.8 Material and equipment identification and traceability shall be maintained from receipt through fabrication, installation, testing and final handover. Equipment tag numbers, material grades, sizes, ratings, serial numbers and manufacturer's identification shall be traceable to the corresponding certificates wherever applicable.

1.9 Where any material, equipment, fabrication, installation or workmanship is found to be non-conforming to approved requirements, SunPetro/TPIA shall have the right to reject the same. The Contractor shall repair, rectify or replace such non-conforming items at its own cost without affecting the contractual completion schedule.

1.10 All Non-Conformance Reports (NCRs) shall be recorded, investigated, and closed through approved corrective and preventive actions. Major repair, concession or deviation shall not be carried out without prior written approval of SunPetro.

1.11 Where additional inspection or testing becomes necessary due to Contractor's non-conformance, defective workmanship or failure of specified tests, all associated costs shall be borne by the Contractor.

1.12 Where special tests are requested by SunPetro beyond the specified Contract requirements and the tested item is subsequently found to comply fully with the Contract, the additional cost and schedule implication, if any, shall be dealt with in accordance with the Contract conditions.

1.13 All measuring, testing and calibration equipment used for inspection and testing shall have valid calibration certificates traceable to nationally/internationally recognized standards.

1.14 Welding, where applicable, shall be performed using approved WPS/PQR and qualified welders/welding operators. Welding consumables shall be controlled, stored, baked and issued in accordance with approved procedures.

1.15 NDT, where applicable, shall be carried out by qualified personnel using approved procedures and to the extent specified in the approved ITP, project specification and applicable codes.

1.16 The Contractor shall notify SunPetro/TPIA sufficiently in advance of all Hold, Witness and Review Points specified in the approved ITP.

2. INSPECTION BY SUNPETRO / TPIA

2.1 SunPetro and/or its appointed TPIA may perform incoming material inspection, stage inspection, surveillance, final inspection and testing depending on the nature and criticality of the material/equipment.

2.2 The Contractor shall provide, at no additional cost, all manpower, access, facilities, calibrated instruments, test equipment, utilities, scaffolding, lifting arrangements and documentation necessary to facilitate inspection and testing.

2.3 The Contractor shall provide inspection notification sufficiently in advance, indicating at minimum:

- Contract/PO number
- Equipment/material description
- Manufacturer/vendor
- Location of inspection
- Date and time
- Applicable QAP/ITP activity
- Inspection stage
- Relevant drawings/specifications
- Required Hold/Witness point.

2.4 Inspection shall include, as applicable, verification of:

Area	**Inspection / Verification**
Materials / Equipment	Material grade, size, rating, quantity, manufacturer, identification, and applicable certificates
Pump Accessories	Couplings, guards, base plates, mechanical seals and other applicable accessories
Valves / Mechanical Items	Type, size, pressure rating, material, certificates, and functional operation
Equipment Foundations	Dimensions, elevation, anchor bolts, level, alignment and surface condition
Structural Works	Dimensions, welding, alignment, bolting, coating, and workmanship
Welding	WPS/PQR, welder qualification, fit-up and visual inspection, where applicable
NDT	RT/UT/MT/PT, as applicable
Equipment Installation	Position, orientation, elevation, alignment, and accessibility
Rotating Equipment	Shaft/coupling alignment, lubrication, rotation direction and mechanical condition
Grouting	Surface preparation, grout material, installation, and curing
Coating / Painting	Surface preparation, coating system, DFT and repair
Electrical	Cable installation, termination, insulation resistance, earthing and equipment installation
Instrumentation	Instrument identification, range, calibration, installation and loop checking
Control Panels / JB	Physical condition, wiring, termination, identification, and functional checks
Earthing	Equipment bonding, continuity, and earth resistance
Equipment Testing	Manufacturer's test certificates and site test results
Functional Testing	Pump/equipment operation, motor operation, valves, and associated auxiliaries
Performance Testing	Pump flow, discharge pressure/head, motor load, vibration, and other specified parameters
Final Inspection	Installation completeness, punch-point closure and readiness for commissioning

2.5 Any material or workmanship found unacceptable shall be identified through an NCR/rejection note. The basis for rejection shall be documented.

2.6 Corrective action for rejected items shall be undertaken by the Contractor at its own cost and shall be subject to re-inspection.

2.7 Additional inspection necessitated by Contractor's non-compliance shall be at Contractor's cost.

3. CONTRACTOR / MANUFACTURER INSPECTION

The Contractor and its manufacturers/sub-vendors shall carry out all inspections and tests specified in the approved QAP/ITP, technical specifications, datasheets and applicable codes.

Inspection and test certificates shall be submitted to SunPetro/TPIA for review and inclusion in the final Manufacturing Record Book / Quality Dossier.

No material requiring inspection release shall be dispatched to site without the applicable Inspection Release Note / Inspection Waiver from SunPetro/TPIA.

PACKING, MARKING, PRESERVATION, DOCUMENTATION AND DELIVERY

4. PACKING AND PROTECTION

4.1 The Contractor/Supplier shall be responsible for adequate packing, preservation, handling and protection of all materials and equipment during transportation, unloading and temporary storage at Bhaskar-I Field.

4.2 Packing shall be suitable for Indian climatic conditions including high ambient temperature, humidity, rainfall, dust and outdoor storage conditions.

4.3 Materials shall be protected against:

- Corrosion and rusting
- Moisture ingress
- Mechanical damage
- Impact during transportation
- Contamination by dirt or foreign material
- Damage to machined/flanged surfaces.
- Loss of loose components and accessories

4.4 Open equipment connections, nozzles, flanged connections, and other openings shall be securely capped, plugged or blanked to prevent ingress of dirt, water and foreign material.

4.5 Flange faces and machined surfaces shall be adequately protected using suitable covers and approved corrosion-preventive protection.

4.6 Pumps, motors, valves, instruments, actuators, junction boxes, control panels and other sensitive components shall be packed in suitable wooden crates/cases or equivalent approved packing, wherever required.

4.7 Electronic, electrical and instrumentation items susceptible to moisture shall be provided with suitable moisture-resistant packing and desiccant where necessary.

4.8 Long structural members and other fabricated components shall be properly bundled, supported and secured to prevent bending, impact or coating damage during transportation.

4.9 Rotating equipment such as pumps and motors shall be suitably protected against mechanical damage, moisture, contamination and shaft movement during transportation and storage.

4.10 The Contractor shall repair any damage to coating, painting, equipment or accessories resulting from transportation, handling or storage prior to installation.

4.11 Commissioning spares, mandatory spares, special tools and loose accessories shall be separately packed, identified and clearly marked.

5. MARKING AND IDENTIFICATION

Each package, crate, bundle and equipment item shall be clearly and permanently identified.

Marking shall include, as applicable:

- **Project:** New Crude Oil Storage Tank Pump House- Bhaskar-I Field
- **Company:** Sun Petrochemicals Private Limited (SunPetro)
- Contractor/Supplier name
- PO/Contract number
- Equipment/tag number
- Item number
- Material description
- Quantity
- Package number, e.g. 1 of 10, 2 of 10
- Gross weight
- Net weight
- Package dimensions
- Country of origin
- Manufacturer's name
- Final destination- Bhaskar-I Field, Gujarat, India

Where applicable, packages shall additionally be marked:

- FRAGILE - HANDLE WITH CARE
- THIS WAY UP
- KEEP DRY
- DO NOT STACK
- HEAVY LIFT
- SLING HERE
- CENTRE OF GRAVITY

Equipment/packages requiring special lifting shall have clearly marked lifting/slinging points and centre of gravity.

All pipe bundles and loose materials shall be fitted with securely attached weather-resistant identification tags.

6. PACKING LISTS

Each package shall contain a detailed packing list showing:

- PO/Contract number
- Package number
- Description of contents
- Tag/item number
- Quantity
- Material grade/rating, where applicable
- Manufacturer
- Country of origin
- Gross and net weight

A master packing list covering the entire consignment shall be provided with the shipment documentation.

7. SHIPPING AND DELIVERY DOCUMENTATION

Prior to dispatch, the Contractor/Supplier shall submit relevant documentation including, as applicable:

Document	Requirement
Commercial Invoice	Required
Packing List	Required
Delivery Challan	Required
Material Test Certificates	Required
Certificate of Conformity	As applicable
Inspection Release Note / Waiver	Required where inspection applies
Pump Manufacturer's Test Certificate	Required
Motor Test Certificate	Required
Valve Test Certificates	As applicable
Instrument Calibration Certificates	For instruments
Hazardous Area Certificates	For Ex equipment, where applicable
Coating/Painting Certificates	As applicable
Certificate of Origin	For imported materials
Warranty/Guarantee Certificates	As applicable
Manufacturer Datasheets	Required
Equipment Preservation Instructions	Required
Storage and Handling Instructions	Required

Materials requiring SunPetro/TPIA inspection shall not be dispatched until release/waiver has been obtained.

8. IMPORTED / OVERSEAS MATERIALS

For materials/equipment imported for the Crude Oil Storage Tank Pump House, the Contractor/Supplier shall comply with applicable Indian Customs regulations, statutory requirements, international shipping requirements and Contract conditions.

The Contractor shall arrange all required commercial invoices, packing lists, certificates of origin, shipping documentation, dangerous goods declarations and statutory certificates, as applicable.

Imported equipment and materials shall be adequately packed and preserved for transportation and subsequent storage under Indian climatic conditions.

Where hazardous materials are shipped, packing, marking, labelling and documentation shall comply with applicable statutory requirements and relevant international transportation regulations.

9. RECEIPT, STORAGE AND PRESERVATION AT SITE

Upon arrival at site, the Contractor shall inspect all materials and equipment for transportation damage, shortages, corrosion, coating damage and deterioration.

Materials shall be stored in designated areas and segregated according to material/equipment type, size, rating and application.

Pumps, motors and other rotating equipment shall be stored in accordance with the manufacturer's preservation requirements.

Electrical and instrumentation equipment shall be stored in covered, dry and suitably protected areas.

Valves, instruments, gaskets, electrical equipment and other sensitive items shall be protected against moisture, dust and mechanical damage.

Equipment preservation shall be maintained until installation and commissioning.

Where required by the manufacturer's recommendations, rotating equipment shafts shall be periodically rotated during storage, and preservation records shall be maintained.

Damaged, corroded, unidentified or otherwise non-conforming materials/equipment shall not be installed.

10. FINAL QUALITY DOCUMENTATION / MDR

Prior to final acceptance and handover, the Contractor shall submit a consolidated **Manufacturing / Construction Record Dossier (MDR)** covering the complete Pump House scope, including, as applicable:

- Approved QAP and ITP
- Approved drawings and datasheets
- Material Test Certificates
- Material traceability records
- Equipment manufacturer's certificates
- Pump test certificates
- Motor test certificates
- WPS/PQR and welder qualification records, where applicable
- Welding records
- NDT reports
- Equipment inspection reports
- Valve certificates
- Coating/painting reports
- Foundation inspection records
- Equipment alignment records
- Grouting records
- Electrical test records
- Earthing test certificates
- Instrument calibration certificates
- Cable test reports
- Functional test reports
- Pump performance test reports
- Vibration test reports, where applicable
- NCR/deviation/concession closure records
- Inspection Release Notes
- Mechanical Completion records
- Pre-commissioning and commissioning reports
- Punch-list closure records
- As-built drawings
- Warranty/guarantee certificates
- Operation & Maintenance Manuals
- Recommended spare parts list
- Special tools list
- Equipment preservation records, where applicable

Note: If shipment of GOODS is to be made directly from sub-SUPPLIER works, it is Supplier's responsibility to ensure that sub-SUPPLIER pack and mark all materials and equipment in accordance with these instructions, together with any specific instructions for preparation and marking prior to shipment.

All inspection, testing, packing, preservation, transportation, documentation and quality-control activities necessary for delivering a complete, defect-free, safe and fully operable Crude Oil Storage Tank Pump House shall be deemed included in the Contractor's scope, whether specifically mentioned herein or reasonably required for satisfactory completion of the Work.

LIST OF APPENDICES

Appendix No.	Document No.	Title
1	EJB-2026-02-030-MEC-GEN-001	Spare List
2	EJB-2026-02-030-MEC-GEN-002	General Specification for Centrifugal Pump (API)
3	EJB-2026-02-030-MEC-GEN-003	General Specification for Gear Pump (API)
4	EJB-2026-02-030-MEC-MDS-001	Mechanical Data Sheet for EOT Crane
5	EJB-2026-02-030-MEC-MRS-001	RFQ For Centrifugal & Gear Pumps (API)
6	EJB-2026-02-030-PIP-MDS-001	Valve Material Specification
7	EJB-2026-02-030-PIP-MDS-002	Piping Material Specification
8	EJB-2026-02-030-PRO-DWG-001	PFD For New Pump House
9	EJB-2026-02-030-PRO-PDS-001	Process Datasheet Cum Mechanical Datasheet Gear Pump
10	EJB-2026-02-030-PRO-PDS-002	Process Datasheet Cum Mechanical Datasheet Gear Pump
11	EJB-2026-02-030-ELE-DS-001	Data Sheet for LV FLP Motor
12	BHS Surface Coating	BHS Surface Coating

Note: The Consolidated Appendices are enclosed as a separate document to the tender document.

SECTION-IV

RESPONSIBILITY MATRIX

Responsibility Matrix for Crude Oil Pump House at CPF Bhaskar-I Field			
Sl. No	**Description**	**Responsibility**	
		SunPetro	**Contractor**
1	Design & Engineering	√	√
2	Statutory Approvals	√	√
3	Issue of AFC drawings	√	√
4	Preparation of Isometrics and preparation of Piping BOQ	--	√
5	Preparation of structural fabrication drawings and preparation of structural BOQ	--	√
6	Preparation of “As Built” Drawings & Documents	√	√
7	Construction of Temporary Works viz. Site Office, Material Storage Warehouse, Fabrication yard, Painting shop, etc.	--	√
8	Free issue of Feed/Booster Pumps: 250 x 150 VPCS (VS-6) KEPL make- 2 nos.	√	--
9	Free issue of Export Pumps: 150 (A) DCD (BB5) KEPL make- 2 nos.	√	--
10	Construction of water and power arrangement	--	√
11	Mobilization and deployment of Construction manpower as per schedule and as per make schedule, if required.	--	√
12	Mobilization and deployment of Construction equipment as per schedule and as per make schedule, if required.	--	√
13	Procurement and Supply of all materials for permanent works as per BOQ, except free issue items.	--	√
14	All site construction work viz. civil, structural, mechanical, equipment installation, piping, painting, electrical, instrumentation, etc. as per BOQ and as per specifications.	--	√
15	Supply of all Personal protection and safety equipment during construction.	--	√
16	TPI Agency	√	--
17	QAP & ITP	--	√
18	Daily, Weekly and Monthly progress reports	--	√
19	Preparation of Construction Methodologies, Project Management Strategy, Quality Documentation, Project Schedule (MSP), Resource Histogram, Mobilization Plan, Progress S-Curve & Bar Charts, Weekly Procurement Tracker, and Project Monitoring and Tracking	--	√

SECTION-V

Quality Control & Quality Assurance

and

Packing, Marking, Documentation and Delivery Instructions

QUALITY CONTROL & QUALITY ASSURANCE

1. General

1.1 The Goods supplied by Supplier shall be strictly in accordance with technical specification set forth in SOS and PO issued. Trade names of products which have been identified by COMPANY accepted as meeting COMPANY's requirements will be given along with the specifications, where applicable.

1.2 Supplier shall be responsible for quality control of the Goods.

1.3 The PO issued pursuant to the Contract will specify whether or not the Goods are subject to inspection by COMPANY or its authorized representative(s).

1.4 Upon reasonable notice given to Contractor, Supplier shall ensure that COMPANY has the opportunity to inspect the Goods at any time, either at Supplier's facilities or at the facilities of Supplier's Suppliers, or wherever else the Goods may be located. Such inspection shall be in accordance with the requirements in Scope of Supply (SOS) and shall not relieve Supplier of any obligations under the Contract and PO issued thereto.

1.5 All Goods furnished by Supplier shall be available for inspection at all reasonable times by COMPANY or their representatives. For such purpose Supplier shall allow or procure for COMPANY and/or its above mentioned authorized representative access to all workshops and other places where Goods are being manufactured (including the premises of Supplier's Suppliers) and COMPANY reserves the right to finally survey quality and place of final acceptance in accordance with Clause 3.3.10 (Title and Risk) of General terms & Conditions. COMPANY's inspection, failure to inspect or waiver of inspection of any part of the Goods shall not constitute acceptance thereof nor relieve Supplier of its obligation to comply with the provisions of the Price Agreement/PO. If, upon inspection, any Goods are considered by COMPANY not to be of an acceptable standard in accordance with the Contract specifications, Supplier shall on receipt of notice from COMPANY, repair or replace the same at its own cost and to COMPANY's satisfaction and Supplier shall be allowed no extension of time on account of such performance or replacement. In the event of Supplier's failure, following written notification from COMPANY, to repair or replace within a reasonable period of time any Goods considered unacceptable by COMPANY, COMPANY may repair (or have repaired) or replace the Goods at Supplier's expense and deduct the cost thereof from the Price Agreement/PO.

1.6 If in compliance with the provisions of the Price Agreement, or by COMPANY's instructions or by reason of any applicable law any Goods are required to be tested or inspected, Supplier shall give COMPANY timely notice of Supplier's readiness for test/inspection thereof and, if the same is to be witnessed by someone other than COMPANY of the date fixed there for. Supplier will be reimbursed at cost for any tests / inspections not detailed or specified in the Price Agreement/PO.

1.7 In the event of a complete or partial failure in any tests referred to in Paragraph "1.6" above, or for any other reason, COMPANY may request special tests. Supplier shall be responsible for all costs and any schedule impacts associated with such special tests, however, in the event that these tests disclose the Goods to be in accordance with the Price Agreement, such costs shall be to COMPANY's account and where such tests have an adverse effect on the delivery schedule, the Due Date for Delivery shall be extended by the time spent on such special tests.

1.8 All instruments, machines and equipment (including the testing laboratory) shall be subject to examination by or on behalf of COMPANY before they are used for the purpose of any tests.

1.9 If COMPANY appoints an Inspector, Supplier shall coordinate with such Inspector and treat its authorized representatives in the same manner, as COMPANY's authorized representatives, for inspection and testing of Goods under the provision of this Price Agreement.

2. Goods Subject to Inspection by COMPANY

2.1 COMPANY or its Inspector will carry out intermediate and final inspections depending on the nature of the Goods. COMPANY will provide the Supplier with the name and address of the Inspector.

2.2 Supplier shall provide at its expense:

2.2.1 All facilities required by the Contract and PO(s) issued thereto for the Inspector to inspect the Goods.

2.2.2 Any required certificates including test and material certificates.

2.3 In the event of inspection requirement by COMPANY or its authorized representative(s), Supplier shall advice Inspector and COMPANY of the date on which and the location where the Goods are ready for Inspection. Such advice shall be by fax and shall name COMPANY's Inspector. The Goods shall be set up in Supplier's or Suppliers' facilities, as far as necessary to carry out inspection.

2.4 Goods inspection shall be handled as follows:

2.4.1 The Inspector shall reject all Goods that are found to be of unacceptable quality or workmanship or fail to comply fully with the requirements of "A/B" and shall write and issue, on-the spot, to the Contractor, a "Note of Non-acceptance". Note of Non-acceptance shall clearly state the basis for the rejection. Supplier shall submit to COMPANY the Inspector's notes.

2.4.2 Subject to COMPANY's approval, Supplier shall take corrective action on rejections at Supplier's sole expense and with due regard to its obligation to deliver the Good in time.

2.4.3 The cost of additional inspections caused by Supplier's non-compliance with Scope of Supply (SOS) and PO issued thereto shall be to Supplier's account.

3. Goods Subject to Inspection by Supplier / Manufacturer

Supplier shall, at its sole cost and expense, carry out all inspection and testing and shall provide certificates that may be required under the provisions of the Price Agreement. Such certificates shall be sent to COMPANY or its authorized representative(s) within one week from the date on which the Goods have been tested or inspected. Non-compliance will result in payment being deferred until certificates have been received.

PACKING, MARKING, DOCUMENTATION AND DELIVERY INSTRUCTIONS

1. DOMESTIC SHIPMENT

1.1 PACKING AND PROTECTION INSTRUCTIONS

SUPPLIER shall be responsible for packing and protection of the goods whilst in transit to the destination shown on page one (1) of the Contract.

1.2 **MARKING INSTRUCTIONS**

1.2.1 Stencil on two sides and one end in clear characters, at least centimeters high (where case size permits, otherwise use optimum size for each package dimension), the marks set out hereunder. If goods are to be shipped in shipping line containers, then marking may be stenciled on one end only. However, packages must be stowed in a manner which exposes these marks.

1.2.2 Packages containing fragile articles must be packed with special precaution against risk of breakage. Such containers must be stenciled on all sides "FRAGILE – HANDLE WITH CARE". This marking must be in English. Where cases are not to be overturned SUPPLIER must show on the cases clear and readily visible identification to ensure they are kept in the correct position.

1.2.3 Packages/equipment of five tons or more must be marked with slinging points and also clearly show on all sides the center of gravity. This is of paramount importance for pressure vessels and heat exchangers.

1.2.4 For hazardous/dangerous of restricted material, mark as specified by relevant international standards and regulation. Specific reference is made to most recent regulations of the International Civil Aviation Organization (for airfreight) and the International Maritime Cargo Organization (for sea freight).

1.2.5 Metal tags or labels must be stamped or indelibly marked with full shipping marks and must be securely attached using 6 twists of stainless-steel wire to all loose bundles or uncrated items, alternatively marking boards can be securely strapped to bundles.

1.2.6 Each package and contents must clearly show the country of origin of the goods.

1.2.7 Number packages consecutively, i.e. 1 of 10, 2 of 10, etc. Do not duplicate package numbers.

1.2.8 All material must also bear the following **SHIPPING MARKS** in full: -

- **Marks according to final destination.**
- **Supplier's Name (in full)** _____
- **Contract No. (in full)** _____
- **Tag No. (if applicable)** _____
- **Contract Item Nos.** _____
- **Box No.:** _____ **of** _____
- **NDC Materials & Purchasing Department –**
- **FOR (Destination as Page 1 of Contract).**
- **Gross Weight** _____ **kilos.**
- **Net Weight** _____ **kilos.**
- **Length x Width x Height** _____ **centimeters.**
- **Total Volume** _____ **cubic meters.**
- Country of Origin _____

Where appropriate, description signs such as 'FRAGILE", "GLASS", "THIS WAY UP", "HAZARDOUS", "RESTRICTED", "FLASH POINT", etc. shall be prominently marked.
Delete as applicable (please check with Freight Forwarder prior to marking).

1.2.9 Two packing lists detailing actual contents and listing all rust prevention agents and removal solutions, should be enclosed in each package. A master list detailing all packages, listing Contract and Item Nos. For each item contained in the complete consignment, should be included in package No. 1.

1.3 SHIPPING AND DOCUMENTATION INSTRUCTIONS

1.3.1 Immediately the goods are in all respects ready for shipment, SUPPLIER shall contact NDC Purchasing Coordinator (for Contracts issued on a delivered NDC Operating Unit basis) or NDC's Freight Forwarder (for Contracts placed on a delivered Freight Forwarder basis). Twenty-four (24) hours Prior Notification shall be given for delivery.

1.3.2 In addition to any other requirements of these instructions, an original and one (1) copy of the Packing List must a Company each shipment together with an original and one (1) copy of the delivery note. It is Supplier's responsibility to obtain a receipt for proof of delivery.

2. OVERSEAS SHIPMENT

The following instructions are intended as minimum requirements, and adherence to these instructions in no way absolves or relieves SUPPLIER of any responsibility or obligation outlined in the Contract.

a. Shipment shall be effected by either a Conference Line vessel or a vessel acceptable to COMPANY's insurers.

b. Sea carrier's certificate issued by Owners, Agents or Master of vessel to the effect that the carrying vessel is neither Israeli owned nor calling at/passing by any Israeli port during the voyage.

2.1 PACKING AND PROTECTION INSTRUCTIONS

2.1.1 Due to climatic extremes encountered in India (i.e. extreme heat, high humidity and fine drifting sand) and the complex transport operation (i.e. truck, sea or air), it is essential that protection and packing is of the highest standard. SUPPLIER S must ensure that this will adequately protect material during the total transport operation from factory to job-site including short-time storage on site. Liability for damage to goods due to defective/or insufficient packing, as well as for corrosion due to insufficient protection, is to be borne by SUPPLIER.

2.1.2 High quality wooden cases and/or crates shall be used. These should be constructed of top quality softwood or rigid plywood and be solid and robust. Ends should be screwed or nailed in a manner where no sharp pieces are exposed.

2.1.3 UNDER NO CIRCUMSTANCES SHALL FIBREBOARD, CARDBOARD OR SIMILAR CARTONS BE USED AS OUTSIDE PACKING.

2.1.4 All items of fragile nature shall be suitably packed with special precaution against risk of breakage. Where material is encased or otherwise completely enclosed, the SUPPLIER shall be responsible for suitable inner packing, protection and wrapping of any items subject to damage from moisture and/or corrosion. Provision must also be made to include desiccant materials, i.e. silica-gel where appropriate.

2.1.5 Hay, straw or similar vegetable fibres subject to disease or fungus shall not be used in packing.

2.1.6 All heavy equipment shall be securely fastened to the bottom of the case with coach-bolts and wing-nuts and shall be blocked and braced to prevent movement. All exposed ends and open flanges shall be protected and covered against damage, using caps sealed with waterproof tape and blanks bolted over each flange face using a suitable gasket material to ensure a watertight joint. Large equipment which does not require to be completely enclosed by packing shall be palletized or skidded.

2.1.7 Cases weighing more than 136 kgs. shall have raised skid platform or pallet base, to permit sling or forklift truck handling.

2.1.8 Do not consolidate any two or more orders in any one package, before prior agreement with COMPANY.

2.1.9 **All hazardous/dangerous or restricted materials shall be packed, marked, labelled, and certified strictly as per the latest International Maritime Dangerous Goods (IMDG) Code, IATA Dangerous Goods Regulations (DGR), and applicable Indian regulations.**

2.1.10 Two packing lists detailing actual contents and listing all rust prevention agents removal solutions should be enclosed in each package. A master list detailing all packages, listing Contract and Item Nos. for each item listed in the complete consignment should be included in package number 1.

2.1.11 The preparation for export shipping (including packing) may be subject to inspection by COMPANY or appointed representative at Supplier's plant prior to shipment and at dockside prior to Loading aboard ship. Inspection shall not relieve SUPPLIER of any responsibilities or obligations under the terms and conditions of the Contract.

2.1.12 All spare parts (such as commissioning spares or one year operational spares) when available at time of shipment of main equipment, must be either packed and clearly marked and included in main packing case attached to base boards, or, if size and dimensions deem separate shipment then shall be properly protected for short term storage in accordance with relevant Contract Specification and then packed in accordance with Paragraphs 5.1.2 or 5.1.3 (above).

2.1.13 If SUPPLIER is in any doubt as to the correct method of protection or packing, please contact the COMPANY by telex or fax with a copy to the appointed Forwarding Agent.

Note:SUPPLIER should ensure that marking and preparation for shipment instructions which are listed by commodity of equipment and attached to each Contract are passed on to their dispatch departments, or sub-SUPPLIER s, prior to commencement of packing.

2.2 MARKING INSTRUCTIONS

2.2.1 Stencil on two sides and one end in clear characters at least 5 centimeters high (where case size permits, otherwise use optimum size for each package dimension), the marks set out above (If goods are to be shipped in shipping line containers then marking may be stenciled on one end only. However, packages must be stowed in a manner which exposes these marks).

2.2.2 Packages containing fragile articles must be packed with special precaution against risk of breakage. Such containers must be stenciled on all sides "Fragile - Handle with Care". This marking must be in English. Where cases are not to be overturned SUPPLIER must show on the cases clear and readily visible identification to ensure they are kept in the correct position.

2.2.3 Packages/equipment of five tons or more must be marked with slinging points and also clearly show on all sides the center of gravity. This is of paramount importance for Pressure Vessels and Heat Exchangers.

2.2.4 For hazardous/dangerous or restricted material, mark as specified by relevant.

2.2.5 All spares orders must be clearly marked as spares and shall not be simply included unmarked with main equipment.

2.2.6 Metal tags or labels must be stamped or indelibly marked with full shipping marks and must be securely attached using 6 twists of stainless steel wire to all loose bundles or uncrated items, alternatively marking boards can be securely strapped to bundles.

2.2.7 Each package and contents must clearly show the country of origin of goods.

2.2.8 Number packages consecutively i.e. 1 of 10, 2 of 10 etc. Do not duplicate package number.

2.2.9 All materials must also bear the following shipping marks in full within a yellow coloured:

MARKS:- According to final destination:-
P.O. No. (in full)
Tag No. _____ (if applicable)
P.O. Items No's - _____
Box No. _____ of _____
COMPANY Port Mark India Seaport
Gross _____ Kilos
Net _____ Kilos
Length x width x height in centimeters
Total Cube in _____ Cubic Meters
Made in _____ (Country of Origin)
And where appropriate description signs such as:
"Fragile", "Glass", "This Way Up", "Hazardous", "Restricted", "Flash Point", etc.
* Delete as applicable (please check with nominated forwarding agent prior to marking).

2.3 DOCUMENTATION

2.3.1 Shipping Invoices and Packing Lists

2.3.1.1 Combined Invoice/Packing Lists must clearly describe each Contract item. Export marks, including all weights and dimensions, must be shown. If goods are packed in containers, then exact details of materials in each container and container number must be shown on Combined Invoice/Packing List. Description of each item on these documents must match the Contract Description.

2.3.1.2 Combined Invoice/Packing Lists must be typewritten and the original and all copies must be Manually and individually signed in ink by Supplier's authorized signatory as follows:

-I/We hereby certify that this Invoice is true and correct and that these materials are of _____ origin, (Specific Country of Origin) of goods e.g. United Kingdom, France, U.S.A., etc. - E.E.C. EFTA or any other group of countries is not acceptable) and manufactured by (Name and Address of Manufacturer(s)).
-Signed

2.3.1.3 Additionally, the following details shall be provided on all Combined Invoice/Packing Lists:

- Contract number.
- Delivery Terms of Contract, (i.e. CFR., etc.).
- Item number, quantity and complete description of goods precisely in accordance with the Contract including any tag, item coding or stock numbers as specified. The description must match the packing list.
- Itemized net price, both unit and total, of the goods, wherever applicable. Prices and extensions must be accurate but no discount shall be shown.
- Marks, numbers, quantity of packages and contents of each package.
- Gross and net weight in Kg, and dimensions of each package in cu. m.
- Name(s) and address(es) of actual manufacturer(s).
- "Partial Shipment" or "Final Shipment" if delivered in partial consignments, separate documents must be raised and issued for each separate consignment. Final shipment against this order must be marked "Final Shipment-Order Complete".

2.3.1.4 Hazardous materials must be identified on a separate Combined Invoice/Packing List, from non-hazardous materials. All hazardous materials must be identified by the appropriate hazardous class and technical and proper shipping name. All Combined Invoices/Packing Lists for hazardous materials shall contain the following statements:-

"This is to certify that the above named materials are properly classified, described, packaged, marked and labelled, and are in proper condition for transportation according to the appropriate Government of International Transportation Regulations".

NAME _____ COMPANY NAME_____
TITLE_____ _____ SIGNATURE
HAZARD CLASS U.S. NO. _____
TECHNICAL SHIPPING NAME_____

SUPPLIER must produce necessary hazardous cargo certificates in accordance with the appropriate regulations for all shipments. On application to the Project Freight Forwarder these forms will be supplied for completion.

2.3.1.5 SUPPLIER must provide all information shown in Paragraphs 2.3.1.1–2.3.1.4 to enable COMPANY to produce the Combined Invoice/Packing List, should COMPANY decide to handle certification & legalization of these shipping documents.

2.3.2 Certificate of Origin

2.3.2.1 This document is crucial for the clearing of all materials into India. Utmost care must be exercised to ensure that all information is absolutely clear and correctly represented and that the origin is always true.

India Customs check certificates of origin very carefully and also physically inspect materials for manufacturers name and country of origin.

2.3.2.2 The SUPPLIER shall arrange for the timely preparation, certification and legalization of all Certificates of Origin. SUPPLIER must supply such information and docume0ntation as required to COMPANY's Freight Forwarding Agent. Failure to do so will delay shipment and payment.

2.3.2.3 Where materials are supplied as separate units which are manufactured by separate sub-SUPPLIER and included in one consignment, those separate manufacturer's names and addresses must be declared on the Certificate of Origin.

2.3.2.4 ALL Suppliers' Company names must be shown in full. Initials are not acceptable. If your Company trades using its initials, the full Company name must be shown and in brackets after it, the initials.

2.3.2.5 Where materials are purchased from sub-SUPPLIER s for incorporation into one final unit product and the sub-SUPPLIER s have manufactured the items in the same country as the producer of the final unit product, declare the name and address of the manufacturer of the final product.

2.3.2.6 Where materials are manufactured as one final product which contains materials from sources outside the producing country, declare the percentage by country of the constituent materials.

2.3.2.7 In cases where a certain country's commercial law prohibits the name and address of the Manufacturer being shown on the body of the Certificate of Origin, a separate Manufacturer's Declaration shall be completed and legalized.

2.3.2.8 The Declaration shall be drawn up on Supplier's Company letterhead and state: - "We hereby certify that the goods covered in Invoice Number _____ and Certificate of Origin Number _____ have been manufactured by _____ (full name and address of actual manufacturer(s) and are of _____ (country) origin." Contract reference and description of goods shall also be included.

This Declaration shall be signed in ink by authorized signatory of SUPPLIER

2.4 SHIPPING INSTRUCTIONS

2.4.1 COMPANY will advise the Forwarding Agent to arrange shipping of project goods after release/waiver of inspection, packing & receipt of correct documentation from SUPPLIER.

2.4.2 **Shipment direct from the sub-SUPPLIER may only be arranged after written agreement with COMPANY**.

If shipment of GOODS is to be made directly from sub-SUPPLIER works, it is Supplier's responsibility to ensure that sub-SUPPLIER pack and mark all materials and equipment in accordance with these instructions, together with any specific instructions for preparation and marking prior to shipment.

SECTION-VI

BID EVALUATION CRITERIA(BEC)

A. Technical Evaluation Criteria

a. Bidder should have executed two similar jobs in Oil & Gas installations comprising equipment installation involving piping, electrical, mechanical, civil & structural and instrumentation works in last 3 years. Past Track Record comprising copy of work orders & work completion certificates shall be submitted along with the bid.

b. Minimum contract value of each such executed jobs by bidder shall be Rs. 15 Crore.

c. Bidder shall have competent technical manpower and required tools and tackles as well as resources. Organogram and list of other resources shall be submitted by bidder during bid submission for execution of scope of work for this tender.

B. Financial Evaluation Criteria

a. The Bidder shall have an average annual turnover of not less than INR 50 Crore during the last three financial years.

b. The Bidder shall also have net positive cash flow and profitability for the last three financial years.

C. Commercial Qualification Criteria

a. Bids shall be submitted as per instruction provided in Notice Inviting of Tenders in Section – I.

b. Offer of following type shall be liable for rejection.

i. Fax / e-mail / Xerox/photo/scanned copy offers

ii. Offer made by Agent /retainer/consultant / Representatives / Associates / of the foreign principal

iii. Offer does not conform to validity period as per NIT/ITB.

iv. Offer without Bid bond /bank guarantee in prescribed format for amount and validity as per ITB / NIT.

v. Offer not accompanied with an undertaking to provide all necessary certificates / document for enabling Company to avail input GST credit benefit (wherever applicable) in respect of the payment of GST etc. which are payable against the supply and services (if awarded) along with documentary evidence of payment of Excise duty, VAT and GST.

vi. Offer where prices are not firm during entire duration of the contract and /or with qualifications.

vii. Offer not duly signed by authorized signatory

viii. Bidders not meeting Delivery schedule, completion period

c. Bidder agrees that quoted prices are inclusive of all taxes and duties, as applicable, including corporate tax / income tax etc.

d. In case at any stage of tendering process, it is established that bidder has submitted forged documents/certificates/information towards fulfilment of any of the tender/contract conditions.

D. Discount

Bidders are advised not to indicate any separate discount. Discount, if any should be merged with the quoted prices.

E. GENERAL

Bidders to note the followings:

a. Bidder to submit a declaration along with the bid that bidder is not blacklisted or placed on holiday list by any of the E&P company. If yes, bidder to submit the complete details along with the bid.

b. In case bidder takes exception to any clause or terms condition of tender document not covered under BEC, Company shall have discretion to reject the offer on account of such exception.

c. In case any contradiction between BEC and a clause appearing elsewhere in the bidding document, provision of BEC shall supersede all such clauses.

SECTION-VII

BILL OF QUANTITY (BOQ) / PRICE SCHEDULE (PS)

BILL OF QUANTITY (BOQ) / PRICE SCHEDULE

This is an item rate tender. Contractor shall be paid as per actual quantity of work executed. The quantities given in BOQ are tentative and subject to change as per site requirement.

Bidder shall quote as per the following format. Contract shall be awarded to the technically acceptable most competitive bidder.

Summary Price Schedule

Sr No	Description	Total Amount (INR)
1	Lump Sum Amount for Civil & Structural (Table A)	
2	Lump Sum Amount for Electrical (Table-B)	
3	Lump Sum Amount for Instrumentation & Control (Table-C)	
4	Lump Sum Amount for Mechanical (Table-D)	
5	Lump Sum Amount for Piping (Table-E)	
	Grand Total in INR	

Detailed breakdown for each is given in their respective tables.

Note:

1. The bidder shall quote rates and prices against all applicable items in the detailed Price Schedule for Civil & Structural, Electrical, Instrumentation & Control, Mechanical and Piping works, as applicable to the scope of work specified in the tender documents.

2. The quantities indicated in the Price Schedule, wherever provided, shall be read in conjunction with the Scope of Work, technical specifications, drawings and other tender documents. The bidder shall verify the scope and quantities before submitting the bid.

3. The quoted rates and prices shall be deemed to include all costs associated with the complete execution of the respective items, including materials, labour, supervision, tools and tackles, construction equipment, consumables, transportation, loading and unloading, handling, storage, fabrication, erection, installation, testing and other incidental activities, wherever applicable.

4. The prices quoted against individual items shall include all materials, accessories, fittings, supports, fasteners, fixtures and ancillary components necessary for the proper completion of the respective works, as specified in the tender documents.

5. The bidder shall ensure that the prices quoted in the detailed tables cover the complete scope of the respective discipline. Any item or activity necessary for completion of the specified scope but not separately identified in the Price Schedule shall be deemed included in the relevant quoted prices, provided it falls within the contractual scope.

6. The quoted rates and prices shall include all specified inspection, testing, quality assurance, quality control, documentation, pre-commissioning, commissioning and handover activities relevant to the respective discipline.

7. The bidder shall include the cost of coordination and interface management among Civil & Structural, Electrical, Instrumentation & Control, Mechanical and Piping works to ensure the integrated and satisfactory completion of the Crude Oil Pump House.

8. The bidder shall quote prices in Indian Rupees (INR). The applicable GST shall be indicated separately in the prescribed format. Other taxes, duties and statutory levies shall be treated in accordance with the tender conditions and applicable laws.

9. Unless otherwise specified in the tender documents, the quoted rates and prices shall remain firm and fixed throughout the contract period, without escalation on account of changes in labour costs, material prices, transportation, fuel or other input costs.

10. The bidder shall clearly identify any materials or equipment to be supplied by SunPetro, if applicable. Such items shall not be included in the contractor's supply prices; however, handling, storage, preservation, installation, testing and other associated activities shall be included wherever specified in the contractor's scope.

11. The bidder shall not alter the prescribed Price Schedule format. Any item not applicable to the bidder's scope shall be marked as instructed in the tender documents. No applicable item shall be left unpriced.

12. The discipline-wise totals shall be carried forward to the Summary Price Schedule in the prescribed format. All calculations, extensions, subtotals and totals shall be checked by the bidder before submission.

13. Any arithmetic discrepancies, omissions or inconsistencies in the quoted prices shall be dealt with in accordance with the bid evaluation and correction provisions of the tender documents.

14. Payment for the works shall be made in accordance with the contractual payment terms, approved milestones, measurement and certification requirements, and other applicable provisions of the contract.

15. Any additions, omissions or changes to the contractual scope shall be dealt with in accordance with the variation and change-order provisions of the contract. No separate payment shall be admissible for activities already covered under the accepted rates and prices.

16. The bidder shall ensure that the quoted prices are adequate for completing the specified works in accordance with the approved drawings, technical specifications, applicable codes and standards, safety requirements and contractual obligations.

17. Delivery & Work Location Address:
Bhaskar Field
Sun Petrochemicals Pvt. Ltd. (SunPetro). Bhaskar Field, Central Processing Facility (CPF), Pandad-Tamsa Road, Village: Pandad, Tal: Khambhat, Dist: Anand, Gujarat – 388625.

18. **GUARANTEE:** The Contractor shall guarantee for all items, material, workmanship for 18 months of Mechanical completion or 12 months of operation whichever is earlier.

19. **Documents to be submitted at the time of delivery**
Original – Challan/Packing List, Invoice, Consignment Note/ Bill of Lading / Air Waybill, Inspection Certificate, Material Test Certificate if any, Guarantee/Warranty Certificate, Installation Manuals, and any other supporting documents.

TABLE-A : Civil & Structural

SR. No.	Description	Qty.	Unit	Unit Rate (INR) - Supply & Erection, Construction	Total price (INR)
1	Excavation for foundations, substructures, sumps, walls, trenches, poles, pits & general building works in all types of soils, vegetable earth, soft murum, running sand, shingle, turf clay, loam, peat, ash, shale, slag, chalk, garbage, muddy/ marshy/ slushy soil, marine clay, reclaimed land etc., including dressing/ trimming the sides, levelling and ramming of bottoms, manual dewatering, removing rank vegetation, backfilling in layers not more than 200mm thickness, watering, consolidating, compacting to achieve not less than 97% modified proctor density conforming to relevant IS, stacking the selected material in measurable heaps for future use within owners space or disposing within an initial lead of 150m as directed, loading, unloading, levelling excluding shoring, strutting etc. complete as directed by engineer-in-charge. note: 1) the rate includes the handling/supporting the existing utilities such as cables, drains, pipes, water mains etc. 2) it also includes the royalty and other taxes applicable if any	2217	Cum		
2	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade m-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by percussion drilling using direct mud circulation (DMC) or bailer and chisel technique by tripod and mechanical winch machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured up to bottom of pile cap). note: truck mounted rotary/TMR/tubewell boring machine shall not be used. 450 mm Dia piles	512	m		
3	Providing and laying plain cement concrete for all depths below and up to plinth level in foundations, pavements, pits, trenches or any other works etc. including shuttering, tamping, ramming, vibrating, curing, etc. all as specified in any shape, position, thickness and finishing the top surface rough or smooth as specified and directed all complete for concrete grade M15 with 20mm and downsize graded crushed stone aggregates/ gravel as per specifications. all materials including cement supplied by the contractor.	276	Cum		
4	Centering and shuttering (straight and inclined shuttering) in structure for all depths including shuttering for single pour concreting, in substructure & superstructure & plinth of all types e.g. trenches, pits, sloping sides & bottom of pits, pull pits, foundations, raft, beams, slabs, pile caps, manholes, pipe encasement, catch pits, drains, equipment/machine foundations, pedestals, pipe sleepers, columns, suspended floors, staircases, landings, steps, brackets etc. providing pockets, openings, recesses, chamfering,, scaffolding as required etc., wherever required, vibrating, tamping, curing and rendering if required to give a smooth and even surface etc. all material in contractor's scope.	2466	Sq. m		

5	Providing and laying reinforced cement concrete of M30 grade with 20mm and down size graded crushed stone aggregates/ gravel in substructure & superstructure & plinth of all types e.g. trenches, pits, sloping sides & bottom of pits, pull pits, foundations, raft, beams, slabs, pile caps, manholes, pipe encasement, catch pits, drains, equipment/machine foundations, pedestals, pipe sleepers, columns, suspended floors, staircases, landings, steps, brackets etc. (including single pour concreting upto 250 cu. m), including cost of admixtures if used. for all depths below and up to plinth level in any shape, position and thickness etc. all complete as per specifications, specified. all materials including cement supplied by the contractor.	923	Cum		
6	Supplying and placing in position high strength deformed steel bars reinforcement (conforming to is:1786, grade FE 500), for RCC work including transporting the steel, straightening, cleaning, decoiling, cutting, bending to required shapes and lengths as per details, binding with contractor's own 16 SWG black soft annealed binding wire at every intersection, welding, supplying and placing with proper cover blocks, supports, chairs, overlaps, welding, spacers etc. for all heights and depths etc. supply of all material in contractor's scope.	83	Tons		
7	Fabricating, erecting, painting & supplying in position bolted and/or welded structural steel works at all levels and locations, including all type of sections, built-up sections/compound sections made out of rolled sections and/or plates/bent plates in frameworks, bracings, trusses, floor beams, lifting beams, platforms, ladders, stoppers, brackets, pipe supports and process piping, etc., handling, transporting, storing, cutting to required size, straightening/ bending if required, edge preparation, cleaning, preheating, bolting/welding of joints, (including sealing the joints of box sections with continuous welding, finishing edges by grinding, transporting the same to site of work, hoisting, fixing in line and level with temporary staging & bracing and removal of the same after erection as specified, applying a priming coat of approved steel primer, touching up of field paint system over damage paint while transportation/ erection including preparation and submission of detailed fabrication drawings, supply of all tools, tackles, machinery, staging, consumables, erection bolts, connection bolts etc. Including Minor structural work including supply, fabrication, painting and erection of pipe supports, cable tray supports, instrument mounting posts and secondary structure.	183	Tons		
8	Supplying, fixing and keeping in position at all levels and locations galvanized threaded anchor bolts of all diameters, including nuts, washers, anchor plates, pipe sleeves etc. in foundations, columns, pedestals, slabs, beams, walls etc. (supply of all materials in contractor's scope) (bolts shall confirm to IS:1367, material E250(FE 410W) and galvanizing as per IS:1367part xiii) maintaining the required levels.	3200	Kg		
9	Grouting pockets, holes, pipes sleeves of any shape or size, column bases, machine bases etc. including roughening surface, cleaning with compressed air/water jets, ramming, curing etc.				
a.	Cement and sand grout 1:1	0.30	Cum		
b.	Non-shrink grout	0.46	Cum		
10	Providing roofing and cladding pre-coated, profiled colour coated galvalume / zincalume alloy sheet of minimum thickness 0.5 mm, yield stress 550 Mpa. including vertical / curved surface fixed with polymer coated j or l hooks, bolts and nuts 8 mm diameter with bitumen and GI limpet washers or with GI limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces),	2365	Sq. m		

	excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
11	Providing and laying 2mm thick antifungal self-levelling epoxy flooring on concrete substrate including coving at floor wall junction & including necessary surface preparation using cleaning, dedusting, applying suitable primer including aisle or zone marking in different colours etc. complete as per manufacturers specifications and as directed by engineer in charge.	1034	Sq. m		
12	Providing, detailing, fabricating and fixing at desired location using MS chequered plates of any thickness and of grade FE 250 as per specifications and approved fabrication drawings (which are to be prepared by contractor and got approved from engineer), including transportation of the same to site, erection at all heights and levels, provision of necessary erection bolts, fixing bolts, nuts, washers, cleats, stiffeners, and all necessary operations like preheating as per specifications, straightening, bending, cutting, drilling, grinding, machining if specified, welding, grinding and removing the welding burr and preparing surface for painting with wire brush cleaning and applying two coats of epoxy red oxide zinc phosphate primer of 30 microns each and two coats of epoxy corrosion resistant enamel paint of 30 microns after fabrication including touching up with spray painting after erection etc complete as directed by engineer in charge.	11	Tons		
13	Supplying, installing, testing, and commissioning (SITC) of wind-operated natural turbo roof ventilator of 24-inch (600 mm) throat diameter, with aluminium/ss blades and matching UV-stabilized FRP/polycarbonate base plate. scope includes cutting existing roofing sheets cleanly, fixing the base assembly using stainless steel self-tapping fasteners, neoprene/bitumen washers, and sealing all joints completely with heavy-duty silicone weatherproofing sealant to ensure 100% leak-proof execution, including testing, safety scaffolding, and cleanup as directed by the engineer-in-charge.	14	Nos		
14	Providing and laying precast slab of 2 meters x 4-meter size with 150 mm depth and reinforcement as per SunPetro standard design (drawing attached) including quality check for concrete while casting of slab and levelling of slabs to the acceptable level.	240	Nos		
15	Providing and laying factory made chamfered edge cement concrete paver blocks in footpath of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of engineer-in-charge. 80 mm thick c.c. paver block of m-30 grade with approved colour design and pattern.	1695	Sq. m		
16	Providing and laying at or near ground level factory made kerb stone of m-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of engineer-in-charge (length of finished kerb edging shall be measured for payment). (precast c.c. kerb stone shall be approved by engineer-in-charge).	1130	m		
17	Providing and laying of precast drains (500x500) with proper slope and finishing and covers on top	960	m		
18	Providing and laying of precast drains (300x300) with proper slope and finishing and covers on top	90	m		
19	Providing and fixing on wall face unplasticized rigid PVC rainwater pipes conforming to IS: 13592 type a, including	20	sq. m		

	jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion, (i) single socketed pipes. 110 mm diameter.				
20	Surface dressing of the ground including removing vegetation and in equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.	7000	sq. m		
	Total Value for Table-A in INR				

TABLE-B : Electrical

SR. No.	Description	Unit	Qty.	Make	Unit Rate (INR) - Supply	Unit Rate (INR) - Service	Total Price (INR)
1	**POWER TRANSFORMERS**						
	Design, Manufacturing, Installation, testing, commissioning, routine testing of transformer (Routine Test Confirming to IS 2026) of outdoor type distribution / converter transformer with connected accessories and peripherals of the following ratings including unloading , transporting from Owner's issued point to the place of installation, unpacking, positioning in place, site assembly of loosely furnished accessories, connection of auxiliary circuits, testing of equipment's with contractor's own test equipment complete with all labour and materials as per approved drawings, specifications of this tender and of Engineer-in-Charge. Material shifting equipment's like trailer, Manlifter, Cherry, Cherry picker and watch & ward of material shall be in vendor scope. excluding the preparation of transformer foundation						
1.1	2.5 MVA, 11/6.6 kV, Dyn11. ONAN, Oil type transformer with all accessories, Transformer confirming to IS 2026, % Impedance 6 to 8%, Conventional Transformer Marshalling Box, Transformer Trouble Relays, NCT for the Transformer LV REF Protection and transformer shall be ERDA Tested. It is responsibility of Bidder to verify the rating, % Z and type similar to the existing installed facility.	No	1	Voltamp / Siemens / ABB			
1.2	Supply and Installation of an On-Load Tap Changer (OLTC) with a voltage regulation tap range from +10% to -10% in steps of 1.25%, complete with an outdoor drive mechanism box and a separate indoor Remote Tap Change Control (RTCC) panel. The RTCC panel shall include an Automatic Voltage Regulator (AVR) equipped with an RS485 communication port (Modbus protocol) for SCADA/BMS integration. The complete OLTC assembly shall be fully installed, wired, and tested at the Transformer OEM factory and must be supplied along with the routine factory test reports from the OLTC manufacturer.	Set	QR	CTR			
1.3	Supply and Installation of a Neutral Grounding Resistor (NGR) for a 6.6 kV system, rated at 3.81 kV Line-to-Neutral to limit earth fault current to [200A / 400A] for a duration of 10 seconds. The scope includes the submission of detailed NGR sizing calculations and a protection relay coordination study (coordinating NGR	No	1	NHP / CTR /Powermech Engineering/ Rajeev Metals & Electricals			

	let-through current with downstream CBCTs and transformer LV REF protection) for approval prior to manufacturing. Complete assembly with punched stainless steel (SS304) resistor elements housed in an outdoor IP65 galvanized sheet steel enclosure, equipped with porcelain support insulators and terminal boxes for incoming neutral cable and outgoing earth flat connections, assembly shall be provided with NGR OEM factory routine test report with NGR Monitoring and Tripping Relay. Relay						
2	**6.6KV METAL CLAD MEDIAM VOLTAGE SWITCHGEAR**			SIEMENS			
	Design, Engineering, Manufacture, Supply, Erection, Testing, and Commissioning of a fully Type-Tested, Indoor Metal-Clad, Draw-out Type 6.6 kV Vacuum Circuit Breaker (VCB) Switchboard based on the Siemens NXAIR (or Existing Site Installed) platform/series.						
	The switchboard shall comprise 2 Nos. Incoming VCB Feeder and 6 Nos. Outgoing VCB Feeders, rated for a nominal voltage of 6.6 kV (Highest System Voltage 7.2 kV). The main electrolytic copper busbar shall be rated for 1250A and certified for a short-circuit fault level of 26.3 kA for 3 second						
	The assembly shall strictly conform to IEC 62271-200, featuring Loss of Service Continuity category LSC 2B, Partition Class PM (metallic partitions), and Internal Arc Classification (IAC) AFLR 26.3 kA for 1 sec for maximum operator safety.						
	The scope includes Siemens SIPROTEC (or equivalent) microprocessor-based numerical protection relays with native IEC 61850 for SCADA/BMS interface, cast resin CTs and VTs, multifunction digital meters, 110V DC control wiring, space heaters, annunciation system, and a continuous internal earthing bus. The complete assembly must be manufactured, wired, and tested in the OEM factory, and supplied with valid type test certificates (from CPRI/ERDA or international equivalent) and routine factory test reports.						
	The draw-out VCB truck/trolley supplied must be completely interchangeable (physically and electrically) with both the newly proposed 6.6kV MV Switchgear Panel and the existing 6.6kV MV switchgear panels currently operating at the site. Complete assembly shall be supplied with routine factory test reports and valid type test certificates. If any site survey / data acquisition required by Bidder , same shall be carried out at their own risk and cost.						

	Panel shall have door interlock facility and all safety feature including Gas Duct or Pressure relief arrangement at the event of internal arc fault.						
	The switchgear shall be equipped with an active, ultra-fast Arc Flash Detection and Protection system, comprising optical arc flash point or loop sensors installed across the busbar, circuit breaker, and cable compartments. These sensors shall be integrated with a dedicated high-speed arc flash relay (or the main numerical protection relay) for instantaneous VCB tripping to mitigate internal arc faults.						
	The Incoming VCB feeder shall be equipped with a Siemens SIPROTEC (or equivalent) numerical feeder protection relay integrated with a Core Balance Current Transformer (CBCT) for sensitive earth fault protection.						
	The Outgoing VCB motor feeders shall be equipped with comprehensive numerical motor protection relays along with integrated inputs for monitoring motor winding RTDs (Resistance Temperature Detectors) and BTDs (Bearing Temperature Detectors).						
	The scope shall also include the supply of one (1) compatible draw-out type Busbar Earthing Truck for safe maintenance grounding.						
	Bidder to provide the rates for the feeders , number of feeder may be updated during detail engineering.						
	Each panel shall be provided all raccessorinterlocking, hardwareing ,hardware requried for the complete working of modules , either same is specifically mentioned in description or not .						
	Control Voltage shall be 110V DC for Closing circuit, Triping Circuit , Indication Circuit , Annunciation Circuit , Control supply for Relay and Meter. Panel shall have DC supply supervision and Contactor based source changeover.						
2.1	Incomer Panel: • 1250A Vacuum Circuit Breaker (VCB) • Rated Voltage: 7.2Kv • Rated Current: 1250 A • Short Circuit Breaking Capacity: 26.3 kA for 3 sec • Numerical Protection Relay model-7SR5111 with 50/51, 50N/51N, 27, 59 functions • Metering : Class 0.5 MFM with RS485 Communication port equivalent to EM6400NG • Bus Bar Rating of 1250 A Copper, 26.3 kA for 3 sec • L/R Selector Switch , LED Indications , 8 window Annunciator, R-Y-B and ON-OFF indication, TNC Switch, Emergency stop push button, • CBCT • 4 Core Line CT for, Metering , REF 64R , Protection and APFC Relay	No	2				

	• 3 Core Line PT : Metering , Protection ,Protection • Surge Protection Device • Integrated with VCB Manual operated earthing switch with interlock						
2.2	Outgoing Motor Feeder Panels: • 1250A Vacuum Circuit Breaker (VCB) • Rated Voltage: 7.2 kV • Rated Current: 1250 A • Short Circuit Breaking Capacity: 26.3 kA for 3 sec • Numerical Protection Relay Model - 7SR5711 with 50/51, 50N/51N : Required for the Motor Protection and Required integration with soft starter, Motor Rating - 425 KW - 2 Nos, Motor Rating - 315KW - 2 Nos, 1 Nos for APFC feeder and 2 Nos spares for future. • Metering : Class 0.5 MFM with RS485 Communication port equivalent to EM6400NG • Bus Bar Rating of 1250 A Copper, 26.5 kA for 3 sec • L/R Selector Switch , TNC switch, LED Indications , 8 window Annunciator, Emergency stop push button • CBCT • 3 Core Line CT for, Metering Protection and Spare • Surge Protection Device	No	7				
2.3	Spare trolley Mounted VCB: • 1250A Vacuum Circuit Breaker (VCB) • Rated Voltage: 7.2 kV • Rated Current: 1250 A	Set	1				
3	**11KV METAL CLAD MEDIAM VOLTAGE SWITCHGEAR**						
3.1	Spare trolley Mounted VCB: • 630A Vacuum Circuit Breaker (VCB) • Rated Voltage: 12 kV • Rated Current: 630 A	Set	1				
4	**6.6KV SOFT STARTER - (Heavy Duty)**			ABB/ Schneider /Benshaw			
	Design, engineering, supply, installation, testing, and commissioning of a fully Type-Tested, freestanding, floor-mounted, indoor metal-enclosed (IP4X/IP5X) 6.6kV, 3-Phase, 50Hz solid-state reduced voltage Soft Starter panel. The assembly and its components shall conform to applicable IS and IEC standards, specifically including IEC 62271-200 (for metal-enclosed switchgear) and IEC 62271-106 (for MV contactors and motor starters). The panel shall be suitably rated for a induction motor (optimized for pump applications) and structurally independent from the main MV Switchboard.						

	1 No. Manually operated, 3-pole, off-load isolation switch (disconnect switch) equipped with mechanical interlocks and a visible break for maintenance safety.						
	1 Set of 3 MV fast-acting, current-limiting HRC semiconductor fuses, strictly coordinated with the thermal withstand limit of the thyristors.						
	1 Set of Solid-State Thyristor (SCR) power bridges rated for medium voltage system transients, complete with RC snubber networks and Metal Oxide Varistors (MOVs).						
	1 No. Heavy-duty MV Vacuum Bypass Contactor (AC-3 duty), configured to close automatically upon the motor reaching full operational speed.						
	Cooling System: Thermostatically controlled cooling fans and louvers, adequately sized to dissipate thyristor heat losses during the programmable starting and stopping ramps.						
	110 Volts) DC Control System: The soft starter logic board, contactor coils, relays, and panel LED indications shall operate exclusively on a 110V DC auxiliary supply.						
	Pump-Optimized Controller: Advanced microprocessor-based controller featuring a door-mounted LCD HMI keypad for programmable torque control (allowing specific deceleration ramps to eliminate water hammer), current limits, and diagnostics.						
	Main VCB Panel Integration: The soft starter shall be hardwired to integrate seamlessly with the main numerical protection relay located in the upstream MV VCB Switchboard.						
	Fuse Monitoring Integration: HRC fuse health/blown-fuse monitoring contacts shall be provided in the soft starter and hardwired to the upstream numerical relay to initiate an instant trip or alarm upon fuse failure.						
	RTD & BTD Integration: The protection scheme shall include dedicated inputs for continuously monitoring the motor's winding Resistance Temperature Detectors (RTDs) and Bearing Temperature Detectors (BTDs).						
	Emergency Trip Interlock: Hardwired 110V DC potential-free contacts designed to send an instantaneous emergency "Trip" command to the upstream VCB in the event of a severe fault or internal soft starter failure.						
	Adequately sized bottom/top cable entry compartments with termination facilities for incoming 6.6kV power cables from the upstream VCB panel and outgoing 6.6kV cables to the motor.						
	Communication interface module (Modbus RTU/TCP or Ethernet) for seamless integration with the plant BMS/DCS system.						

	Testing & Deliverables: The complete assembly shall be manufactured, wired, and routine tested n the OEM factory and must be supplied with valid Type Test certificates from an independent accredited laboratory (such as CPRI/ERDA or international equivalent), alongside routine factory test reports.						
4.1	Soft starter for 315KW Motor	Set	2				
4.2	Soft starter for 425KW Motor	Set	2				
5	**110V DC Battery Charger and DCDB with VRLA Battery**			State Utility approved OEM equivalent to Amar Raja, HBL, Exide,Chhabi etc.			
	Design, engineering, manufacture, supply, installation, testing, and commissioning of a 110V DC system comprising a Dual 110V, 50A Float-cum-Boost Battery Charger, a 110V, 200AH VRLA Battery Bank, and a DC Distribution Board (DCDB). The complete system shall be designed, manufactured, and tested in strict accordance with the latest applicable IS/IEC standards and engineering in charge guidelines.						
	1 set of 110V, 200 Ampere-Hour (AH) capacity (at C10 discharge rate) Sealed Maintenance Free (SMF) Valve Regulated Lead Acid (VRLA) battery bank.						
	The battery bank shall comprise 55 Nos. of 2V individual cells, designed and sized for a nominal End Cell Voltage (ECV) of 1.75V per cell. Delivery Condition: The VRLA battery bank shall be factory-formed and supplied to the site in a fully charged condition.						
	Battery Isolator Box: 1 No. Wall-mounted or rack-mounted heavy-duty DC MCCB unit, installed immediately adjacent to the battery bank to provide localized isolation and short-circuit protection.						
	Supplied complete with heavy-duty, acid-resistant (FRP/Epoxy coated) steel battery racks structurally designed for standard seismic zones. Includes all necessary inter-cell connectors, lead-coated copper links, terminal lugs, insulating covers, cell numbering tags, and standard maintenance accessories.						
	Cabling: Scope includes the supply and termination of appropriately sized, heavy-duty, fire-retardant (FRLS) stranded copper DC power cables routed between the Battery Bank Isolator and the main Battery Charger/DCDB panel.						

	Dual redundant 110V DC, 50A Thyristor-controlled, fully automatic Float-cum-Boost Charger (Dual FCBC) configuration (2 x 100% capacity modules, operating in load-sharing or working/standby mode) to cater to both the continuous DC switchgear load and battery recharging requirements.						
	DC Battery Charger housed in a freestanding, floor-mounted, indoor metal-enclosed (IP4X/IP42) CRCA sheet steel panel, structurally reinforced and adequately ventilated.						
	Controls & Logic: Equipped with Auto/Manual selection for Float and Boost charging modes, automatic current limiting, load sharing capabilities between modules, and highly precise automatic voltage regulation (AVR) to prevent battery overcharging.						
	Protection Scheme: Soft start feature, input/output over-voltage and under-voltage protection, overload and short circuit protection (via fast-acting semiconductor fuses and MCCBs), reverse battery polarity protection, and surge suppression.						
	Metering & Annunciation: Digital DC Voltmeter, DC Ammeter (with zero-center for battery charge/discharge), and comprehensive LED annunciation per module (Mains ON, Charger ON, Float/Boost Mode, AC Fail, DC Over/Under Voltage, Earth Fault Alarm, and Charger Fault).						
	The DCDB shall be provided as an integral compartment of the charger panel (or as a separate matched enclosure) with an electrolytic copper main DC busbar.						
	DCDB Incomer: Equipped with suitably rated Double Pole (DP) DC MCCBs for receiving power from the dual charger/battery bus. Rating 80A MCCB						
	DCDB Outgoing Feeders: Equipped with requisite numbers of appropriately rated DP DC Miniature Circuit Breakers (MCBs) dedicated to switchgear protection relays, VCB tripping/closing coils, control logic, and emergency lighting. 9 Nos of 32A MCB						
	Earth Fault Monitoring: Dedicated DC Earth fault monitoring relay and alarm system to immediately detect and isolate positive or negative leakage to ground.						
	Adequately sized bottom cable entry compartments with heavy-duty termination blocks for incoming AC auxiliary power, heavy-gauge battery cables, and outgoing DC feeder cables.						
	Ventilation Interlock: The charger control scheme shall feature a hardwired integration with a Hydrogen (H2) Sensor-based exhaust ventilation system mounted in the battery room. The logic shall trigger an alarm and						

	activate the room exhaust fans if hydrogen concentration exceeds safe thresholds.						
5.1	110V DC Control Supply including Battery Charger, Battery Bank, DCDB as per above specification	Set	1				
6	**6.6kV Automatic Power Factor Correction (APFC) Panel with Detuned Reactors**			ABB/ SCHNEIDER/L&T			
	Design, engineering, manufacture, test, supply, installation, and commissioning of an indoor, metal-clad 6.6 kV APFC capacitor bank panel designed for an ultimate total capacity of 1005 kVAr. The panel shall connect to a dedicated upstream 6.6kV VCB feeder and conform to IEC 60871-1, IEC 60076-6, and IEC 62271-200. The assembly shall be divided into Present and Future scopes as detailed below.						
	Main Incomer & Metering Compartment						
	Cable Termination & Isolation: Adequately sized cable entry and termination compartment for incoming 6.6kV cables from the upstream switchgear, equipped with a 6.6kV, 3-pole, off-load manual Disconnect Switch (Isolator) complete with an integral Earth Switch. The isolator shall be key-interlocked with the upstream 6.6kV VCB to ensure it can only be operated when the upstream circuit breaker is open.						
	Cast-resin Potential Transformers (PTs) and Current Transformers (CTs) appropriately rated to supply accurate voltage and current reference signals to the intelligent APFC controller.						
	Panel Configuration & Staging (Present vs. Future): The APFC panel enclosure, main busbars, and the intelligent APFC relay shall be sized and supplied for the ultimate 6-step configuration (3 × 110 kVAr + 3 × 225 kVAr).						
	Presently Equipped (Active Steps): The panel shall be fully equipped with four (4) active switching steps comprising 2 × 110 kVAr and 2 × 225 kVAr (Total 670 kVAr) to cater to the present load of two (2) operating motor sets.						
	Future Provision (Space & Bus): The panel shall include two (2) fully partitioned spare compartments designed for future steps of 1 × 110 kVAr and 1 × 225 kVAr. These compartments shall be pre-wired to the APFC relay and equipped with main busbar droppers, requiring only the future insertion of contactors, reactors, and capacitor units.						
	Controller: An intelligent, microprocessor-based APFC relay (measuring actual reactive power) shall automatically switch the respective steps to track the mechanical load seamlessly without hunting. The logic must incorporate an						

	automatic lockout timer preventing any step from reconnecting until its internal discharge resistors have adequately bled off residual voltage.						
	Step Switching & Protection (For Each Step): Each individual step compartment (both present and future provisions) shall comprise:						
	Step Isolation: 1 No. 3-pole, off-load manual isolation switch with mechanical door interlocks for localized maintenance safety.						
	Short-Circuit Protection: 1 Set of 3 Nos. MV fast-acting, capacitor-duty high-rupturing capacity (HRC) fuses.						
	Switching Device: 1 No. Class C2 Medium Voltage Vacuum Contactor rated for capacitive duty to eliminate restrike overvoltage's during frequent switching.						
	Capacitor Units (For Present Steps): Heavy-duty, All-Polypropylene (APP) film dielectric, impregnated with non-PCB, biodegradable fluid. Equipped with internal element fuses and internal discharge resistors designed to reduce residual voltage to less than 50V within 5 minutes of disconnection.						
	Series Detuned Reactors (For Present Steps): Each equipped step shall include a dedicated Series Detuned Reactor (typically 7% tuning, ~189 Hz). These reactors shall safely detune the circuit to prevent harmonic resonance caused by the SCRs in the upstream motor soft starters and limit high-frequency inrush currents during step switching. Construction shall be iron-core, dry-type, resin-impregnated, Class H insulation, and fitted with thermal overload protection (PTC thermistors) wired to the trip circuit.						
	Unbalance Protection: The bank shall include a Neutral Unbalance Current Transformer (NCT) or Residual Voltage Transformer (RVT) integrated with an unbalance protection relay (ANSI 60/46) to trip the circuit upon individual capacitor element failure.						
	The complete assembly shall be fully manufactured, wired, and tested in the OEM factory and supplied with valid Type Test certificates alongside routine Factory Acceptance Test (FAT) reports.						
6.1	6.6kV Automatic Power Factor Correction (APFC) Panel with Detuned Reactors (1005 kVAr Ultimate Capacity ie. 670KVAR Present + Balance Future) and	Set	1				
7	**SUPPLY, INSTALLATION, PRE-COMMISSIONING, TESTING & COMMISSIONING FOR LT PANEL**			L&T/ C&S/ SIEMENS/ ABB/ SCHNEIDE			

	WITH MINIMUM 25% SPARE FEEDERS			R and their Channel Partner			
	Design, Manufacture & Codal Compliance: Complete design, engineering, manufacturing, and supply of the MCC Panel. The panel shall be a compartmentalized Partially Type Tested Assembly (PTTA) conforming strictly to Form 3B as per IEC 61439 standards, with a minimum enclosure protection class of IP52. It shall be completely assembled, wired, and tested in the OEM or an authorized OEM channel partner factory prior to dispatch.						
	System & Busbar Specifications: Enclosure shall be single front type. Suitable for continuous operation on a 415 V, 50 Hz, 3 Phase system. Includes Electrolytic Copper Bus Bar rated for 250A. Short Circuit (SC) Level designed to withstand 50 kA for 1 sec.						
	Control, Protection & Marshalling: All outgoing feeders must have CBCT with Earth Leakage Relay (ELR). Motor and Power feeders shall include indication lamps for ON, OFF, and TRIP status, Start/Stop push buttons, and L/R selector switches where applicable. All feeders shall provide potential-free contacts (PFC) for remote monitoring. Scope includes a separate marshalling cabinet for DCS indication (Local/Remote, run, trip, stop, start).						
	Material Handling & Logistics: Receiving the items from the SPPL Site store, transportation to the installation site by transport vehicle, safe loading and unloading by crane/suitable tackles, unpacking, inspection for physical damages, and formal reporting to the Client prior to erection.						
	Civil & Structural Framework: Fabrication of the base frame and necessary framework. Scope includes chipping of the wall, bolting or welding the frame to supporting structures, grouting of the frame into the wall/floor, and properly finishing all civil work to seamlessly match the finished wall/floor appearance						
	Mechanical Erection & Assembly: Supply of all required GI hardware and foundation bolts. Erection, precise levelling, aligning, and welding of the base frame to floor inserts. Placing individual shipping sections on the levelled base frame, bolting sections together, and mounting/fixing all loose supplied accessories.						
	Electrical Interconnections & Glanding: Complete interconnection of electrical power busbars and control wiring between individual shipping sections. Drilling of required holes in gland plates for incoming and outgoing cable entries						
	Exhaust & Statutory Works: Installation of exhaust gas pipe with stack strictly in accordance with GPCB/CPCB						

	Standards and Specifications. (If needed)						
	Finishing & Protective Measures: Comprehensive gap sealing and vermin proofing of any unused cutouts or structural gaps, followed by touch-up painting to restore the factory finish						
	Testing, Commissioning & Handover: Carrying out functional testing and Site Acceptance Tests (SAT) using contractor-arranged mechanical tools and certified calibrated meters of required range/accuracy. Charging the equipment with necessary permissions and furnishing all testing certificates for Client's approval.						
	General Compliance: All work shall be strictly carried out as per approved drawings and instructions of the Engineer-in-charge, utilizing exclusively skilled and trained manpower						
	All DOL starter feeders shall have ON, OFF, trip indication, Start and stop push button and L/R selector switch, Auto Manual Selector witch. All power feeders shall have ON, OFF and trip indication. All outgoing feeders shall have CBCT with ELR.						
	Separate cabinet for marshalling for indication of Local/Remote, run, trip, stop, start through DCS and the panel shall be of single front type.						
7.1	MCC-1 Panel Details: 1) Copper Bus Bar Rating - 415V, 50 Hz, 250A, 3 Ph. 2) SC Level - 50 kA for 1 sec	No	1				
7.2	Motor Control Centre (MCC) shall be suitable for operation on 415 V, 50 Hz, 3 Phase system. MCC Incomer: -400A,415V, 4P MCCB as per load requirement - 1 No - Breaking Capacity (Icu): Minimum 36 kA at 415 V - Adjustable Overload and Short Circuit Protection	No	1				
7.3	Outgoing Motor Feeders: - MCCBs with minimum Icu of 25 kA at 415 V - Thermal Magnetic / Electronic Release 40kW Motor Feeder (1Working + 1 Stand-by) Star-delta starter for 40 KW Motor. 125A, 415V, 4 Pole MCCB, Icu 25kA	Nos	2				
7.4	2kW Motor Feeder:40A, 415V, 4 Pole MCCB, Icu 25kA DOL starter for Pump House Drain Pit Oil Lifting Pump of 2 KW (1Working + 1 Stand-by)	Nos	2				
7.5	DOL starter - 0.37 KW for Pump - Drain Pit motors.	Nos.	1				
7.6	125A 4P MCCB with earth fault protection for power feeder.(1Working + 1 Stand-by)	Nos.	2				

7.7	63A 4P MCCB with earth fault protection for power feeder. -	Nos.	6				
7.8	32A 4P MCCB with earth fault protection for power feeder. -	Nos.	6				
7.9	250A 4P MCCB with earth fault protection for power feeder. - EMPTY SPACE	Nos.	2				
7.10	Additional Enclosure with Mounting frame to make above panel double door type , with canopy to achieve IP rating IP-55.	Set	1				
8	**Main Distribution Board (MDB) - Comprising of Lighting Feeders & Power Feeders with minimum 25% spares feeders.**						
8.1	Floor mounted main lighting distribution board MLDB(3000X800X2000mm approx.) 1) Incomer - 1 No. of 160A 4P MCCB and Make - L&T 2) Outgoing - 12 Nos. 16A DP MCB 3) Lighting Panel shall have a Auto Manual Selector Switch , Power Contactor , ON OFF Push Button , Astronomical Time Switch programmable.	No	1	STANDARD MAKE			
9	**Heat tracing panel**	No.	1	Recommended Vendor - Vedee Associates			
	Supply, installation and testing of heat tracing panel and materials including heat tracer cable, insulation, required accessories etc. 1) Incomer - 1 No. of 160A 4P MCCB and Make - L&T 2) Outgoing - 16 Nos. 40A DP RCBO (Make - L&T) with contractor (Make - L&T) including indicator cum "ON/OFF" type temperature controller (Make - Select)						
9.1	Supply of 'Eltherm' Germany Make ELSR-H-60 Heating Cable For Pipe line	Mtrs	95	Elthern			
9.2	FLP power connector	Nos.	4	Sudhir/ FCG			
9.3	FLP end connector	Nos.	8	Sudhir/ FCG			
9.4	FLP Tee connector	Nos.	3	Sudhir/ FCG			
9.5	RTD - PT 100	Nos.	4	Altop/ Kayson			
9.6	Mounting Bracket	Nos.	19				
9.7	SS Pipe Strap of various sizes	Nos.	42				
9.8	Aluminium adhesive tape	Roll	5	CGAL			
9.9	Glass adhesive tape	Roll	20	CGAL			
9.10	Warning label	Nos.	12				
10	**SUPPLY, INSTALLATION, TESTING & COMMISSIONING FOR BULK ITEMS**						

	Supply, Installation, Testing and Commissioning of Bulk Items as per standards & best engineering practice. Supply shall include Factory acceptance tests (as required) & certificates. All the supplied items shall be of reputed or Client approved makes, state of the art quality, durable, without any damages, perfect finishing, without visual damages, including all the required accessories, hardware consumables, etc. and complete in all respect. Work shall include receiving the items from SPPL Site store, transportation to installation site by transport vehicle, loading and unloading by crane etc., unpacking, necessary fabrication, framework, grouting, properly finishing civil work, chipping of the wall / bolting / welding, supply of GI hardware's & consumables, erection, mounting and fixing of all loose supplied accessories (if any), wiring, Drilling of required holes in gland plates, Preparing concrete foundation of required size & depth for poles along with all the necessary arrangement for pipe sleeves (for cabling), anchor bolts, excavation, disposal of surplus earth, backfilling with sand soil, bricks, route markers, etc. as per standards along with supply of cement, sand and other related item for preparing concrete foundations. Inspection of physical damages and reporting of same to the Client, Gap sealing and vermin proofing of any unused cutouts and touch up painting, functional testing, carrying out acceptance tests and charging with necessary permissions. All work shall be carried out as per drawings and instructions of Engineer-in-charge. Contractor shall employ skilled and trained manpower for the work. All necessary mechanical tools and certified calibrated meters of required range and accuracy shall be arranged by the contractor. Performing necessary site acceptance tests and furnishing certificates for Client's approval shall be in Contractors scope.						
10.1	**LIGHTING FIXTURES - (Integral / Non-Integral type) along with diffusers, reflectors & all other mounting accessories.**						
	Industrial Lighting Fixtures - Flameproof type General Scope: Design, engineering, manufacture, supply, installation, testing, and commissioning of LED Hazardous Area Lighting Fixtures, complete with all incidental materials required for a safe, operational, and code-compliant installation in explosive atmospheres.						

	Hazardous Area Classification & Certification: The fixture shall be Flameproof (Ex 'd'), specifically certified for use in Zone 1 & Zone 2 (Gas) hazardous areas. Suitable for Gas Group IIB, with a Temperature Class of T3 (200°C) or better. Mandatory Certification: Must possess valid PESO (CCOE) approval for Indian installations, in addition to IECEx and/or ATEX certifications.						
	Enclosure & Mechanical Construction: Housing shall be constructed from heavy-duty, high-pressure Die-Cast Aluminium Alloy (LM6 grade, low copper content for high corrosion resistance). Surface finished with anti-corrosive epoxy powder coating. The optical compartment must feature a high-impact, heat-resistant toughened borosilicate glass cover, further protected by a heavy-gauge Stainless Steel (SS316) wire guard. Minimum Degree of Protection shall be IP66 / IP67.						
	Electrical & LED Driver Specifications: Designed for 230V AC (nominal), 50 Hz, 1-Phase system with a wide operating voltage tolerance (e.g., 140V to 277V AC). Equipped with a high-efficiency constant current LED driver featuring a Power Factor (PF) > 0.95, Total Harmonic Distortion (THD) < 15%, and integral surge protection (minimum 4kV line-to-line, 10kV line-to-earth).						
	Photometric & LED Characteristics: Utilizing high-efficacy industrial-grade LED chips delivering a minimum system efficacy of 100 lumens/watt. Correlated Colour Temperature (CCT) shall be 5500K -6500K (Cool White daylight) with a Colour Rendering Index (CRI) > 70. The luminaire must have a rated operational lifespan of at least 50,000 hours (L70) at an ambient temperature of 50°C.						
	Hardware & Accessories Scope: The fixture shall be supplied entirely complete with: PESO-certified Flameproof (Ex d) double-compression Brass/Nickel-Plated cable glands suitable for FRLS armored cables; an integral or separate Flameproof junction box/terminal chamber; heavy-duty Hot Deep Galvanised mounting brackets (suitable for wall, ceiling, or stanchion pipe mounting as per site layout); and all necessary HDG fixing bolts and hardware.						
	Earthing Configuration: The luminaire housing and junction box must be provided with clearly marked, dedicated internal and external earthing terminals (minimum two external earth bosses) to ensure fail-safe grounding of the enclosure.						

	Installation, Testing & Commissioning Scope: Proper erection and secure mounting of the fixture and brackets using contractor-supplied hardware. Safe routing, glanding (using the supplied Ex d glands), and termination of the incoming FRLS power cable. Solid connection of the external earthing terminals to the local plant earth grid using appropriate GI/Copper wire. Complete functional testing, loop checking, and commissioning of the lighting circuit.						
	Applicable Standards: The complete assembly shall strictly comply with the latest editions of IEC/IS 60079-0 (General Requirements) and IEC/IS 60079-1 (Equipment protection by flameproof enclosures "d").						
10.1.1	60W LED Well glass Lighting Fixture.	Nos.	24	CG/ PHILLIPS/ HAVELLS			
10.1.2	Weather proof type flood lighting fixture suitable for 1x150W / LED Equivalent comprising of anodized AL. housing and reflector with adjustable lamp holder. Heat resistant front glass cover fixed	Nos.	10	CG/ PHILLIPS/ HAVELLS			
10.2	**RECEPTACLES / SOCKET OUTLETS & SWITCH BOXES**			Baliga / Equivalent			
	General Scope: Design, engineering, manufacture, supply, installation, testing, and commissioning of heavy-duty industrial Flameproof Receptacles (Interlocked Switch Socket Outlets complete with matched Plug Tops), including all incidental materials required for a safe, operational installation in explosive atmospheres.						
	Ratings: Receptacle assembly shall be rated for the specified capacity (e.g., 16A, 32A, or 63A) and suitable for continuous operation on the designated system (e.g., 230V AC, 1-Phase, 3-Pin or 415V AC, 3-Phase, 4-Pin/5-Pin).						
	Hazardous Area Classification & Certification: The assembly shall be Flameproof (Ex 'd'), specifically certified for use in Zone 1 & Zone 2 (Gas) hazardous areas. Suitable for Gas Group IIB, with a Temperature Class of T3 (200°C) or better. Mandatory Certification: Must possess valid PESO (CCOE) approval for Indian installations, alongside IECEx and/or ATEX certifications.						
	Enclosure & Mechanical Construction: Housing shall be constructed from heavy-duty, high-pressure Die-Cast Aluminium Alloy (LM6 grade, low copper content for high corrosion resistance) designed to withstand industrial abuse, and finished with an anti-corrosive epoxy powder coating. Minimum Degree of Protection shall be IP66.						

	Safety Interlock Mechanism (Critical): The socket outlet must feature a robust mechanical interlock system. The design must ensure that the integral switch cannot be turned ON unless the plug is fully and correctly inserted, and the plug absolutely cannot be withdrawn while the switch is in the ON position under load.						
	Hardware & Accessories Scope: Supplied complete with the matching Ex 'd' Plug Top. The assembly shall include PESO-certified Flameproof (Ex 'd') double-compression Brass/Nickel-Plated cable glands suitable for the incoming FRLS armored power cables, along with all internal industrial terminal blocks and necessary Stainless Steel (SS304/SS316) fixing hardware for the enclosure.						
	Mounting Support Structure (Commercial Clarity): The fabricated mounting brackets, structural stands, or stanchions required for the localized erection of these receptacles are excluded from this line-item rate. Such support structures shall be measured and billed extra on a per Kilogram (Kg) basis under the respective structural steel fabrication item in the Schedule of Rates (SOR).						
	Earthing Configuration: The receptacle housing and plug must be provided with clearly marked, dedicated internal and external earthing terminals (minimum two external earth bosses on the enclosure) to ensure fail-safe grounding of the receptacle and the connected portable equipment.						
	Installation, Testing & Commissioning Scope: Proper erection and secure mounting of the receptacle to the respective structural stands. Safe routing, glanding (using the supplied Ex 'd' glands), and termination of the incoming power cable. Solid connection of the external earthing terminals to the plant earth grid. Complete functional testing of the mechanical interlock, continuity checking, and commissioning.						
	Applicable Standards: The complete assembly shall strictly comply with the latest editions of IEC/IS 60079-0 (General Requirements) and IEC/IS 60079-1 (Equipment protection by flameproof enclosures "d").						
10.2.1	16A, 1 Ph. 3-Pin Socket Outlet - Flameproof & Wall / Column Mounted	Nos.	4				
10.2.2	32A, 3 Ph. 5-Pin Socket Outlet - Flameproof & Wall / Column Mounted	Nos.	4				
10.3	**EARTH ELECTRODES / PITS**						

	Supply, installation, testing and commissioning of chemically treated earth pit having following sizes of electrodes. Supply shall include backfill chemical compound, fixing clamps, link plates, etc.. Work shall include excavation, driving electrode in to ground, back filling with backfill chemical compound, construction of brick chamber, removable RCC / CI cover with lifting arrangement, fixing of clamps, link plates, termination & connection, marking of earth pit no. etc., testing & commissioning as per Specifications / standards / instructions of Engineer-in-charge.						
10.3.1	3000mm long & 65mm dia. GI pipe electrode	Nos.	10	Any Standard			
10.4	**EARTHING CONDUCTOR**						
	EARTHING CONDUCTOR: Supply, routing, laying, installation, and complete termination of earthing conductors (strips or wires) of specified sizes strictly as per approved layouts. Conductors shall be buried in the ground, laid continuously on cable trays, routed through masonry trenches, or drawn through pipe sleeves, including any necessary site-condition re-routing instructed by the Engineer-in-charge. For buried routes, the work includes laying at the specified depth and backfilling with sand/tiles/brick/soil (Note: Earth excavation is explicitly excluded and shall be billed separately). The scope comprehensively covers all jointing and equipment terminations, including the supply and installation of heavy-duty tinned copper/aluminium crimping lugs, bi-metallic connectors, and necessary SS/GI fixing hardware (nuts, bolts, spring washers). Grid cross-connections and straight joints shall be executed via approved arc welding or robust bolted joints. All activities must be executed under the direct supervision of the site Engineer-in-charge, ensuring full compliance with IS 3043,, and approved plant safety standards.						
10.4.1	**GI Strip Hot Deep Galvanised and Coating Thickness - 70 Micron**						
10.4.1.1	50x6 mm	Mtrs.	250	Reputed			
10.4.1.2	25x6 mm	Mtrs.	50	Reputed			
10.4.2	**Copper Wire (green/yellow coloured PVC insulated, Unarmoured, Flexible Cu. Cable)**						
10.4.2.1	1C x 6 Sq.mm.	Mtrs.	100	Finolex/ RR/ POLYCAB			

10.4.2.2	1C x 35 Sq.mm.	Mtrs.	100	Finolex/ RR/ POLYCAB			
10.5	**EARTH BUS**						
	Supply, installation & termination of earthing bus of following sizes & specifications. Supply shall include fixing bolts, other required accessories, consumable hardware's, etc. The earth buses shall be mounted on walls, columns, floor, equipment foundations, etc. as shown in earthing layouts for different areas of the overall plot. Work shall include mounting, fixing / bolting of earth bus, welding (if required), etc. all under supervision of site Engineer-in-charge. Work shall also include re-locating of Earthing buses as per actual site conditions in presence and under instructions of Engineer-in-charge.						
10.5.1	300mm x 50mm x 6 mm GI Earth Bus with 8 Holes of 10mm dia. each	Nos.	10	Any Standard			
10.6	**LIGHTNING PROTECTION SYSTEM**						
	Supply, installation & termination of Lightning Protection system consisting of following air terminals & test links. Down conductors are considered separately in earthing conductors. Supply shall include fixing bolts, other required accessories, consumable hardware's, etc. The air terminal shall be mounted on top of structure / building as shown in earthing layouts for different areas of the overall plot. Test links shall be mounted on wall / column / trench for every down conductor as shown in layouts. Work shall include mounting of air terminal, fixing / bolting of test links, welding (if required), etc. all under supervision of site Engineer-in-charge. Work shall also include re-locating of air terminals & test links as per actual site conditions in presence and under instructions of Engineer-in-charge.						
10.6.1	1.5 Mtr. Long HDG Air Terminal Rod	Nos.	4	Any Standard			
10.6.2	Test Link	Nos.	4	Any Standard			
11	**HT CABLE TERMINATION & JOINTING(EXCLUDING MATERIAL SUPPLY)**						
	Supply, installation, and end-termination of Medium Voltage 6.6KV (Unearthed) and 11KV (Earthed) grade, 3-core, XLPE insulated, armored aluminium conductor cables.						
	The unit rate explicitly includes the supply of complete, high-quality Heat Shrinkable type termination kits (indoor/outdoor as per site requirement) comprising stress control						

	tubing, anti-tracking sealant tubes, insulating mastics, and complete armor/copper tape screen earthing accessories (including tinned copper earth braids and constant force springs/clamps).						
	The termination scope strictly mandates proper core preparation, application of anti-oxidation conductive lug paste, and the supply and heavy-duty hydraulic crimping of friction-welded bi-metallic terminal lugs (Aluminium-Copper) to strictly prevent galvanic corrosion when connecting aluminium conductors to copper equipment terminals.						
	The complete termination and jointing work shall strictly be carried out only by Kit OEM certified skilled manpower (certified cable jointers).						
	The rate comprehensively encompasses the provision of all necessary specialized tools (gas torches, proper dies, hydraulic crimpers), cleaning solvents, supply of all final terminal connecting hardware (SS/HDG nuts, bolts, spring washers), and mandatory pre- and post-termination testing, explicitly including Insulation Resistance (Megger) and Hi-Pot (High Potential) testing. All works shall be executed in absolute completeness without any additional financial claim, strictly in accordance with the kit manufacturer's standard installation instructions, relevant IS/IEC codes, and the final directions of the Engineer-in-Charge.						
11.1	3C X 120 sq.mm 6.6 KV Grade XLPE armoured Aluminium cable of following sizes (UE) Indoor Type for Motor , Soft Starter and 6.6KV MV Panel	Nos	20	RAYCEM			
11.2	3C X 185 sq.mm 6.6 KV Grade XLPE armoured Aluminium cable of following sizes (UE) Outdoor Type for for power transformer and VCB	Nos	8	RAYCEM			
	SITC of heat shrinkable cable jointing kit, 3-core, XLPE armoured aluminium conductor cable of following sizes,mould, ferrules suitable for crimping, armour clamp earthing and consumables including service of the jointer, labour and testing as required to make the installation complete in all respects as per recommendation of the cable manufacturer and directions of Engineer-in-Charge.						
11.3	3C X 120 sq.mm 6.6 KV Grade XLPE armoured Aluminium cable of following sizes	Nos	20	RAYCEM			
11.4	3C X 185 sq.mm 11 KV Grade XLPE armoured Aluminium cable of following sizes	Nos	8	RAYCEM			
	HT CABLE LAYING AND DRESSING.						

	CABLE SUPPLY & LAYING: Supply, horizontal and vertical laying, and installation of cables of various voltage grades and types (strictly conforming to the relevant parts of IS 7098) of the following sizes. The work includes routing and laying cables in pre-installed cable trays at all elevations, masonry trenches, supported on walls/ceilings via clamping, or pulling through protective pipe sleeves. The scope comprehensively covers the supply and fixing of aluminium strip identification tags, heavy-duty Nylon cable ties, GI saddles, and saddle bars, along with material transportation from the Owner's store/yard to the site, unpacking, and all associated labour, tools, and incidental materials to complete the installation as per approved drawings, tender specifications, and the directions of the Engineer-in-Charge. (Commercial Note: The unit rate explicitly excludes earth excavation, sand backfilling, and the supply/installation of protective warning tiles or bricks for underground direct burial, which shall be measured and billed separately). All Cable shall be GI Round Armored.			Finolex/RR/ POLYCAB/ KEI/KEC			
11.5	3C X 120 sq.mm 6.6 KV Grade XLPE double armoured Aluminium cable For NGR , 6.6KV Switchboard , Motor , Soft Starter etc	Mtrs	1600				
11.6	3C X 185 sq.mm 11 KV Grade XLPE double armoured Aluminium cable of following sizes (E.) for 11KV Power supply from 11KV Switchboard to Transformer, Supply from 66KV Switchyard to Main panel etc.	Mtrs	1000				
12	**LT CABLE LAYING AND DRESSING - ALL ALLUMINIUM CABLE SHALL BE DOUBLE ARMOURED**						
	Horizontal and vertical laying of cables of different voltage grade and types of the following sizes in ready trays at all elevations/trenches/ supported on walls/ ceiling/CLAMPING/ pull through pipes including supply and fixing of aluminium strip number tags, supply and fixing of Nylon Cable ties(HT&LT), GI saddles and saddle bars etc. transportation from Owner's store/yard to site, unpacking and including all labour and materials complete as per approved drawings specifications of this tender and directions of Engineer-in-Charge.All loading/unloading, shifting of material from one place to another place/store reconciliation including trailor, Frana, Manlifter, Cherry picker and watch & ward of material shall be in vendor scope.			Finolex/ RR/ POLYCAB			
12.1	3.5C X 150 sq.mm (Al)	Mtrs	RO				
12.2	3.5C X 120 sq.mm (Al)	Mtrs	RO				
12.3	3.5C X 50 sq.mm (Al),	Mtrs	RO				

12.4	3.5C X 35 sq.mm (Al)	Mtrs	RO				
12.5	3.5C X 25 sq.mm (Al)	Mtrs	RO				
12.6	4C X 16 sq.mm (Cu)	Mtrs	350				
12.7	4C X 10 sq.mm (Cu)	Mtrs	350				
12.8	4C X 6 sq.mm (Cu)	Mtrs	RO				
12.9	3C X 6 sq.mm (Cu)	Mtrs	700				
12.10	3C X 4 sq.mm (Cu)	Mtrs	1050				
12.11	3.5C X 35 sq.mm (Cu)	Mtrs	RO				
12.12	3.5C X 25 sq.mm (Cu)	Mtrs	1400				
12.13	12C X 2.5 sq.mm (Cu)	Mtrs	450				
12.14	19C X 2.5 sq.mm (Cu)	Mtrs	100				
12.15	3C X 2.5 sq.mm (Cu)	Mtrs	600				
12.16	5C X 2.5 sq.mm (Cu)	Mtrs	RO				
12.17	3C x 2.5 SQ. MM. (Cu)	Mtrs	500				
12.18	3C x 1.5 SQ. MM. (Cu)	Mtrs	500				
12.19	4C x 2.5 SQ. MM. (Cu)	Mtrs	500				
13	**LT CABLE TERMINAITON**						
	FLAMEPROOF CABLE TERMINATION (COMPREHENSIVE END-TO-END SCOPE): Complete supply, installation, and end-termination of 1.1KV grade XLPE/PVC insulated, FRLS, armored cables. The unit rate explicitly includes the supply and precise fixing of Flameproof (Ex 'd') double compression, heavy-duty forged brass nickel-plated cable glands (minimum IP66, Zone 1 & 2, Gas Groups IIA/IIB/IIC, strictly PESO and IECEx/ATEX certified). Glands shall be supplied complete with all mandatory accessories: matching PVC/FRLS slide-on shrouds, brass earth tags, SS serrated washers, and brass lock nuts. The termination scope comprehensively covers cable dressing, armor grounding, core preparation, and the mandatory pre-treatment of conductors using anti-oxidation conductive lug paste. It strictly includes the supply and heavy-duty hydraulic crimping of long-barrel tinned copper lugs, aluminium lugs, or friction-welded bi-metallic terminal lugs (bi-metallic lugs are mandatory wherever there are dissimilar metals between the cable conductor and equipment terminal to strictly prevent galvanic corrosion). Furthermore, the rate inherently encompasses the supply of all final terminal connecting hardware (SS/HDG nuts, bolts, spring and flat washers), heat-shrinkable						

	color-coded sleeves for phase identification, insulation tapes, cleaning solvents, and the routing/connection of the gland earth tag to the equipment's local earth bus. The contractor shall not claim any extra charges for specialized tools, hydraulic crimping machines, labour, incidental consumables, or mandatory pre/post-termination continuity and megger testing. All works shall be executed in absolute compliance with the IS/IEC 60079 series, IS 12063, and the direct instructions of the Engineer-in-charge to yield a fully functional and safe connection.						
13.1	3.5C X 180 sq.mm (Al)	Set	RO				
13.2	3.5C X 120 sq.mm (Al)	Set	RO				
13.3	3.5C X 50 sq.mm (Al)	Set	RO				
13.4	3.5C X 35 sq.mm (Al)	Set	RO				
13.5	3.5C X 25 sq.mm (Al)	Set	RO				
13.6	4C X 16 sq.mm (Cu)	Set	10				
13.7	4C X 10 sq.mm (Cu)	Set	10				
13.8	4C X 6 sq.mm (Cu)	Set	RO				
13.9	3C X 6 sq.mm (Cu)	Set	20				
13.10	3C X 4 sq.mm (Cu)	Set	20				
13.11	3C X 35 sq.mm (Cu)	Set	RO				
13.12	3C X 25 sq.mm (Cu)	Set	12				
13.13	12C X 2.5 sq.mm (Cu)	Set	10				
13.14	19C X 2.5 sq.mm (Cu)	Set	10				
13.15	3C X 2.5 sq.mm (Cu)	Set	50				
13.16	5C X 2.5 sq.mm (Cu)	Set	RO				
13.17	3C x 2.5 SQ. MM. (Cu)	Set	30				
13.18	3C x 1.5 SQ. MM. (Cu)	Set	30				
13.19	4C x 2.5 SQ. MM. (Cu)	Set	30				
13.2	**Copper lugs for 1.1KV grade XLPE/PVC FRLS cables**						
13.2.1	12C X 2.5 sq.mm (Cu)	Nos.	RO				
13.2.2	19C X 2.5 sq.mm (Cu)	Nos.	RO				
13.2.3	3C X 2.5 sq.mm (Cu)	Nos.	RO				
13.2.4	5C X 2.5 sq.mm (Cu)	Nos.	RO				
13.2.5	3C x 2.5 SQ. MM. (Cu)	Nos.	RO				
13.2.6	4C x 2.5 SQ. MM. (Cu)	Nos.	RO				
13.2.7	4C x 4 SQ. MM. (Cu)	Nos.	RO				

13.2.8	4C x 6 SQ. MM. (Cu)	Nos.	RO				
14	FLAMEPROOF LOCAL CONTROL STATION (LCS): Supply, installation, testing, and commissioning of Flameproof (Ex 'd') Local Control Stations. The instrument class shall be strictly certified for use in Zone 1 & Zone 2 (Gas) hazardous areas, suitable for Gas Group IIA, IIB, Temperature Class T3, with a minimum IP66 degree of protection. The assembly must possess valid PESO (CCOE) approval alongside IECEx/ATEX certifications. The enclosure shall be heavy-duty Die-Cast Aluminium Alloy (LM6) with anti-corrosive epoxy powder coating, supplied complete with requisite actuators (push-buttons, selector switches, ammeters as applicable), dedicated internal/external earthing terminals, and PESO-certified Ex 'd' double-compression Brass/Nickel-Plated cable glands. Work includes secure fixing on walls/structures using contractor-supplied GI bolts, nuts, washers, and rawl plugs, along with complete safe cable glanding, termination, and continuity testing. All work shall be executed as per the IEC/IS 60079 series, approved drawings, and instructions of the Engineer-in-charge. (Commercial Note: Supply and fabrication of structural steel mounting stands or canopies, wherever required, will be measured and paid separately under relevant structural items in the BOQ) All control terminal shall be suitable for the 1.5sqmm and 2.5sqmm Control Cable.						
14.1	**Flameproof type LCS Exd for Hazardous Area as er above specification.**						
14.1.1	LCS with Start & Stop push buttons and ON/OFF indication.	Nos.	5	Any Standard			
14.1.2	LCS with Start & Stop push buttons, ON/OFF indication and Digital Ammeter	Nos.	5	Any Standard			
15	**CABLE TRAYS, BENDS, 'T' JOINTS & REDUCERS**						
	Supply, installation of GI Perforated/Ladder type cable trays with GI covers (for outdoor areas) and accessories such as coupler plates, hardware, bends, reducers, 'T' joints, cross, other required accessories, consumable hardware's, etc. as per the direction of site in charge. Work shall include levelling and fixing with cable tray supports. The cable tray shall be installed on pipe racks/or on cable trays supports provided below room or on trench wall / column as required.			Sumip/ Satyam/ Aeron			

	Cable tray shall be earthed (connected to earthing strip) at every 30 mtr interval. Cable Trays shall be supported at every 1M Interval.						
15.1	**GI Perforated Cable Trays**						
15.1.1	50 mm wide GI Perforated type cable tray and thickness - 2mm with Cover	Mtrs.	150				
15.1.2	100 mm wide GI Perforated type cable tray and thickness - 2mm with Cover	Mtrs.	100				
15.1.3	450 mm wide GI Ladder type cable tray and thickness - 2mm	Mtrs.	350				
15.1.4	300 mm wide GI Ladder type cable tray and thickness - 2mm	Mtrs.	350				
15.2	**Bends**						
15.2.1	450 mm wide Ladder Vertical 90 degree bend Inside	Nos.	15				
15.2.2	450 mm wide Ladder Vertical 90 degree bend Outside	Nos.	15				
15.2.3	450 mm wide Ladder Vertical 90 degree bend Inside	Nos.	15				
15.2.4	450 mm wide Ladder Vertical 90 degree bend Outside	Nos.	15				
15.3	**Bends**						
15.3.1	300 mm wide Ladder Vertical 90 degree bend Inside	Nos.	15				
15.3.2	300 mm wide Ladder Vertical 90 degree bend Outside	Nos.	15				
15.3.3	300 mm wide Ladder Vertical 90 degree bend Inside	Nos.	15				
15.3.4	300 mm wide Ladder Vertical 90 degree bend Outside	Nos.	15				
16	**G.I. PIPES / CONDUIT**						
16.1	SUPPLY & INSTALLATION OF GI PIPE SLEEVES/CONDUITS: Supply, laying, and complete installation of Class B GI pipes of specified sizes to serve as protective cable sleeves and conduits. The scope includes surface fixing on steel or concrete structures, laying within masonry trenches, embedding in concrete, and direct underground installation (explicitly including continuous routing from trenches to the pump house floor and forming exact conduit outlets for light fittings and equipment). The work comprehensively covers pipe cutting, threading, bending, welding of joints and structural supports, and the application of anti-corrosive protection (bituminous painting/wrapping) for buried sections. Scope also includes the supply and fixing of GI clamps, small fabricated iron support structures, spacers, seats, threaded plugs, and protective PVC/nylon end bushings to prevent cable damage.						

	Complete with all necessary minor civil works (chipping, grouting, sealing, finishing), labour, and materials as per approved drawings and directions of the Engineer-in-Charge. (Commercial Note: Earth excavation and backfilling for underground routing are explicitly excluded from this line item and shall be measured separately in this SOR).						
16.1.1	20 mm NB	Mtrs	RO				
16.1.2	40 mm NB	Mtrs	20				
16.1.3	65 mm NB	Mtrs	60				
16.1.4	100 mm NB	Mtrs	30				
16.1.5	120 mm NB	Mtrs	60				
17	**SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF MISSC. CONSUMABLES**						
17.1	**EXCAVATION & BACKFILLING**						
	Excavation in earth soil / rock, backfilling with soft soil, earth soil, sand/chemical compound, fire bricks on top for protection of cables, earthing conductors, Earth Pits, route markers etc. as per standard engineering practice. Contractor Scope shall include supply of Sands, Bricks, chemical compounds, roue markers necessary hardware's, etc., dispersal of extra earth soil, etc. required for the work to be complete in all aspects. Cable Route markers shall be placed at every 30 meter interval and at every bend / turn in routing.						
17.1.1	Excavation	m3	750				
17.1.2	Soft soil (for back filling with excavated soil after screening)	m3	750				
17.1.3	Sand (for back filling ie. Sand Bedding across the directly buried cable)	m3	150				
17.1.4	Warning tape	Bundle	5				
17.1.5	Cable Protection Precast RCC Tiles with Danger Mark	m3	50				
17.1.6	GI LT Cable Route Marker and Round Type with installation by using concrete	Nos	150				
17.1.7	Compound filling	m3	50				
17.2	**STRUCTURAL STEEL**			TATA /SAIL /JSW ISI MARK			
	General Scope: Supply, fabrication, and installation of Mild Steel (MS) structural steel for base frames of switchboards, supports for LCS, junction boxes, lighting panels, cable trays, Electrical Panel and other various electrical items. The work shall utilize standard MS structural sections including ISA (Angles), ISMC (C-						

	Channels), ISMB (Beams), flats, and MS sheets.						
	Fabrication & Consumables: The unit rate shall comprehensively include all mechanical fabrication activities at the site or contractor's workshop, encompassing measuring, cutting, drilling, bending, and robust bolting. The scope strictly includes all continuous arc and gas welding, supplying all necessary consumables such as gas, welding rods, and cutting wheels as required for the complete assembly						
	Hardware & Fasteners: Charges shall include the mandatory supply and installation of all necessary heavy-duty Hot Dip Galvanized (HDG) or GI hardware (bolts, nuts, spring washers) and heavy-duty anchor fasteners required for securely mounting the fabricated structures to concrete, masonry, or existing steel platforms.						
	Painting & Surface Protection: Prior to erection, all fabricated MS structures must undergo rigorous surface preparation (mechanical wire brushing and grinding to remove all rust, mill scale, and welding slag). The rate explicitly includes the supply and application of a complete anti-corrosive painting system: two (2) coats of high-quality Red Oxide Zinc Chromate primer followed by two (2) coats of synthetic enamel finish paint (shade as approved by the Client/Consultant).						
	Erection & Measurement: Final erection, levelling, aligning, and grouting of the finished structures in their designated plant locations. Measurement and billing shall be executed based on the actual theoretical weight (Kg or Metric Ton) of the finished installed steel sections only, excluding the weight of welding materials, paint, and small hardware.						
17.2.1	Comprehensive Supply, Fabrication, and Erection of Structural Steel work as per above specification	Kg	1000				
17.3	**MISCELLENOUS SITC ITEM**						
	Supply & Installation of the following miscellaneous safety and statutory items, explicitly including all required civil works to complete the installation in all respects. The work comprehensively encompasses the supply and installation of all necessary consumables, fixing clamps, hardware, and accessories required for proper mounting and deployment. All items shall comply with relevant IS/IEC codes and include mandatory safety signages.						

17.3.1	CO2 Fire Extinguisher: Supply and installation of a Carbon Dioxide (CO2) type fire extinguisher of 4.5 kg capacity with handle fixing bracket. Codes: Conforming to IS 15683 and installed as per IS 2190. Signage: Includes supply and installation of a photoluminescent "Fire Extinguisher" identification sign mounted directly above the unit.	Nos.	4	Any Standard ISI Mark			
17.3.2	Insulating Rubber Mats (1.1KV Grade): Supply and laying of 1.1KV Grade electrical insulating rubber floor mats (900mm wide) continuously in front of 415V LT electrical panels. Mats shall strictly conform to IS 15652 (ISI marked), feature an anti-skid, acid/oil/fire-resistant surface, and include valid manufacturer test certificates. Scope includes necessary floor marking for safe operating zone	Nos.	20	Any Standard ISI Mark			
17.3.3	Insulating Rubber Mats (11KV Grade): Supply and laying of 11KV Grade electrical insulating rubber floor mats (900mm wide) continuously in front of 11kV HT switchgears and panels. Mats shall strictly conform to IS 15652 (ISI marked, Class B or equivalent), feature an anti-skid, acid/oil/fire-resistant surface, and include valid manufacturer test certificates. Scope includes necessary floor marking for safe operating zones.	Nos.	20	Any Standard ISI Mark			
17.3.4	Shock Treatment Chart: Supply and wall-mounting of an electrical Shock Chart (2.5 X 3 feet) in Hindi, English, and Gujarati languages. Codes: As mandated by CEA (Measures relating to Safety and Electric Supply) Regulations and IS 5216. Signage: To be mounted in a highly visible area near main switchboards, complete with a protective acrylic/glass frame.	Nos.	6	Any Standard			
17.3.5	11KV DO Operating Rod: Supply of a tested Drop Out (DO) operating/discharge rod for 11 KV Supply. Codes: Conforming to IS 13770 / IEC 60832 for insulating sticks. Signage: Includes a wall-mounted storage bracket with a clear label reading "11KV Operating Rod - Authorized Personnel Only"	Nos.	2	Any Standard			
17.3.6	11KV Rubber Hand Gloves: Supply of seamless electrical insulating rubber hand gloves tested for 11 KV Supply. Codes: Strictly conforming to IS 4770 / IEC 60903 with latest test certificates. Signage: Supplied with a designated wall-mounted storage box labelled "High Voltage (11KV) PPE - Inspect Before Use".	Pairs	2	Any Standard			
17.3.7	415V Rubber Hand Gloves: Supply of electrical insulating rubber hand gloves tested for 415 V Supply. Codes: Conforming to IS 4770 / IEC 60903. Signage: Supplied with a designated wall-mounted storage box clearly labelled "LT (415V) PPE Gloves".	Pairs	2	Any Standard			

17.3.8	Danger Notice Board: Supply and installation of vitreous enamelled Danger Notice Boards, Size 1 Feet X 1 Feet. Codes: Conforming strictly to IS 2551. Signage: Boards shall display the skull and crossbones symbol alongside specific voltage warnings (e.g., "DANGER 11,000 VOLTS" or "DANGER 415 VOLTS") in English, Hindi, and Gujarati, fixed on substation doors and fencing.	Nos.	10	Any Standard			
17.3.9	Resuscitation & Safety Exit Charts: Supply and installation of Resuscitation & Safety exit charts framed in glass. Codes: Symbols and colours conforming to IS 9457 and IS 5216. Signage: Includes supplementary photoluminescent "EXIT" directional signs to be installed above doors and along escape routes.	Nos.	5	Any Standard			
17.3.10	First Aid Box: Supply and installation of a comprehensive First Aid Box. Codes: Contents complying with IS 13115 and local Factories Act requirements. Signage: Must feature the standard Green Cross on a white background, mounted in a prominent, easily accessible location.	Nos.	2	Any Standard			
17.3.11	Fire Bucket Stand: Supply and installation of a fabricated Fire bucket stand with 3 Nos. sand filled buckets. Codes: Buckets must conform to IS 2546 (Galvanized mild steel fire buckets). Signage: Buckets to be painted Post Office Red with the word "FIRE" stencilled in white/black. Stand to have a prominent "Fire Sand Buckets" locator sign.	Nos.	4	Any Standard			
17.3.12	Manual Siren: Supply and installation of a heavy-duty Manual hand-operated siren. Codes: Industrial standard mechanical construction suitable for outdoor/indoor emergency alerting. Signage: Includes a clear, wall-mounted instruction plate detailing "Emergency Siren Operating Instructions".	Nos.	1	Ahuja and Equivalent			
17.4	**MISCELLENOUS WORK /SERVCIES**						
17.4.1	DGMS STATUTORY LIAISONING & APPROVAL : Complete responsibility for obtaining all mandatory statutory clearances, inspection certificates, and final charging approvals from the Directorate General of Mines Safety (DGMS) for the executed electrical installation. The unit rate shall comprehensively include the preparation, vetting, and submission of all required statutory as-built drawings (Single Line Diagrams, equipment layouts, earthing layouts, hazardous area classification drawings), collation of mandatory equipment test certificates (PESO, CIMFR, DGMS equipment approvals, OEM test reports), and preparation of the complete application dossier. The scope strictly encompasses all	LS	1				

	continuous follow-up, coordination, and liaisoning efforts with DGMS authorities. Furthermore, the contractor is fully responsible for arranging and facilitating the physical site inspection, providing all necessary testing kits, tools, and skilled manpower during the Inspector's visit, and promptly executing any site rectifications, modifications, or compliance measures raised by the DGMS Inspectorate without any additional financial claim. (Commercial Note: The contractor's quoted lump-sum rate shall cover all professional liaisoning fees, documentation, testing logistics, travel, and incidental out-of-pocket expenses. However, the official statutory inspection fees/Government challans payable directly to the DGMS shall be paid by the Owner, or reimbursed to the contractor at actuals upon submission of valid original receipts).						
17.4.2	(CEIG) STATUTORY LIAISONING & APPROVAL (COMPREHENSIVE SCOPE): Complete responsibility for obtaining all mandatory statutory clearances, initial drawing approvals, physical inspection clearance, and the final charging permission (Safety Certificate) from the Chief Electrical Inspector to Government (CEIG) or State Electrical Inspectorate for the entire executed electrical installation. The unit rate shall comprehensively include the preparation, plotting, and submission of all required statutory drawings (As-built Single Line Diagrams, equipment layouts, earthing and lightning protection layouts), collation of mandatory equipment test certificates, submission of the contractor's valid electrical license and supervisor competency certificates, and the preparation of the complete application dossier. The scope strictly encompasses all continuous follow-up, coordination, and liaisoning efforts with the Inspectorate. The contractor is fully responsible for arranging and facilitating the physical site inspection, which includes providing all necessary calibrated testing instruments (earth testers, meggers, multimeters), tools, and skilled supervisory manpower during the Inspector's visit. The contractor must promptly execute any site rectifications, structural modifications, or compliance measures raised by the Electrical Inspectorate during the approval process without any additional financial claim or time extension. (Commercial Note: The contractor's quoted lump-sum rate shall cover all professional liaisoning fees, drawing preparation, testing logistics, and	LS	1				

	incidental out-of-pocket expenses. However, the official statutory inspection fees and Government challans payable directly to the State Government/Inspectorate shall be paid by the Owner, or reimbursed to the contractor at actuals upon submission of valid original receipts).						
18	SUPPLY WITH INSTALLATION OF HIGH MAST						
18.1	Supply with installation of high mast, Make - Bajaj, Height - 30 Meters, Flood Lights - 400 Watts and 10 Nos. on each high mast.	Nos.	2	Bajaj			
18.2	Supply with installation of high mast, Make - Bajaj, Height - 25 Meters, Flood Lights - 400 Watts and 08 Nos. on each high mast.	Nos.	2	Bajaj			
	Total Value for Table-B in INR						

***RO – Rate only**

Notes:

1. Cable lengths indicated are approximate. The exact routing and cut-lengths of all cables must be physically measured and confirmed by the contractor at the site prior to manufacturing clearance or procurement.
2. The electrical scope defined herein is preliminary in nature and intended for budgetary and tender estimation purposes only.
3. The contractor shall ensure compliance with the latest editions of IS, IEC, CEA regulations, IE Rules, National Electrical Code (NEC), and applicable local statutory requirements.
4. Electrical equipment shall be suitable for the site environmental conditions and intended application.
5. Supply, installation, testing, commissioning and obtaining all statutory approvals, wherever applicable, shall be in the contractor's scope.
6. The contractor shall supply all necessary accessories required for a complete, safe, and functional installation. This includes, but is not limited to, cable glands, lugs, ferrules, tags, structural supports, clamps, earthing hardware, minor civil works, and consumables, whether specifically itemized in the BOQ or not.
7. All major equipment including motors, transformers, switchgears, MCCs, VFDs, and soft starters shall be tested at the manufacturer's works (FAT) and at the site (SAT) in accordance with applicable standards and the approved Quality Assurance Plan (QAP).
8. The electrical contractor shall actively coordinate with all other disciplines (Civil, Mechanical, Instrumentation) for interface requirements to ensure the proper structural and functional integration of the electrical system.
9. Any discrepancy between the tender drawings, technical specifications, and the BOQ shall be formally brought to the Owner's/Consultant's attention for clarification prior to execution.
10. Contract unit rates shall remain firm and binding irrespective of any variations in quantity, including the complete deletion of single or multiple items from the scope.

11. Rates for the MV/LT Switchgear shall be quoted strictly on a per-feeder module basis, as final feeder configurations may vary during detailed engineering

12. It is the mandatory responsibility of the bidder to visit the site at his own cost and own risk prior to bidding to study all existing installations and site conditions. The new installation must seamlessly integrate with existing facilities, matching or exceeding the minimum criteria for metering, protection, and indication present in the existing HT and LT panels.

13. All materials supplied must strictly conform to the Owner's/Consultant's Approved Vendor List (AVL). Any deviation requires prior written approval from the Engineer-in-Charge.

14. The contractor must adhere to stringent site safety protocols, including the provision of task-specific PPE for all workmen, and maintain valid workmen's compensation insurance throughout the project duration.

15. Upon project completion, the contractor must submit comprehensive As-Built Drawings, Operation & Maintenance (O&M) manuals, OEM warranty certificates, and statutory test reports as a prerequisite for final bill clearance.

16. Housekeeping & Scrap: Daily site cleanup and the safe disposal of scrap materials (cable offcuts, packaging, debris) to designated yard areas remain the responsibility of the contractor.

17. Contract rate shall be first irrespective of the quantity either become nil or any or multiple item deleted form scope or not required

18. The Contractor shall obtain approval for all HT and LT equipment, including the NOC for HT equipment from DGMS, and shall be responsible for the preparation and submission of all required documents.

TABLE-C: Instrumentation & Control

Sr. No.	Description		Qty.	Unit	Make	Unit Rate (INR) - Supply & Service	Total Price (INR)
A	**Supply, testing, transport and installation of Instruments including handling, shifting from site-store/yard to the installation location, required hardware/fasteners, accessories, consumables, tagging etc,**						
1.1	D.P type transmitter	DPT	4	Nos.	Rosemount/ Endress Hauser		
1.2	Temperature Element (RTD)	RTD + TW	3	Nos.	Emerson/ Yokogawa		
1.3	Temperature Transmitter	TT	3	Nos.	Emerson/ Yokogawa		
1.4	Thermowell	TW	2	Nos.	-		
1.5	Temperature Guage	TG	2	Nos.	General /WIKA		
1.6	Pressure gauge	PG	8	Nos.	General /WIKA		
1.7	Restriction ORIFICE	RO	4	Nos.	Minco/WIKA		
1.8	Motor Operated Valve	MOV	4	Nos.	-		
1.9	Pressure Indication Transmitter	PT	4	Nos.	Rosemount/ Endress Hauser		
2	Orifice -FE	FE	2	Nos.	Emerson		
2.1	Flow Transmitters	FT	2	Nos.	Rosemount/ Endress Hauser		
2.2	Mass Flow Meter	MFM	1	Nos.	Rosemount/ Endress Hauser		
2.3	Analyser	AT	1	Nos.	MSA Safety / Honeywell		
2.4	Level Transmitter	LT	1	Nos.	Vega/E&H		
2.5	Safety valves	PSV	1	Nos.	Brightech		
2.6	Control valves - (Flow and pressure)	CV	2	Nos.	-		
2.7	On Off valve	XV	1	Nos.	-		
2.8	Flame Detectors		2		-		
2.9	ESD Switch		4		-		
2.10	MCP		1		-		
B	**Calibration / refurbishment charges including handling, shifting from site-store / yard to the installation location, restore to safe place after calibration, removable and reinstallation from/to package units, if required, require tools & tackles, manpower, calibrators, calibration laboratory, changing range / engg. unit etc. as per data sheet, trouble shooting, preparation of reports, hardware/fasteners, consumables, Labelling (with range, date, tag), etc. all complete as per specification**						
1.1	D.P type transmitter: - Seal type, 2" Flanged conn.		4	Nos.	-		
1.2	Temperature Element (RTD): -2" Flanged conn.		3	Nos.	-		

1.3	Temperature Transmitter		3	Nos.	-		
1.4	Temperature Gauge: - 2" Flanged conn.		2	Nos.	-		
1.5	Pressure gauge - Seal type, 1" Flanged conn.		8	Nos.	-		
1.6	Pressure Indication Transmitter		4	Nos.	-		
1.7	Flow Transmitters		2	Nos.	-		
1.8	Level Transmitter		1	Nos.	-		
1.9	Control valves - (Flow and pressure)		2	Nos.	-		
2	On Off valve		1	Nos.	-		
2.1	Motor operated valve		4	Nos.	-		
2.2	DCS configuration, Development of graphics and testing		1	LOT	-		
2.3	Cause and effects checking		1	LOT	-		
2.4	Loop checking for field instruments		120	Nos.	-		
a	digital input /outputs		76	Nos.	-		
b	Analog input / outputs		26	Nos.	-		
c	Loop checking for MCC digital inputs/outputs		18	Nos.	-		
C	**Update the existing DCS graphics for the new Pumphouse, Including incorporated of associated new I/O'S and required control, monitoring, alarm, status Indication**		as per I/o list and interl ock list	package			
D	**Supply and laying of Armour cables**						
1.1	**Supply & laying of Armour cables**						
1.1.1	1P x 1.0 mm2, Shielded Signal cable for AI/AO		300	Meters	Polycab/KEI		
1.1.2	20Px1.0 mm2, Shielded (in &Overall) Signal cable for AI/AO		600	Meters			
1.1.3	12Px1.0 mm2, Shielded (in &Overall) Signal cable for AI/AO		600	Meters			
1.1.4	1P x 1.0 mm2, Shielded Alarm cable for DI		300	Meters			
1.1.5	20P x 1.0 mm2, Shielded (Overall) Alarm cable for DI		600	Meters			
1.1.6	12P x 1.0 mm2, Shielded (Overall) Alarm cable for DI		600	Meters			
1.1.7	4C x 1.5 mm2, Control Cable for DO		600	Meters			
1.1.8	10C x 1.5 mm2, Shielded Overall Alarm cable for DI		RO	Meters			
1.1.9	1T X 1.5 mm2 cable (TEMP)		50	Meters			
1.1.10	3C x 1.5 mm2, Control Cable for DO - 3 Phase Power Cable		500	Meters			
1.2	**Earthing cables PVC insulated Type `C' - 85 °C as per IS 5831-1994 multi-stranded copper conductor wire in green colour**						
1.2.1	1 x 2.5 MM2 multistrand copper cable, PVC insulated		150	Meters	Polycab/KEI		
1.2.2	1 x 6 MM2 multistrand copper cable, PVC insulated		75	Meters			

1.3	**Cable glanding and termination with PVC hood Includes glanding, feruling, lugging, termination, continuity checks for point to point wiring termination with supply of printed ferrules, Lugs, PVC tapes, PVC/Nylon cable tie, PVC sleeves for DC type cable glands**						
1.3.1	size: 1 1/4"NPT x 20Px1 mm2 cable for AI/AO/DI		4	Nos.	Standard		
1.3.2	size: 1 1/4 "NPT x 12Px1 mm2 cable for AI/AO/DI		4	Nos.			
1.3.3	size: 1/2"NPTx 2Cx1.5 mm2 cable DO		2	Nos.			
1.3.4	size: 1/2" NPT x 1Tx1.5 mm2 cable for RTD/GD		5	Nos.			
1.3.5	size:1/2" ET x 2Cx1.5 mm2 cable with check nut		2	Nos.			
1.3.6	size: 1 1/4"ET x 12Px1.0 mm2 cable with check nut		5	Nos.			
1.3.7	size: 1 1/4"ET x 20Px1.0 mm2 cable with check nut		5	Nos.			
1.4	**Supply of Die-cast Al Junction boxes IP-65 & flameproof to Ex'd' / Exe**						
1.4.1	Supply of Junction Box with 20 Terminals -Approx size: 350mm (W) x 350mm (H) x150mm (D)		5	Nos.	Standard		
1.5	**Fabrication & Erection of Ladder / Perforated GI Cable Tray including fabrication of bends, reducers, Tees and including supply of mounting SS. fasteners ((nut& bolts)**						
1.5.1	Perforated type, 2.0 mm thick		RO	Meters			
1.5.2	50 mm wide x 50 mm Height		50	Meters	Standard		
1.5.3	100 mm wide x 50 mm Height		1500	Meters			
1.5.4	150 mm wide x 50 mm Height		1000	Meters			
1.5.5	300 mm wide x 50 mm Height		0	Meters			
1.6	**Fabrication, Erection. Surface cleaning & epoxy Painting of structural Steel like Angle, Channels Flats, Plate. for support of Cable Trays, Panels, JB, Air Manifold & Field Inst.**						
1.6.1	ANGLE ISA 50 X 50 X 6 mm Thk		50	Kgs	Standard		
1.6.2	CHANNEL ISMC 100 x 50 x6mm		50	Kgs			
1.6.3	Anchor fastner 12 MM X100 L		30	Nos.			
1.6.4	Anchor fastner 10 MM X100 L		30	Nos.			
1.6.5	6-way Air Manifold - 1/2" Npt ball valve with drain point		1	Nos.			
1.7	**Fabrication, Installation, surface cleaning & epoxy Painting of 2" Instrument Standpipe (Stanchion support) including supply of 4 nos of anchor fasteners. Pipe shall be 2" size IS :1239 heavy duty.**		30	Nos.			
1.8	**Supply of tube fittings and Miscellaneous items**						

1.9	**Transparent Tubes**						
1.9.1	1/4" OD PVC tube Transparent, Max working Pressure: 150 PSI		25	Meters			
2	**SS 316 Tubes.**						
	Tube specification: • All stainless tubing shall be of SS316 seamless, bright finished, soft annealed as per ASTM A269 and to be supplied in 6-meter length, • All tubes shall be scratch free and suitable for bending.						
2.1	1/2", O.D. SS tube (Seamless) SS-316 (wall thickness 0.049"), MOC-316		25	Meters			
3	**Tubes fittings - Double compression type, & Fitting materials, MOC- SS316**						
3.1	Cap (Nut) and Ferrule; 1/2" OD, MOC - SS316		3	Nos.			
3.2	Tube Union - Straight; 1/2" OD x 1/2"OD		3	Nos.			
3.3	Tube Union; 1/2"OD x 1/2" OD "L" type		3	Nos.			
3.4	Tube Male Connector; 1/2" NPT (M)x 1/2" O.D.		3	Nos.			
3.5	Tube Male elbow Connector; 1/2"NPT(M) x 1/2" OD "L" type		3	Nos.			
3.6	Tube Female Connector; 1/2"NPT (F)x 1/2" OD		3	Nos.			
3.7	Tube Union tee; 1/2"OD x 1/2" OD, Equal "T" type		3	Nos.			
3.8	Tube Male Connector; 1/2" NPT (M)x 6mm OD with stainless steel cap(nut) and copper ferrule		3	Nos.			
3.9	Tube Male Connector ;1/2" NPT (M) x 3/8-inch O.D.		3	Nos.			
3.10	1/2"x1/2"Female NPT Needle Valve, SS316,		3	Nos.	Standard		
3.11	1/2"Male NPT X1/2" Female NPT angle Needle valve,		3	Nos.			
3.12	1/2"Male NPTx1/2"Female NPT Ball Valve,		3	Nos.			
3.13	Nipple; Hex, 1/2" Male NPT x 6" long,		3	Nos.			
3.14	Nipple; Hex.,1/2" Male NPT x 2" long, MOC-SS316,		3	Nos.			
3.15	Nipple; Hex, 1/2" NPT Male x 3" long, MOC-SS316,		3	Nos.			
3.16	Nipple; Hex, 1/2" NPT Male x 4" long, MOC-SS316,		3	Nos.			
3.17	Valve - Ball; 1/2"NPT(F) x 1/2" NPT(F),		3	Nos.			
3.18	Valve - Needle, 1/2" NPT Male x 1/2" NPT Female,		3	Nos.			
3.19	Plug - Blind; 1/2" Male NPT, MOC-SS316		3	Nos.			
3.20	Equal Tee 1/2"ODX 1/2"ODX 1/2"OD		3	Nos.			
4	**Instrument general consumables (additional items - not to be part of cable laying, tubing work shall be supplied as spares)**						
4.1	Teflon Tape, Size: 1/2"		30	Nos.			
4.2	Terminals fork type 0.5 mm2 with soldered seam and easy-entry insulation		30	Nos.	Standard		
4.3	Terminals fork type 1 mm2 with soldered seam and easy-entry insulation		30	Nos.			

4.4	Terminals fork type 1.5 mm2 with soldered seam and easy-entry insulation		30	Nos.			
4.5	Pin cable lugs 0.5 mm2 DIN 46231with soldered seam and easy-entry insulation		30	Nos.			
4.6	Pin cable lugs 1 mm2 DIN 46231with soldered seam and easy-entry insulation		30	Nos.			
4.7	Pin cable lugs 1.5 mm2 DIN 46231with soldered seam and easy-entry insulation		30	Nos.			
4.8	Tube-shape Copper Cord end terminals/Cable lugs 0.5 mm2		30	Nos.			
4.9	Tube-shape Copper Cord end terminals/Cable lugs 1 mm2		30	Nos.			
4.10	Tube-shape Copper Cord end terminals/Cable lugs 1.5 mm2		30	Nos.			
4.11	Tube-shape Copper Cord end terminals/Cable lugs twin entry 0.5 mm2		30	Nos.			
	Total Value for Table-C in INR						

***RO – Rate only**

TABLE D: Mechanical

SR. No.	Description	Qty.	Unit	Unit Rate (INR) - Dismantling	Unit Rate (INR) - Erection and Alignment	Total Price
A	**ERECTION & ALIGNMENT**					
	Receipt, unloading, surface preparation, lifting of pumps, alignment, installation, grouting, levelling of Pumps, EOT crane and miscellaneous Mechanical equipment including supply of equipment for erection, supply of foundation bolts, shim plates, necessary instrument for alignment, hook-up with piping, electrical and instrumentation shall be part of the CONTRACTOR's scope.					
1	Feed Booster Pumps - P-101E/F (For details of the pump refer to the equipment list and the Vendor drawings for weights and dimensions) - Will be Client Free-Issue items	2	Nos.			
2	Export Oil Pumps - P-102E/F (For details of the pump refer to the equipment list and the Vendor drawings for weights and dimensions) - Will be Client Free-Issue items	2	Nos.			
3	Tank bottom recycle pump - P-201A/B (For details of the pump refer to the equipment list and the Vendor drawings for weights and dimensions)	2	Nos.			
4	Pump house drain pit oil lifting pump - P-202A/B (For details of the pump refer to the equipment list and the Vendor drawings for weights and dimensions)	2	Nos.			
5	EOT Crane & Accessories - EOT-101 (For details of the EOT Crane refer to the equipment list and the Vendor drawings for weights and dimensions)	1	Nos.			
	Total Value for Table-D in INR					

Notes:

1. This SOR shall be read in conjunction with Equipment list.
2. New equipment data shall be referred for technical details.

TABLE E: Piping

SI. NO.	ITEM	ITEM DESCRIPTION	SPEC	SIZE 1 NB	SIZE 2 NB	UOM	TOTAL QTY	UNIT RATE (INR) - SUPPLY	UNIT RATE (INR) - SERVICE	TOTAL PRICE (INR)
1	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 16 INCH, SCH 40	B7A	400		MTR	632			
2	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 14 INCH, SCH 40	B7A	350		MTR	84			
3	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 12 INCH, SCH 40	B7A	300		MTR	53			
4	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 12 INCH, SCH 80	D7A	300		MTR	246			
5	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 10 INCH, SCH 80	D7A	250		MTR	31			
6	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 8 INCH, SCH 80	D7A	200		MTR	12			
7	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 8 INCH, SCH 40	B7A	200		MTR	24			
8	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 6 INCH, SCH 80	D7A	150		MTR	18			
9	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 6 INCH, SCH 40	B7A	150		MTR	120			
10	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 4 INCH, SCH 40	B7A	100		MTR	426			
11	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 3 INCH, SCH 40	B7A	80		MTR	4			
12	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-36.10, 2 INCH, SCH 80	B7A	50		MTR	360			
13	PIPE	PIPE, SEAMLESS, BE, ASTM A106 GR.B, ASME B-	A3A	50		MTR	374			

		36.10, 2 INCH, SCH 40								
14	PIPE	PIPE, SEAMLESS, PE, ASTM A106 GR.B, ASME B-36.10, 1 INCH, SCH 80	B7A	25		MTR	168			
15	ELBOW	ELBOW 90, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 16 INCH, SCH 40	B7A	400		NOS	10			
16	ELBOW	ELBOW 45, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 16 INCH, SCH 40	B7A	400		NOS	14			
17	ELBOW	ELBOW 90, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 14 INCH, SCH 40	B7A	350		NOS	17			
18	ELBOW	ELBOW 90, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 12 INCH, SCH 40	B7A	300		NOS	17			
19	ELBOW	ELBOW 45, LR,,1.5D BW, ASTM A234 WPB-S, ASME B-16.9, 12 INCH, SCH 40	B7A	300		NOS	4			
20	ELBOW	ELBOW 90, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 8 INCH, SCH 40	B7A	200		NOS	10			
21	ELBOW	ELBOW 90, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 6 INCH, SCH 40	B7A	150		NOS	22			
22	ELBOW	ELBOW 90, LR, 1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 12 INCH, SCH 80	D7A	300		NOS	29			
23	ELBOW	ELBOW 90, LR, 1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 10 INCH, SCH 80	D7A	250		NOS	1			
24	ELBOW	ELBOW 90, LR, 1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 8 INCH, SCH 80	D7A	200		NOS	6			
25	ELBOW	ELBOW 90, LR, 1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 6 INCH, SCH 80	D7A	150		NOS	7			
26	ELBOW	ELBOW 90, LR, 1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 4 INCH, SCH 80	D7A	100		NOS	2			
27	ELBOW	ELBOW 90, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 4 INCH, SCH 40	B7A	100		NOS	49			
28	ELBOW	ELBOW 90, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 3 INCH, SCH 40	B7A	80		NOS	4			

29	ELBOW	ELBOW 90, LR,1.5D, BW, ASTM A234 WPB-S, ASME B-16.9, 2 INCH, SCH 80	B7A	50		NOS	7			
30	ELBOW	ELBOW 90, SW, 3000#, ASTM A105, ASME B-16.11, 1 INCH	B7A	25		NOS	78			
31	TEE	TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 16 INCH, SCH 40	B7A	200		NOS	1			
32	TEE	TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 8 INCH, SCH 40	B7A	200		NOS	1			
33	TEE	TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 6 INCH, SCH 40	B7A	150		NOS	17			
34	TEE	TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 4 INCH, SCH 40	B7A	100		NOS	14			
35	TEE	TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 2 INCH, SCH 80	B7A	50		NOS	12			
36	TEE	TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 12 INCH, SCH 80	D7A	300		NOS	5			
37	TEE	TEE, SW, 3000#, ASTM A105, ASME B-16.11, 1 INCH	B7A	25		NOS	22			
38	TEE	TEE, SW, 3000#, ASTM A105, ASME B-16.11, 1 INCH, SCH 160	D7A	25		NOS	2			
39	RED. TEE	RED.TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 16 INCH X 14 INCH, SCH 40	B7A	400	350	NOS	4			
40	RED. TEE	RED.TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 14 INCH X 12 INCH, SCH 40	B7A	350	300	NOS	7			
41	RED. TEE	RED.TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 4 INCH X 2 INCH, SCH 40	B7A	100	50	NOS	1			
42	RED. TEE	RED.TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 12 INCH X 10 INCH, SCH 80	D7A	300	250	NOS	4			
43	RED. TEE	RED.TEE, BW, ASTM A234 WPB-S, ASME B-16.9, 12 INCH X 8 INCH, SCH 80	D7A	300	200	NOS	1			
44	BALL VALVE	BALL VALVE,RF/B16.5, BODY: ASTM A216 GR.WCB, SEAT: RPTFE, STEM : AISI 410/SS316, FULL BORE, 2 PIECE, 300#, 125-250 µAARH, EN ISO 17292, OPERATION: GEAR OPERATED, 16 INCH	B7A	400		NOS	1			
45	BALL VALVE	BALL VALVE,RF/B16.5, BODY: ASTM A216 GR.WCB, SEAT:	B7A	350		NOS	4			

		RPTFE, STEM : AISI 410/SS316, FULL BORE, 2 PIECE, 300#, 125-250 µAARH, EN ISO 17292, OPERATION: GEAR OPERATED, 14 INCH								
46	BALL VALVE	BALL VALVE,RF/B16.5, BODY: ASTM A216 GR.WCB, SEAT: RPTFE, STEM : AISI 410/SS316, FULL BORE, 2 PIECE, 300#, 125-250 µAARH, EN ISO 17292, OPERATION: GEAR OPERATED, 12 INCH	B7A	300		NOS	5			
47	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, SEAT: RPTFE/DEVLON, STEM: AISI 4140, FULL BORE, 2 PIECE, 600#, 125-250 µAARH, EN ISO 17293, OPERATION:GEAR OPERATED, 12 INCH	D7A	300		NOS	7			
48	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, SEAT: RPTFE/DEVLON, STEM: AISI 4140, FULL BORE, 2 PIECE, 600#, 125-250 µAARH, EN ISO 17293, OPERATION:GEAR OPERATED, 10 INCH	D7A	250		NOS	1			
49	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, SEAT: RPTFE/DEVLON, STEM: AISI 4140, FULL BORE, 2 PIECE, 600#, 125-250 µAARH, EN ISO 17293, OPERATION:GEAR OPERATED, 8 INCH	D7A	200		NOS	2			
50	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, SEAT: RPTFE, STEM : AISI 410/SS316, FULL BORE, 2 PIECE, 300#, 125-250 µAARH, EN ISO 17292, OPERATION: GEAR OPERATED, 6 INCH	B7A	150		NOS	2			
51	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216	B7A	100		NOS	16			

		GR.WCB, SEAT: RPTFE, STEM : AISI 410/SS316, FULL BORE, 2 PIECE, 300#, 125-250 µAARH, EN ISO 17292, OPERATION: LEVER, 4 INCH								
52	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, SEAT: RPTFE, STEM : AISI 410/SS316, FULL BORE, 2 PIECE, 300#, 125-250 µAARH, EN ISO 17292, OPERATION: LEVER, 3 INCH	B7A	80		NOS	1			
53	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, SEAT: RPTFE/DEVLON, STEM: AISI 4140, FULL BORE, 2 PIECE, 600#, 125-250 µAARH, EN ISO 17293, OPERATION:LEVER, 2 INCH	D7A	50		NOS	4			
54	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, SEAT: RPTFE, STEM : AISI 410/SS316, FULL BORE, 2 PIECE, 300#, 125-250 µAARH, EN ISO 17292, OPERATION: LEVER, 2 INCH	B7A	50		NOS	18			
55	BALL VALVE	BALL VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, SEAT: PTFE, STEM :SS304, REDUCE BORE, 150#, 125-250 µAARH,BS EN ISO 17292, OPERATION: LEVER, 2 INCH	A3A	50		NOS	5			
56	BALL VALVE	BALL VALVE, RF/B16.5, BODY: ASTM A105, SEAT: RPTFE, STEM: SS316, FULL BORE,2 PIECE , 600#, 125-250 µAARH, EN ISO 17292, OPERATION: LEVER, 1 INCH	D7A	25		NOS	6			
57	BALL VALVE	BALL VALVE,RF/B16.5 , BODY:ASTM A216 GR.WCB/ASTM A105, SEAT: RPTFE, STEM : SS316, REDUCE BORE, 2 PIECE, 300#, 125-250 µAARH, EN ISO	B7A	25		NOS	31			

		17292, OPERATION: LEVER, 1 INCH								
58	GLOBE VALVE	GLOBE VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, TRIM STELLITED, STEM - 13 % CR. STEEL, OS & Y, 600#, 125-250 µAARH, EN ISO 17293, OPERATION: HANDWHEEL, 12 INCH	D7A	300		NOS	1			
59	GLOBE VALVE	GLOBE VALVE,RF/B16.5 , BODY: ASTM A216 GR.WCB, TRIM STELLITED, STEM - 13 % CR. STEEL, OS & Y, 600#, 125-250 µAARH, EN ISO 17293, OPERATION: HANDWHEEL, 8 INCH	D7A	200		NOS	1			
60	ARC VALVE	ARC VALVE, 600#, 6 X 6 X 3 INCH SCH 80	D7A	150		NOS	2			
61	ARC VALVE	ARC VALVE, 300#, 6 X 6 X 3 INCH	B7A	150		NOS	2			
62	NRV	SWING DISC CHECK VALVE, RF, B 16.5, BODY: ASTM A216 GR.WCB, TRIM-STELLITED, STEM-13%CR. STEEL, 600#,API 594, 125-250 µ AARH, 12 INCH	D7A	300		NOS	1			
63	NRV	SWING DISC CHECK VALVE, RF, B 16.5, BODY: ASTM A216 GR.WCB, TRIM-STELLITED, STEM-13%CR. STEEL, 300#,API 594, 125-250 µ AARH, 4 INCH	B7A	100		NOS	2			
64	NRV	SWING DISC CHECK VALVE, RF, B 16.5, BODY: ASTM A216 GR.WCB, TRIM-STELLITED, STEM-13%CR. STEEL, 300#,API 594, 125-250 µ AARH, 3 INCH	B7A	80		NOS	1			
65	NRV	SWING DISC CHECK VALVE, RF, B 16.5, BODY: ASTM A216 GR.WCB, TRIM-STELLITED, STEM-13%CR. STEEL, 300#,API 594, 125-250 µ AARH, 2 INCH	B7A	50		NOS	2			
66	NRV	LIFT CHECK VALVE, SW 800#, BODY: ASTM A 105, TRIM-STELLITED, ASME B16.11, 1 INCH	B7A	25		NOS	7			
67	CON. REDUCER	CON. REDUCER, BW, ASTM A234 GR. WPB-S, ASME B-	B7A	400	300	NOS	1			

		16.9, 16 INCH X 12 INCH SCH 40								
68	CON. REDUCER	CON. REDUCER, BW, ASTM A234 GR. WPB-S, ASME B-16.9, 12 INCH X 6 INCH SCH 40	B7A	300	150	NOS	7			
69	CON. REDUCER	CON. REDUCER, BW, ASTM A234 GR. WPB-S, ASME B-16.9, 10 INCH X 6 INCH SCH 80	D7A	250	150	NOS	7			
70	CON. REDUCER	CON. REDUCER, BW, ASTM A234 GR. WPB-S, ASME B-16.9, 8 INCH X 4 INCH SCH 40	B7A	200	100	NOS	10			
71	CON. REDUCER	CON. REDUCER, BW, ASTM A234 GR. WPB-S, ASME B-16.9, 4 INCH X 3 INCH SCH 40	B7A	100	80	NOS	5			
72	ECC. REDUCER	ECC. REDUCER, BW, ASTM A234 GR. WPB-S, ASME B-16.9, 16 INCH X 12 INCH SCH 40	B7A	400	300	NOS	1			
73	ECC. REDUCER	ECC. REDUCER, BW, ASTM A234 GR. WPB-S, ASME B-16.9, 14 INCH X 10 INCH SCH 40	B7A	350	250	NOS	2			
74	ECC. REDUCER	ECC. REDUCER, BW, ASTM A234 GR. WPB-S, ASME B-16.9, 12 INCH X 6 INCH SCH 40	B7A	300	150	NOS	2			
75	STRAINER	STRAINER 14" X 300# BASKET TYPE,125-250 AARH, MATERIAL BODY : CS, 60 MICRON MESS SIZE	B7A	350		NOS	2			
76	STRAINER	STRAINER 12" X 300# BASKET TYPE,125-250 AARH, MATERIAL BODY : CS, 60 MICRON MESS SIZE	B7A	300		NOS	2			
77	STRAINER	STRAINER 6" X 300# BASCKET TYPE 125-250 AARH, MATERIAL BODY : CS, 60 MICRON MESS SIZE	B7A	150		NOS	2			
78	STRAINER	STRAINER 4" X 300# BASCKET TYPE 125-250 AARH, MATERIAL BODY : CS, 60 MICRON MESS SIZE	B7A	100		NOS	2			
79	FLANGE	WN FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 16 INCH, SCH 40	B7A	400		NOS	19			
80	FLANGE	WN FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 14 INCH, SCH 40	B7A	350		NOS	13			

81	FLANGE	WN FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 12 INCH, SCH 40	B7A	300		NOS	22			
82	FLANGE	WN FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 12 INCH, SCH 80	D7A	300		NOS	19			
83	FLANGE	WN FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 10 INCH, SCH 80	D7A	250		NOS	6			
84	FLANGE	WN FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 8 INCH, SCH 80	D7A	200		NOS	7			
85	FLANGE	WN FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 6 INCH, SCH 80	D7A	150		NOS	5			
86	FLANGE	WN FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 4 INCH, SCH 80	D7A	100		NOS	5			
87	FLANGE	WN FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 6 INCH, SCH 40	B7A	150		NOS	36			
88	FLANGE	WN FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 4 INCH, SCH 40	B7A	100		NOS	73			
89	FLANGE	WN FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 3 INCH, SCH 80	D7A	80		NOS	2			
90	FLANGE	WN FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 2 INCH, SCH 160	D7A	50		NOS	7			
91	FLANGE	WN FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 2 INCH, SCH 80	B7A	50		NOS	59			
92	FLANGE	SO FLANGE, RF, 150#, ASTM A105, 125-250 µAARH, ASME B-16.5, 2 INCH	A3A	50		NOS	14			
93	FLANGE	SW FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 1 INCH, SCH 160	B7A	25		NOS	60			
94	SOCKOLET	SOCKOLET,SW, 3000#, ASTM A105, MSS SP-97, 14 INCH X 1 INCH	B7A	350	25	NOS	5			
95	SOCKOLET	SOCKOLET,SW, 3000#, ASTM A105,	B7A	300	25	NOS	5			

		MSS SP-97, 12 INCH X 1 INCH								
96	SOCKOLET	SOCKOLET, SW, 3000#, ASTM A105, MSS SP-97, 6 INCH X 1 INCH	B7A	150	25	NOS	2			
97	SOCKOLET	SOCKOLET, SW, 3000#, ASTM A105, MSS SP-97, 4 INCH X 1 INCH	B7A	100	25	NOS	6			
98	SOCKOLET	SOCKOLET, SW, 3000#, ASTM A105, MSS SP-97, 2 INCH X 1 INCH	B7A	50	25	NOS	14			
99	SOCKOLET	SOCKOLET, SW, 6000#, ASTM A105, MSS SP-97, 10 INCH X 1 INCH	D7A	250	25	NOS	2			
100	WELDOLET	WELDOLET, BW, ASTM A105, MSS SP 97, 16 INCH X 4 INCH, SCH 40	B7A	400	100	NOS	1			
101	WELDOLET	WELDOLET, BW, ASTM A105, MSS SP 97, 10 INCH X 4 INCH, SCH 80	D7A	250	100	NOS	2			
102	WELDOLET	WELDOLET, BW, ASTM A105, MSS SP 97, 14 INCH X 2 INCH,SCH 80	B7A	350	50	NOS	7			
103	WELDOLET	WELDOLET, BW, ASTM A105, MSS SP 97, 10 INCH X 2 INCH, SCH 160	D7A	250	50	NOS	1			
104	WELDOLET	WELDOLET, BW, ASTM A105, MSS SP 97, 12 INCH X 2 INCH, SCH 80	B7A	300	50	NOS	5			
105	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 16 INCH	B7A	M33x 210L		SET	384			
106	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 14 INCH	B7A	M30x 195L		SET	312			
107	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 12 INCH	B7A	M30x 190L		SET	269			
108	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 12 INCH	D7A	M33x 220L		SET	408			
109	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 10 INCH	D7A	M33x 215L		SET	115			
110	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 8 INCH	D7A	M30x 190L		SET	86			
111	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME	D7A	M27x 170L		SET	58			

		B18.2.1/ASME18.2.2, 6 INCH								
112	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 6 INCH	B7A	M20x 135L		SET	432			
113	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 4 INCH	D7A	M24x 125L		SET	38			
114	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 4 INCH	B7A	M20x 125L		SET	672			
115	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 3 INCH	D7A	M20x 125L		SET	19			
116	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 2 INCH	B7A	M16x 100L		SET	480			
117	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 2 INCH	D7A	M16x 110L		SET	58			
118	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 2 INCH	A3A	M16x 90L		SET	58			
119	STUD BOLT	STUD BOLT, BOLT: A193GR. B7, NUT: A194 GR.2H, ASME B18.2.1/ASME18.2.2, 1 INCH	B7A	M16x 85L		SET	240			
120	GASKET	GASKET, 4.5mm THK./300#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 16 INCH	B7A	400		NOS	19			
121	GASKET	GASKET, 4.5mm THK./300#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 14 INCH	B7A	350		NOS	16			
122	GASKET	GASKET, 4.5mm THK./300#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 12 INCH	B7A	300		NOS	22			
123	GASKET	GASKET, 4.5mm THK./600#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS	D7A	300		NOS	20			

		OUTER RING, ASME B16.20, ASME 16.5, 12 INCH								
124	GASKET	GASKET, 4.5mm THK./600#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 10 INCH	D7A	250		NOS	7			
125	GASKET	GASKET, 4.5mm THK./600#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 8 INCH	D7A	200		NOS	7			
126	GASKET	GASKET, 4.5mm THK./600#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 6 INCH	D7A	150		NOS	5			
127	GASKET	GASKET, 4.5mm THK./300#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 6 INCH	B7A	150		NOS	36			
128	GASKET	GASKET, 4.5mm THK./600#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 4 INCH	D7A	100		NOS	5			
129	GASKET	GASKET, 4.5mm THK./300#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 4 INCH	B7A	100		NOS	84			
130	GASKET	GASKET, 4.5mm THK./600#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 3 INCH	D7A	80		NOS	4			
131	GASKET	GASKET, 4.5mm THK./300#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 2 INCH	B7A	50		NOS	60			
132	GASKET	GASKET, 4.5mm THK./600#, SPIRAL WOUND GRAPHOIL FILLED, SS316	D7A	50		NOS	7			

		INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 2 INCH								
133	GASKET	GASKET, 4.5mm THK./150#, SPIRAL WOUND PTFE FILLED, SS304 INNER AND CS OUTER RING, ASME B16.21, ASME 16.5, 2 INCH	A3A	50		NOS	14			
134	GASKET	GASKET, 4.5mm THK./300#, SPIRAL WOUND GRAPHOIL FILLED, SS316 INNER AND CS OUTER RING, ASME B16.20, ASME 16.5, 1 INCH	B7A	25		NOS	60			
135	BLIND FLANGE	BLIND FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 16 INCH	B7A	400		NOS	4			
136	BLIND FLANGE	BLIND FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 14 INCH	B7A	350		NOS	4			
137	BLIND FLANGE	BLIND FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 12 INCH	B7A	300		NOS	2			
138	BLIND FLANGE	BLIND FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 10 INCH	B7A	250		NOS	2			
139	BLIND FLANGE	BLIND FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 12 INCH	D7A	300		NOS	2			
140	BLIND FLANGE	BLIND FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 10 INCH	D7A	250		NOS	1			
141	BLIND FLANGE	BLIND FLANGE, RF, 600#, ASTM A105, 125-250 µAARH, ASME B-16.5, 8 INCH	D7A	200		NOS	1			
142	BLIND FLANGE	BLIND FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 6 INCH	B7A	150		NOS	5			
143	BLIND FLANGE	BLIND FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 4 INCH	B7A	100		NOS	5			
144	BLIND FLANGE	BLIND FLANGE, RF, 300#, ASTM A105, 125-250 µAARH, ASME B-16.5, 2 INCH	B7A	50		NOS	2			
145	BLIND FLANGE	BLIND FLANGE, RF, 150#, ASTM A105, 125-250 µAARH, ASME B-16.5, 2 INCH	A3A	50		NOS	2			

146	INSULATION	THERMAL INSULATION FOR 16" PIPE LINE (50 mm Thick Insulation) - ROCKWOOL WITH ALUMINIUM CLADDING OF 1mm THK + SS BINDING WIRE + SS BAND OVER CLADDING				M2	199			
147	INSULATION	THERMAL INSULATION FOR 14" PIPE LINE (50 mm Thick Insulation) - ROCKWOOL WITH ALUMINIUM CLADDING OF 1mm THK + SS BINDING WIRE + SS BAND OVER CLADDING				M2	130			
148	INSULATION	THERMAL INSULATION FOR 12" PIPE LINE (50 mm Thick Insulation) - ROCKWOOL WITH ALUMINIUM CLADDING OF 1mm THK + SS BINDING WIRE + SS BAND OVER CLADDING				M2	208			
149	INSULATION	THERMAL INSULATION FOR 10" PIPE LINE (50 mm Thick Insulation) - ROCKWOOL WITH ALUMINIUM CLADDING OF 1mm THK + SS BINDING WIRE + SS BAND OVER CLADDING				M2	36			
150	INSULATION	THERMAL INSULATION FOR 8" PIPE LINE (50 mm Thick Insulation) - ROCKWOOL WITH ALUMINIUM CLADDING OF 1mm THK + SS BINDING WIRE + SS BAND OVER CLADDING				M2	13			
151	INSULATION	THERMAL INSULATION FOR 6" PIPE LINE (50 mm Thick Insulation) - ROCKWOOL WITH ALUMINIUM CLADDING OF 1mm THK + SS BINDING WIRE + SS BAND OVER CLADDING				M2	34			
152	INSULATION	THERMAL INSULATION FOR 4" PIPE LINE (50 mm Thick Insulation) - ROCKWOOL WITH ALUMINIUM CLADDING OF 1mm THK + SS BINDING WIRE + SS BAND OVER CLADDING				M2	68			

153	3LPE Pipes	API 5L, 3LPE coated line pipe 16"		400		MTR	200			
154	3LPE Pipes	API 5L, 3LPE coated line pipe 12"		300		MTR	200			
155	3LPE Pipes	API 5L, 3LPE coated line pipe 10"		250		MTR	200			
156	3LPE Pipes	API 5L, 3LPE coated line pipe 8"		200		MTR	200			
157	3LPE Pipes	API 5L, 3LPE coated line pipe 6"		150		MTR	200			
158	3LPE Pipes	API 5L, 3LPE coated line pipe 4"		100		MTR	200			
159	PAINTING OF PIPES	PAINTING OF PIPES - AS PER PROJECT PAINTING SPECIFCIATION - QPS_SC_001 SURFACE COATING - SYSTEM 5 FOR UN-INSULTATED SURFACE AND SYSTEM 6 FOR INSULATED SURFACES.				SQ.M	1,219			
	Total Value for Table-E in INR									

Notes:

1. All pipes and pipe fittings must comply with Piping Material Specifications
2. All Valve must comply with Valve Material Specifications
3. The above quantities doesn't include construction contingency. Contractor to consider as required.
4. Construction contractor to consider 100% spare gasket and 10% fasteners as spare in their offer.
5. An engineering contingency of 20% is considered and Contractor to consider Construction contingency as required.
6. For Procurement and construction related notes refer to the attached SOW.
7. Supply cost shall include supply of materials per specification along with MTC, transportation to site, unloading, storage, safe keeping and reconciliation of materials as required.
8. Fabrication and testing cost should include welding, NDT, hydrotesting, Painting & preservation.
9. Erection cost shall include cost of erection and insitu welding and associated material handling as required to complete the activity.
10. Surplus materials and cut lengths shall be the property of the company and the same shall be handed over to the Company after site reconciliation.
11. Vendor to refer the Project Surface Coating specification - QPS_SC_001

SECTION-VIII

MODEL CONTRACT

- **Preamble of the Contract**
- **General Conditions of the Contract (GCC)**
- **SPECIAL CONDITION OF THE CONTRACT (SCC)**

PREAMBLE OF THE CONTRACT

THIS AGREEMENT, is made this _____ day of _____ 202x

BY AND BETWEEN

Sun Petrochemicals Pvt. Ltd. a company organised and existing under the laws of India and having its head office at 8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road, Powai, Mumbai - 400 072, Maharashtra, BHARAT India (hereinafter referred to as "**Company"** or "**SunPetro**")
AND

[NAME OF CONTRACTOR], a company organised and existing under the laws of [.....] and having its head office at [.....] (Hereinafter referred to as "**Contractor"**)

RECITALS

WHEREAS, Company desires to have certain Services as hereinafter specified for _____

WHEREAS, Contractor represents that it possesses the necessary premises, equipment, personnel and capability to carry out such Services and is willing to do so on the terms and conditions hereinafter contained;

Hereafter both Company and Contractor shall be called jointly as Parties.

WHEREAS, Company desires to engage Contractor to design, supply, perform and complete the Services and

WHEREAS, Contractor has agreed to such engagement upon n and subject to the terms and conditions hereinafter contained.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, it is hereby agreed between the Parties as follows:

This Contract witness that in consideration of the premises and the payment to be made by the Company to the Contractor provided for herein the Contractor shall Works all equipment and /or materials and execute and perform all Services /Works strictly according to the SCOPE OF WORK (SECTION-III) various provision in tender schedule and Contract and upon such supply, execution and performance of services to the satisfaction of the Company, the Company shall pay to the Contractor at the rates accepted as per the said tender schedule (Attached at SECTION-VII) and in terms of the provisions therein.

The following documents, in order of precedence descending, comprise the entire Contract between the parties:

1] This Preamble of Contract

2] Articles of Contract GCC (General Terms and Conditions)

3] Special Terms & Condition of Contract (SCC)

4] Scope of Work (Specifications and Scope of Works)

5] Responsibility Matrix

6] QA &QC and TPI/Inspection

7] Price Schedule & Bill of Quantity

8] Other Appendices & Annexures

The salient features of the Contracts as detailed herewith highlighted for ready reference:

Note 1 : Title of the Contract : ……..

Note 2 : Contract No.: ……..

Note 3 : Site address: ……..::……..

Note 4 : Project/Block Number: ……

Note 5 : Effective Date of the Contract: ……..

Note 6 : Due Date of Mobilization: ……..

Note 7 : Duration /Validity of the Contract ……..

Note 8 : Tentative Value Of The Contract: ……..

Note 9 : Company's Representative: ……..:

Note 10 : Contractor's Representative: ……..

IN WITNESS WHEREOF, the parties have hereinto set and subscribed their respective hands and seals the day, month and year respectively set forth

Sun Petrochemicals Pvt. Limited	_____
(COMPANY)	(CONTRACTOR)
Signature _____	Signature _____
Name:	Name:
Title:	Title:
In presence of witness	
1)Name Title	1)Name Title
Signature/Initials	Signature/Initials
2)Name Title	2)Name Title
Signature/Initials	Signature/Initials

GENERAL CONDITIONS OF THE CONTRACT (GCC)

8.1 **DEFINITIONS AND INTERPRETATION**

The following definitions and interpretation shall apply and shall have the meanings assigned to them in this Contract except where the context otherwise requires:

8.1.1 "Affiliate" of a Party means any Person, whether directly or indirectly, controlling, controlled by, or under common control with, such Party or Person, as applicable. For the purposes of this definition, the term "control" means (i) direct or indirect ownership of more than fifty percent (50%) of the equity (or such lesser percentage which is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction) having the Contract power to vote on or direct the affairs of such Party or Person, as applicable, or (ii) the Contract power to direct decisions of such Party or Person, as applicable, including the Contract power to direct management and Contract policies of such Party or Person, as applicable, whether by reason of ownership, by contract or otherwise.

8.1.2 "Agreement" or "Contract" or "Contract Document" shall mean the instructions to the bidders mentioned in the tender document, the preamble, these contract definitions, General Contract Conditions, Special Contract Conditions, Schedule of Rates, Responsibility Matrix etc., Specifications, Scope of work, all the exhibits, annexures appendices, schedules etc. hereto along with any amendments agreed and issued subsequently.

8.1.3 "Applicable law" shall mean any Indian law, regulation, bylaws, rule, directive, ordinance, judicial or quasi-judicial decree, order or notification enacted, issued or modified by any Government Agency in India.

8.1.4 "Approved and Approval" shall mean approved or approval in writing by the Company.

8.1.5 "Contract Administrator" shall mean the contract administrator so appointed by SunPetro.

8.1.6 "Contract Price" shall mean the lump sum prices and/or rates of payment specified in Price Schedule in *Section-VII* and as may be indicated in the Price schedule, which SunPetro shall compensate, Contractor for the actual work executed and certified by SunPetro' s Representative subject to any additions/deletions thereto which may be made through the application of relevant provisions of the Contract.

"Contract value" shall mean the estimated value of the payments that would be made to the Contractor for the duration of the Contract for the Works & services to be provided under the Contract including but not limited to the Mobilization Charges, Demobilization Charges, unit rates, cost of consumables etc. as applicable. This Contract Value will be the basis for calculation of Performance Bank Guarantee and other values referred to in the Contract or linked to contract value. The actual Contract Value (based on actual payment) is likely to differ from originally calculated Contract Value; however, the originally calculated Contract Value will be the basis for various provisions under this Contract.

8.1.7 "Contract Area" shall mean various Exploration & Production Blocks and Fields as awarded to the Operator by Government of India and/or any other Block awarded to Company from time to time and as identified as "Contract Area" or where company has participatory interest.

8.1.8 "Certificate of Release and Final Payment" is the certificate issued by SunPetro as per the terms of Clauses mentioned herewith.

8.1.9 The word "Contractor" is "M/s._____ and includes its consortium partners, sub-contractors and vendors and the officers, directors, commissioners, employees, servants, representatives and agents of any of them as applicable.

8.1.10 "Contractor Administrator" shall mean the contract administrator so appointed by the Contractor and informed to SunPetro.

8.1.11 "Contractor's Equipment" shall mean all the equipment(s), units etc. along with auxiliary, plant, machines, spares, facilities, miscellaneous materials /services and consumables etc., provided by the Contractor or its Sub-contractors in connection with the Scope of Work specified in *Section-III*.

8.1.12 Contractor's Personnel" shall mean each individual and / or the collective group of Contractor's employees, Contractor's subcontractors, and their respective employees, subcontractors, licensees, invitees, agents and representatives, who are provided and/or utilized by Contractor for the performance of the Work.

8.1.13 “Commencement Date” shall mean the date means the date specified in the Letter of Award (LOA)or the date on which the Contractor is instructed by the Company to commence the Work at Site.“Completion Date” shall mean the time and date when the work is completed by the Contractor as per the Scope of Work.

8.1.14 “Commissioning” means commissioning of the facilities or any part thereof by the Contractor as specified in the Scope of Work / tender document. Commissioning shall be certified by the Company/Consultant and TPIA as applicable.

8.1.15 “Consultant” means consultant deployed by Company for project management and action as Company’s engineer.

8.1.16 "Company" means the Company or Operator which is a party to this Contract, and any other party for whom Company is acting in executing this Contract, including but not limited to, other members of the Consortium owning an interest in the Block, their or their officers, directors, agents and employees.

8.1.17 “Company Group” shall mean the Company, its affiliates their contractors, subcontractors and equipment vendors of any tier, its Co-ventures, their personnel, officers, directors, employees and agents but excluding Contractor Group.

8.1.18 “Contract”, "Agreement" or "Contract Document" (as per par 3.1.2 above)

8.1.19 "Days” shall indicate consecutive calendar days, it being understood that all dates and time periods referred to in the Contract are expressed in terms of the Gregorian calendar. “Day” means a calendar day of twenty four (24) hours as referred to local time at the Site.

8.1.20 “Defect Liability Period” means the period of validity of the warranties and guarantees given by the Contractor commencing at Operational Acceptance of the facilities or a part thereof by the Company, during which the Contractor would be responsible for defects with respect to the facilities (or the relevant part thereof) as per the term of the Contract.

8.1.21 “Effective Date” shall be the date of issue of NOA (Notification of Award) /LOI(letter of Intent)/ LOA(Letter of Award) / Work Order or as specified by Company.

8.1.22 “Exhibits” are those documents attached hereto and form an integral part of this Contract for all purposes and consisting of all the exhibits and annexures.

8.1.23 “Facilities” means the Plant and Equipment, Installation and Construction Services and related equipment and other associated works, to be carried out by the Contractor under the Contract for completion of the entire scope of work and the Contract documents, which are to be designed, engineered, procured, developed, constructed, tested, pre-commissioned, commissioned and handed over at the site to and for the Company in accordance with the terms and conditions of this Contract.

8.1.24 “GIPIP” shall mean specific guidelines in conformance with the Good international practices/norms and applicable standards / legislations and prevalent regulatory regime as specified by the Government of India.

8.1.25 “Good Oilfield Practices” means good international petroleum industry practices with such degree of diligence and prudence reasonably and ordinarily exercised by experienced parties engaged in a similar activity under similar circumstances and conditions.

8.1.26 “Government” shall mean Government of India or Government of State, or any political subdivision or administrative agency thereof and/or their respective representatives having jurisdiction over the Work performed under this Contract.

8.1.27 “Gross negligence” shall mean (i) the intentional failure to perform a manifest duty, in reckless disregard of or wanton indifference to the consequences to the life, health, safety or property of others; or (ii) any act or failure to act which, in addition to constituting negligence, was in reckless disregard of or wanton indifference to the consequences to the life, health, safety or property of others.

8.1.28 Interpretation

a. Reference to "Section", " Para " "Clause" "Article" and "Provision" shall have the same meaning.
b. The headings and sub-titles in these Conditions of Contract are included solely for convenience and shall not be deemed to be part thereof and shall not affect the meaning or operation of the Contract.
c. Words imparting the singular meaning only also include the plural and vice versa except where the context otherwise requires.
d. Any reference to statute, statutory provision or statutory instrument shall include any re-enactment or amendment thereof for the time being in force.
e. Reference to Applicable Laws shall also include amendments and extensions thereto.

8.1.29 "Installation and Construction Services" shall mean all such services necessary for construction of facility using the plant and equipment and including without limitations engineering design, fabrication, construction, installation, civil, building and other construction works, completion of the facilities, testing, pre-commissioning and commissioning of the facilities, inspection, site preparation works (including the provision and use of Contractor's equipment and the Works of all construction materials required such as consumables, welding electrodes, joint coating materials, end-sleeves, casing pipes, markers, cathodic protection system), operations, maintenance, training, etc. including all such services necessary for making available supplies of Plant and Equipment at site including but not limited to transportation, loading, unloading, insurance and other local services required in relation to the Works of the said works at site.

8.1.30 "Letter of Intent / Letter of Award / Notification of Award /Work Order" or "LOI / LOA / NOA/ WO" shall mean the letter of Intent or Letter of Award or Work Order issued to the Contractor by Company.

8.1.31 "Mobilization" shall mean the actual mobilization of the Contractor's equipment which are fit for operational requirements, along with auxiliary equipment and contractor's personnel during contract period and shall include any demurrage incurred during the period up to and including the date the Work begins at the Work Site of this Project except if such delay or demurrage has occurred due to acts or omissions of the Operator. SunPetro will issue the mobilization letter for the services as and when requirement comes.

8.1.32 "Operational Acceptance" means the acceptance by the Company of the facilities (or any part of the facilities where the Contract provides for acceptance of the facilities in parts), which certifies the Contractor's fulfilment of the Contract in respect of Functional Guarantees of the facilities (or the relevant part thereof) in accordance with the technical specifications, related provisions in GCC and related provisions in the SCC.

8.1.33 "Operator" shall mean Sun Petrochemicals Private Limited (SunPetro) / Company

8.1.34 "PSC" shall mean the production-sharing contract entered between the Government of India and SUNPETRO consortium as its consortium.

8.1.35 "Project" shall mean the work and other related activities as may be indicated in the LOI/ Contract as per the Scope of Work.

8.1.36 "Provisional Completion/Acceptance" shall mean the certificate so issued by the Owner, subject to the fulfillment of the terms described under the SOW/tender document.

8.1.37 "Services" shall mean the services to be provided by the Contractor under the Contract as more particularly described in Scope of Work, to this Contract and shall include such other services as may from time to time be agreed in writing between the Contractor and SunPetro.

8.1.38 "Sun Petro " / "SPPL" shall mean Sun Petrochemicals Private Limited.

8.1.39 "SunPetro's Representative" or "Company Representative" shall mean the person or persons expressly designated in writing by Company, who shall be Company's representative and shall be empowered to act, monitor and direct the performance of the Work required under this Contract on behalf of Company.

8.1.40 "Sub-Contractors" shall mean those persons or companies engaged by the Contractor in connection with the Services / contracts approved by SunPetro.

8.1.41 "SunPetro Designated Base" shall mean means the Project Site where the Works are to be executed as notified by the Company.

8.1.42 "Site" means the location where the Works are to be executed as specified in the Contract.

8.1.43 "Performance Bank Guarantee" shall mean the unconditional, irrevocable bank guarantee required to be submitted by the Contractor to the Company in accordance with the terms of the contract and in the form of which bank guarantee is set forth in *Annexure* #8 hereof.

8.1.44 "Rates" or "Rate" shall mean the applicable rates of compensation to be paid to Contractor for work hereunder as set forth in the Price Schedule.

8.1.45 "Termination Date" shall mean the time of day and date when the Term defined in contract hereof expires or when this Contract is terminated by Company, in accordance with its terms, whichever occurs later.

8.1.46 "Willful Misconduct" means Intentional disregard of Good Oilfield Practice 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.

8.1.47 "Work" shall mean the Work provided by Contractor which includes providing but not limited to tools & tackles, auxiliary equipment, spares, consumables, supplying the necessary equipment, materials, personnel and technical support etc. necessary for the performance of Services on the Work Site / Work Location or base in accordance with the scope of the work defined in the Contract.

8.1.48 "Work Site / Work Location" shall mean the lands and waters and other places on, under, in or through which the Works are to be carried out and any other lands, waters or places approved by the Company for the purposes of the Contract together with any other places designated in the Contract as forming part of the Site.

8.1.49 "Third Party" shall mean a person / entity which is not included in Company Group or Contractor Group.

8.2 **DURATION OF CONTRACT:**

8.2.1 The Contract shall remain valid for a period of two (2) years from the Effective Date. However, the entire Scope of Work including design, engineering, supply, erection, testing and commissioning shall be completed within eighteen (18) months from the date of LOA unless extended by the Company.

8.2.2 Time is the essence of the Contract. The Contractor shall complete the Work within the stipulated Completion Period. Any delay in completion beyond the specified Completion Date shall attract Liquidated Damages as per the relevant provisions of the Contract.

3.2.3 **Commencement Date, Completion Date and Termination Date for rate applicability**:

- Commencement date: Date of issuance of LOA or date of Site Mobilization instruction by Company, whichever is earlier.
- Completion date of contract: Date when the Contractor completes the entire Scope of Work and the Company issues the Completion Certificate.
- Termination Date: Expiry of the Contract

8.3 **Materials, Supplies, Equipment, Services and Personnel / Supply of the Goods and Delivery**

8.3.1 Any item Works / services requested by Company during contract period to complete the work shall be provided by Contractor.

8.3.2 The GOODS shall be supplied by the CONTRACTOR in accordance with the SPECIFICATION, the SCOPE OF SUPPLY and all other requirements of the CONTRACT as set out in Schedule-B, Scope of Supply/Technical Specifications.

8.3.3 The CONTRACTOR shall deliver the GOODS in entirety to the DELIVERY POINT by the DELIVERY DATE. If required by the COMPANY, the GOODS shall be delivered unloaded at the DELIVERY POINT.

8.3.4 **DELIVERY TIME:** It is confirmed by the CONTRACTOR that all the GOODS as given in SECTION-VII are delivered in .....(to be quoted by CONTRACTOR) after receipt of LOA/Call out notice from the COMPANY. However, COMPANY intends to inspect the GOODS before shipment which may take 5-7 days for each call out. COMPANY shall inform the CONTRACTOR of requirement in advance and the shipment shall be initiated after completion of satisfactory inspection. It is further clarified that CONTRACTOR is required to ship only those GOODS which are mentioned in the call out notice issued by the COMPANY and approved by COMPANY's inspection team / agency.

8.3.5 The Contractor shall complete delivery of all materials and equipment in accordance with the project schedule approved by the Company.

8.3.6 DELIVERY POINT- The DELIVERY POINT of the GOODS ordered by the COMPANY under this Contract will be COMPANY's WAREHOUSE or Project Site (either of the two) or any other place as per specified by Company.

8.3.7 DELIVERY TERM- The delivery term (term of shipment) is DDP and shall be guided by the definitions of Incoterms 2020. (Foreign CONTRACTOR can quote CIF Mumbai Port Delivery also).

8.3.8 The time for delivery of the GOODS shall be of the essence of the CONTRACT. In the event that delivery of the GOODS is delayed as a result of:

b. an event of Force Majeure; or

c. a written request by the COMPANY to delay delivery of the GOODS; or

d. the COMPANY's failure to carry out any of its obligations under the CONTRACT, then the CONTRACTOR shall be entitled to an extension of time to the DELIVERY DATE (equal to the period of delay) and shall promptly request such extension in writing from the COMPANY.

8.3.9 **Additional Services, Materials, Supplies and Equipment**

If it is not a part of contract, Company will pay based on agreed cost or actual cost plus 5% handling / service charges. The proof of item prices shall be submitted in original by the contractor to the Company.

8.3.10 The Company has full right to delete any item (s) / service(s) from the contract. The pay will only affect the quantities of item(s) / Service(s) as certified by the company's representative.

8.3.11 **Title and risk of loss**

I. Except as otherwise provided herein, all GOODS furnished by CONTRACTOR hereunder shall become the property of COMPANY when the GOODS or part thereof are delivered to the DELIVERY POINT.

II. Notwithstanding the foregoing, CONTRACTOR shall be responsible for and shall bear any and all risk of loss or damage to the GOODS until delivery thereof in accordance with the delivery provisions of this CONTRACT. Upon such delivery, risk of loss or damage shall pass to COMPANY; provided however, that any loss or damage, whenever occurring, which results from CONTRACTOR's non conforming packaging or manhandling or crating shall be borne by CONTRACTOR.

III. Contractor shall insure Goods on a warehouse-to-warehouse basis

IV. The risk of loss of or damage to the GOODS and title to the GOODS shall transfer from the CONTRACTOR to the COMPANY at the time the GOODS are delivered in entirety to the COMPANY at the DELIVERY POINT in accordance with this CONTRACT.

V. CONTRACTOR shall insure GOODS at their full replacement value until delivery of GOODS in accordance with the terms of this CONTRACT and COMPANY may require evidence of insurance at their full replacement value.

VI. The delivery of the GOODS by the CONTRACTOR shall be made as per the "Terms of Shipment" mentioned in SECTION-VII, of the CONTRACT and the "Terms of Shipment" shall be guided by the definitions of Incoterms 2020

8.4 **INSPECTION AND TESTING**

I. The CONTRACTOR shall, at its own cost, be responsible for carrying out all tests and inspections of the GOODS required in accordance with the CONTRACT, together with any other inspections or tests required by any applicable code, LAW, ordinance or regulation.

II. The CONTRACTOR shall give the COMPANY reasonable advance notice in writing of the date, place and time of any inspection or test being carried out on the GOODS and the COMPANY shall be entitled to attend. Copies of all inspection or test reports, inspection or test data and any other inspection or test information carried out by the CONTRACTOR in terms of the CONTRACT shall be promptly forwarded by the CONTRACTOR to the COMPANY.

III. The COMPANY and/or COMPANY's appointed inspection agency shall be entitled to inspect and/or test the GOODS at any time prior to delivery (wherever the GOODS may be) and the CONTRACTOR shall give the COMPANY and/or COMPANY's appointed inspection agency all reasonable assistance (including granting, or procuring the grant of, access rights) in respect of any such inspection and/or testing. Any such inspection and/or testing by the COMPANY and/or COMPANY's appointed inspection agency shall not relieve the CONTRACTOR of any obligation under the CONTRACT. Failure by the COMPANY to inspect and/or test the GOODS shall not relieve the CONTRACTOR of any responsibility or liability in respect of the GOODS.

IV. If the results of any inspection or testing indicate that the GOODS do not conform, or are unlikely to conform, to the CONTRACT, the CONTRACTOR shall immediately take such action as is necessary to ensure conformity at no additional cost to the COMPANY.

V. The COMPANY shall inspect the GOODS as soon as reasonably practicable before the shipment or after the GOODS have been delivered to the COMPANY in accordance with this CONTRACT. If the GOODS do not meet the requirements of the CONTRACT, the COMPANY shall be entitled to reject the GOODS and shall notify the CONTRACTOR of its rejection. In such event, the risk in, and title to, the rejected GOODS shall immediately re-vest in the CONTRACTOR and the COMPANY shall have no further liability in respect of such rejected GOODS.

VI. **Inspection of Contractor Equipment**

Company shall have the right at any time to inspect and reject for valid cause any items of equipment furnished by the Contractor for performance of the Services and Contractor shall replace, at no additional cost to Company, such items so rejected with items free from defects or if Company agrees, repair such items at Contractor's cost. All supplied shall be new & unused & shall not be more than one year old from the date of manufacture. Documentary proof shall be provided for the same. Any substandard material received/delivered at site shall be rejected outright. Inspection or approval by Company shall not relieve Contractor of warranty obligations. All materials supplied shall be new and unused and subject to inspection by Company or its Third Party Inspection Agency (TPIA).

8.5 **EXPEDITING**

I. CONTRACTOR shall be solely responsible for delivery in accordance with the requirements of the CONTRACT and for expediting all matters relating to the CONTRACT and sub-orders with its suppliers. Notwithstanding the foregoing the GOODS furnished under this CONTRACT, including all warranty work, shall be subject to expediting by COMPANY and CONTRACTOR shall bear all costs of such expediting.

II. COMPANY's REPRESENTATIVES shall be afforded free access during working hours to CONTRACTOR's plants/facilities, and CONTRACTOR agrees to procure a similar right for COMPANY, for expediting purposes with respect to CONTRACTOR's suppliers. In addition, CONTRACTOR shall furnish a weekly progress report by e-mail to COMPANY or as and when requested, in case the GOODS are not readily available and are to be procured by the CONTRACTOR from its supplier.

III. CONTRACTOR shall notify COMPANY in writing of any actual or anticipated delays immediately upon discovery. Such notice shall include an estimated period of delay, cause, and corrective actions being taken.

8.6 **DOCUMENTATION**

I. The CONTRACTOR shall prepare and provide to the COMPANY all DOCUMENTS which are required to be prepared and/or provided by the CONTRACTOR in accordance with the provisions of this CONTRACT, before the DELIVERY DATE as specified in this CONTRACT.

II. Prior to finalization of any DOCUMENT, the CONTRACTOR shall, if requested by the COMPANY or where required by the CONTRACT, submit such DOCUMENT to the COMPANY for review and/or approval. The COMPANY shall respond to the CONTRACTOR in respect of any such DOCUMENT within the time specified in this CONTRACT (or if no time is specified, within a reasonable period of time).

III. All DOCUMENTS shall be fit for the purposes specified in the CONTRACT.

IV. Subject to Clause V below, all DOCUMENTS prepared, produced or created by the CONTRACTOR for the COMPANY pursuant to this CONTRACT shall become the property of the COMPANY and title to, and copyright in, such DOCUMENTS shall vest in the COMPANY from the date of commencement of such preparation, production or creation.

V. Nothing in Clause IV above shall give the COMPANY any right or CLAIM over any item prepared, produced or created by the CONTRACTOR outside this CONTRACT or which was in existence prior to the date of this CONTRACT, provided that the COMPANY shall have the right to possess and use any such item where it is provided to the COMPANY as part of the DOCUMENTS.

8.7 **REPRESENTATIVES**

I. The COMPANY's REPRESENTATIVE(s) shall act in full charge of the CONTRACT and shall have full authority to liaise with the CONTRACTOR's REPRESENTATIVE(s) to resolve all day to day matters which may arise between the CONTRACTOR and the COMPANY.

II. The COMPANY's REPRESENTATIVE(s) shall monitor the performance of the CONTRACT and shall have the authority necessary to enforce the provisions of this CONTRACT.

III. The CONTRACTOR shall direct all matters relating to the CONTRACT to the COMPANY's REPRESENTATIVE(s) and shall act only in accordance with the instructions of the COMPANY's REPRESENTATIVE(s).

IV. The CONTRACTOR's REPRESENTATIVE(s) shall act in full charge of the CONTRACT and shall have full authority to liaise with the COMPANY's REPRESENTATIVE(s) to resolve all day to day matters which may arise between the CONTRACTOR and the COMPANY.

V. Either PARTY may:

(a) revoke the appointment of any person appointed as that PARTY's representative and may appoint another person as representative in his/her place; or

(b) appoint any person to be an additional representative for a stated purpose.

No such revocation or appointment shall be effective until notice of it is given to the other PARTY.

8.8 **COMPANY'S WORK /COMPLETION PROGRAMME**

8.8.1 **Work Programme:**

The completion schedule for Design, Engineering, Procurement, Supply, Fabrication, Civil Works, Erection, Inspection, Testing and Commissioning of Crude Oil Transfer Pump House along with all associated works shall be as specified in the Scope of Work. The Contractor shall submit a detailed project execution schedule in Primavera / MS Project or equivalent project management software for review and approval by the Company.

8.8.2 Contractor to Comply with Company's Work / Completion/Works Programme. Contractor shall use all reasonable care and attention to ensure all aspects of the requirements set forth in Company's Work / Completion / Works programme which are to be provided by Contractor are complied with and to ensure that Company's other contractors are afforded all reasonable facilities to similarly comply as appropriate. Contractor shall carry out checks on any of the requirements of the Work / Completion / Works programme, as directed by Company and record and report the results of such checks to the Company.

8.8.3 The Contractor shall execute and complete the Work in accordance with the approved Project Execution Schedule and instructions issued by the Company's Representative.

8.9 **PERFORMANCE OF THE WORK/SERVICES/SUPPLIES**

8.9.1 **Conduct of Services /supplies**

The Services shall be performed by Contractor in accordance with Good Oilfield Practices and applicable engineering standards. The Contractor shall be responsible for all interface issues, related to providing multiple services under the umbrella of Integrated Services as required as per scope of work / services / supplies.

8.9.2 All correspondence from either party to the other party shall be addressed to its Contract Administrator, unless provided otherwise in the Contract.

8.9.3 **Discipline**

8.9.3.1 Contractor shall maintain at all times strict discipline and good order among its employees and subcontractors and shall abide by and conform to all reasonable rules and regulations promulgated by Company governing the scope of work/supplies.

8.9.3.2 Contractor shall and shall ensure that its employees and subcontractors are qualified, experienced & trained and shall, comply with the all Conditions set forth in scope of work /supplies. Contractor agrees to all provisions set forth in this tender and further agrees that failure to comply with the requirements of scope of work/supplies shall constitute grounds for termination of this Contract.

8.9.3.3 Company has the right to ask contractor to change / replace its personnel for misbehaving / indiscipline during contract period. Contractor will replace person, within 5 working days without affecting the work progress.

8.9.3.4 Contractor shall coordinate its work with other contractors working at the Site and shall not interfere with the activities of other contractors.

8.9.4 **Legal Requirements**

Contractor shall apply for and obtain all necessary certifications, permits, licenses and authorizations for personnel, equipment and technology required in India, including any authorizations or licenses from any governmental body for use of Contractor's Personnel or technology in the Services or the export of such technology to India.

Provident Fund Act:

No dues of Payment of PF Contribution from the Employer & Employees in respect of Contractor working for Onshore Block under Contract along with monthly Returns and remittance particulars of Challans and Statement of workmen.

ESI Act:

No dues of Payment of ESI Contribution from the Employer & Employees in respect of Contractor working for Onshore Block under Contract along with their Half-yearly Returns and remittance particulars of Challans and Statement of workmen.

As per the Labour enactments:
Regular compliance to Minimum Wage Act, No Dues to the Employees who have resigned or whose services are terminated, engaged by the contractors regarding payment of Wages, service compensation, Bonus, Gratuity, Un-availed Leave salary, Notice pay etc.

Labour Welfare Cess:
All prices are inclusive of all taxes including Labor welfare cess. The GST shall be extra at actual. Each bidder has to provide the proof of deposit of Labor welfare cess to SUNPETRO duly signed by CA of the firm.

The Contractor shall indemnify the Company in case of his failure in meeting the statutory requirements as mentioned above. Submission of the above documents shall not relieve the Contractor of any liability to comply with the Applicable Laws.

8.10 **TERMINATION BY COMPANY**

8.10.1 Unless otherwise provided, the Contract shall terminate upon expiry of the Term of the Contract. The Contractor shall be paid for the Work successfully completed and certified by Company Representative along with demobilization charges, if any.

A. Termination for Non- Mobilization or Non-commencement of Work

If the Contractor fails to timely mobilize the Materials or Equipment required to perform the work or having mobilized, fails to timely commence the work in accordance with the terms of the Contract, it would amount to material breach under the Contract and in such event, the Company shall have right to terminate the Contract immediately upon expiry of such specified time, unless otherwise provided or agreed by the Company.

Consequences of Termination:
Upon termination of Contract by Company under this sub-clause, the Contractor shall not be entitled to any payment whatsoever. The Contractor shall immediately refund any sum which the Company might have paid to the Contractor under this Contract. Unless, otherwise provided in the Contract, the Contractor shall compensate the Company for all losses, expenses etc. which the Company shall sustain on account of such breach by the Contractor. Company shall also have the right to forfeit the PBG.

B. Termination for events specified below:

Occurrence of any of events as specified below shall be construed as Event of Default. The Company shall inform the Contractor of the same by issuing a notice of default (hereinafter referred to as "Notice of Default"). If the Contractor, upon receipt of such notice, fails to remedy such default with Seven (7) days, then the Company shall have the right to terminate this contract forthwith. Event of default shall occur if the Contractor:

a) Makes a general assignment for the benefit of its creditors; or
b) Refuses or fails to Work enough properly skilled workmen or proper equipment, or materials or services to accomplish the Work in accordance with the original work schedule and the contract; or
c) Fails to make prompt payment to Sub-contractors or materials, equipment or labour; or
d) Is in breach of Applicable Law; or
e) Otherwise breaches the provisions of the contract or part thereof; or
f) Suspends or abandons activities in the Work site; or Is wound up (not being a member's winding up for the purpose of reconstruction or amalgamation only) or if any deed or action substantially equivalent to any of the foregoing deeds or actions either in Indian law or applicable law shall occur; or
g) Fails to provide uninterrupted services/perform work.

Consequences of Termination:
Upon termination of Contract by Company under this sub-clause B, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination. Further, the Company shall be entitled to take possession of the Work and finish the Work at the risk and cost of the Contractor by whatever method Company deems just and expedient. Unless

otherwise provided in the Contract, the Contractor shall compensate the Company for all losses, expenses etc. and additional expenses which the Company shall sustain, to get the work executed, on account of such breach by the Contractor. Company shall also have the right to forfeit the PBG.

C. Termination in the event of Force Majeure

In the event that a condition of Force Majeure exists at the Site for a period of fifteen (15) consecutive days, Company shall have the right to terminate this Contract by giving two (2) days advance notice to Contractor.

Consequences of Termination:

Upon termination of Contract by Company under this sub-clause, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination and demob charges, if applicable as per Contract. No Party shall be obligated to pay the other Party for losses (including consequential losses), expenses, damages etc. sustained on account of event of Force Majeure.

D. Termination for Convenience

Company shall have a right to terminate the Contract in whole or in part, at any time with fifteen (15) days prior written notice thereof to the Contractor. Upon any such termination the Contractor irrevocably agrees to waive any and all claims for damages, compensations, including loss of anticipated profits, on account thereof, and as the sole right and remedy of the Contractor, Company shall pay the Contractor in accordance with Price Schedule mentioned in the Contract for the work / services performed by the Contractor till the date of such termination.

E. Termination for non-performance or non-completion or non-satisfactory performance

The Contractor shall perform the work in accordance with GIPIP and the terms and conditions of the Contract. If the Contractor does not perform the Work or any part thereof or does not complete the envisaged work or its performance is non-satisfactory, then Company shall issue a notice (**"Remedy Notice"**) to the Contractor to remedy such non-performance or non-completion or non-satisfactory performance. Upon receipt of such Remedy Notice, the Contractor shall remedy such default within Seven (7) days. The Company may ask the Contractor to re-perform any of such services, at sole risk and cost of Contractor. In the event, the Contractor fails to remedy such default within the specified period or the performance of the Contractor is non-satisfactory repeatedly; the Company shall have a right to terminate the Contract immediately without any further notice.

Consequences of Termination:

Upon termination of Contract by Company under this sub-clause, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination. Further, the Company shall be entitled to take possession of the Work and finish the Work at the risk and cost of the Contractor by whatever method Company deems just and expedient. Unless otherwise provided in the Contract, the Contractor shall compensate the Company for all losses, expenses etc. the additional expenses which the Company shall sustain on account of such breach by the Contractor. Company shall also have the right to forfeit the PBG

8.10.2 Upon receipt of Notice of Termination, the Contractor shall, unless a notice directs otherwise:

a) Immediately discontinue the work from that date and to the extent specified in the notice.

b) Place no further orders or agreements for materials, equipment, services or facilities except as may be necessary for the completion of such Contract portion of the work which is directed to be continued.

c) Do only such work as may be necessary to preserve and protect Work already in progress and protect materials, facilities and equipment on the work site or in transit thereto.

8.10.3 **Payment upon Termination to be confirmed**

If the unpaid balance of the Contract Price exceeds the cost incurred by the Company on finishing the work as provided in the Contract, such excess shall be paid to Contractor upon completion of the Work. If the unpaid balance of the Contract Price is lower than the cost incurred by the Company on finishing the work as provided in the Contract, the Contractor shall promptly pay the difference to the Company upon receipt from the Company of the certificate certifying the amount of such difference. Obligations arising under this article shall survive the termination of the contract.

8.10.4 **De-hiring:**

Company may, at its option, de-hire the services of the Contractor due to interruption in the work / unit program, by giving three (3) days written notice to the Contractor and during this period no charges for equipment and personnel etc. shall be payable by Company. However, contractor will take immediate action to demobilize the personnel, machines and other equipment immediately. SunPetro may call the Contractor along with the whole setup by issuing fifteen days' notice to mobilize again.

8.10.5 **Suspension of Work:**

i. The Company may, at any time and for any reason, suspend the whole or any part of the Work by issuing a written notice to the Contractor specifying the scope and effective date of such suspension.
ii. Upon receipt of such notice, the Contractor shall immediately suspend the Work to the extent specified in the notice and shall take all reasonable steps to safeguard, protect and preserve the Work already executed, materials, equipment and plant at the Site.
iii. During the period of suspension, the Contractor shall not remove any materials, equipment or personnel from the Site without prior written approval of the Company, except as necessary to protect life, property or the Work.
iv. The Contractor shall resume the Work as soon as the Company issues written instructions to resume the Work and shall make all reasonable efforts to minimize any delay in completion of the Work arising from such suspension.
v. In the event that the suspension continues for a period exceeding thirty (30) consecutive days, the Parties shall mutually discuss and agree on any reasonable extension of time for completion of the Work.

8.11 **HEALTH, SAFETY & ENVIRONMENT (HSE)**

General

During bid evaluation stage, Contractor shall also be evaluated on HSE. HSE evaluation shall be based on Contractor's response to the bid. Company may also conduct pre hire HSE audit of Contractor to assess their HSE capability. Contractor to comply with HSE standards as applicable to Oil & Gas Industry in addition to all the relevant HSE standards required for performance of work as per Scope of work.

Contractor warrants that it shall perform all such services in a Good and Workmanlike Manner and as per the guidelines issued by DGH and OISD from time to time. Contractor warrants to Company that Contractor's Personnel who are skilled, experienced and competent in their respective Contract positions, and who are fit for duty shall perform all Services. Contractor undertakes to ensure that its personnel comply with Company's regulations regarding health, safety and training which are in force at such time and at such place.

Before the commencement of work, Contractor is required to submit the Safety Management Plan including details of Risk Management related to nature of job. To ensure the safe operations at site, Contractor is required to submit the written safe procedures related to work and comply with DGMS / OMR-2017 OISD / Petroleum Rules and other applicable statutory regulations. This also includes OISD requirements including amendments / modifications issued by DGMS from time to time.

Contractor to provide Health, Safety & Welfare Contract policy Manual which should be aligned with Company's HSE Contract policy

8.11.1 **Safety**

8.11.1.1 In performing the Services hereunder, Contractor and its officers, directors and employees and any subcontractors and their officers, directors and employees shall comply with the provisions of and/or meet the Health, Safety and Environment best Industry standards and requirements set forth in:

a) the safety management system (hereinafter referred to as "the Safety Management System") established by Contractor.
b) Onshore safety, health, training and protective clothing requirements; and
c) All applicable laws, rules and regulations of India.
d) Proper safety kits liveries and uniform for all employees / subcontractors working at site.

8.11.1.2 Prior to commencement of operations, Contractor shall ensure that all Contractor's personnel and the personnel of its subcontractors are familiar with the provisions of ***Contractor's Safety Management System***.

8.11.1.3 Contractor is responsible for the supervision, monitoring and compliance of and with the requirements and shall take prompt and appropriate action to correct any unsafe work practices by its personnel and those of its subcontractors.

8.11.1.4 Company shall, at its complete discretion, monitor and audit Contractor and its subcontractors in respect of compliance with the requirements of this Clause. Contractor shall co-operate fully with, and rectify any deficiencies in compliance Contract pointed out by the Company.

8.11.1.5 If during performance of the Services, Company's Representative is of the opinion that the Contractor is not conducting the Services in compliance with the Safety Case and/or Safety Management System or is conducting the work in such a way as to endanger the safety of Contractor's Personnel or Company's personnel, Company Equipment or any of Company's other contractors' plant, equipment or materials, then Company's Representative shall notify Contractor of the breach of safety involved and suspend operations, and the related provisions of the contract shall apply as if the operations had been suspended due to breakdown of equipment.

8.11.1.6 Incompetent person shall be at RISK to carry out critical operation. Hence all contractor personnel need to be competent & trained to carry out assigned job. Training need for all contractor's Employee shall be identified & accordingly shall be trained by the contractor.

8.11.1.7 Required PPE to be identified & sufficient stock shall be maintained at all time. Also, the Contractor's Employee shall be trained for uses of PPE.

8.11.1.8 Contractor shall provide certificates for but not limited to Lifting Equipment like Crane, Slings, D-Shackles, Chain pulley Blocks. Lifting Equipment shall be colour coded & numbered.

8.11.1.9 Contractor shall provide Test certificate for Cylinder, High pressure Hoses, & Electrical appliances or as specified in the contract.

8.11.1.10 Contractor shall ensure PTW developed by Company and shall be followed

8.11.1.11 In case an item or activity is not covered by any HSE standard, or if the standard is considered to be inadequate, Contractor shall immediately notify the Company of such absence or inadequacy of defined standards. Company & Contractor shall then jointly develop & agree on additional standards to cover the item or activity and reduce the associated risk to as low as reasonably practical (ALARP) before the item or the activity is included or continued in the performance of the Work.

8.11.2 **Environment**

8.11.2.1 Contractor hereby acknowledges Company's commitment to conduct its operations in a manner that not only complies with all relevant environmental protection and Contract pollution control legislation of India but also that, such operations do not cause environmental damage or pollution. In recognition of the commitment, Contractor shall perform the Services in an environmentally acceptable and safe manner consistent with GIPIP and shall ensure that its performance of the Services is properly monitored

8.11.2.2 Contractor shall prepare Aspect & Impact document related to their Job scope and shall submit to Company.

8.11.2.3 Valid Contract pollution under control Certificate for Engine above 150 KVA

8.11.2.4 Contractor shall have Waste Management Plan for their scope of work.

8.11.2.5 Hazardous Waste shall be sorted out & disposed as per the pollution Control Board norm as applicable.

8.11.2.6 Contractor should display MSDS for Chemicals, Reaction Matrix for Chemicals and High noise area.

8.11.2.7 Eye washing station shall be provided at suitable place.

8.11.2.8 Working area is to be illuminated as per Lux standard.

In particular, the Contractor shall: -

a) employ generally accepted industry standards, including, as required, advanced techniques, practices and methods of operation then available for prevention of environmental damage;

b) take necessary and adequate steps to prevent environmental damage and, where some adverse impact on the environment is unavoidable, to minimise such damage and the consequential effects thereof on people and property; and

c) adhere to the guidelines, limitations or restrictions, if any, imposed by the Environmental Clearance referred to in this clause as applicable on the date of this Contract and as such Environmental Clearance may be revised, expanded or replaced.

8.11.2.9 Without limiting the generality of the provisions of this Clause hereof, Contractor shall comply with, and ensure that its employees, agents and subcontractors comply with, all applicable environmental protection and Contract pollution control laws, regulations, rules and ordinances of all relevant state, central and local Government of India.

8.11.2.10 If during Contractor's performance of the Services, Company is of the opinion that Contractor is either not conducting the Services in compliance with any one or more of the provisions of Clause, all applicable environmental protection laws, rules and regulations imposed by state, central or local governments and all environmental guidelines and procedures furnished by Company to Contractor from time to time, or is conducting the Services in such a way as to endanger the environment or as to risk being in breach of any laws, rules or regulations of any such bodies, then Company shall notify Contractor of the breach involved and suspend all operations whereupon the provisions of clauses mentioned herewith in the contract apply as if the Well Operations had been suspended due to equipment breakdown.

8.11.3 Contractor has to submit Monthly Compliance Reports to the company on all aspects as listed above or as decided by the company.

8.12 **SETTLEMENT OF DISPUTE/ ARBITRATION**

8.12.1 The Company and the contractor undertake that all disputes, differences or questions at any time between the parties as to the construction to this Contract or as to any matter or thing arising out of it or in any way connected therewith ("Disputes") shall be resolved between the parties in good faith by having the discussion between the Project Manager / Contract Manager level and if required may be taken up to the Company -Head level to resolve the issues / disputes in the interest of the work and at least three attempts shall be made by the both the parties in this direction.

8.12.2 In the event the disputes arising out of / connected with this Contract, which cannot be amicably resolved shall be referred to arbitration. The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996, (including any statutory modifications or re-enactments thereof) and rules there under excluding any laws, opinions, or regulations that would require application of the laws of any other jurisdiction). The Arbitral Tribunal shall consist of three arbitrators. The Party raising the Dispute shall give a Notice to that effect to the other party and shall nominate the first Arbitrator in such Notice. The other Party shall respond to such Notice within 30 days of receipt thereof and nominate the Second Arbitrator. The two arbitrators so nominated shall appoint the third arbitrator within 30 days of appointment of the Second arbitrator. The Third Arbitrator so appointed shall be the Presiding Arbitrator. The arbitrators to be appointed shall be retired Judges of any of the High Courts or Supreme Court of India. Unless otherwise agreed in writing, the arbitration shall be held at Mumbai, India.

8.12.3 It is also a term of the Contract that the Contractor shall not stop the Work under this Contract, and the Work shall continue as expected regardless of whether the arbitration proceeding have commenced or not. Notwithstanding any disagreement, dispute, protest, request for or pendency of arbitration or court proceedings relating directly or indirectly to the Work, at all times, Contractor shall proceed with the Work in accordance with the determinations, instructions and clarifications of Company in accordance with the terms and conditions of this Contract. If the Contractor fails to proceed with the Work, he shall be considered to be in default and shall be held liable for direct, indirect and consequential costs and expenses arising from such default. During the period Contractor is proceeding with the Work, he shall be paid the undisputed Contract portion of his claims which are due under the Contract.

8.12.4 The right to arbitrate disputes and claims under this Contract shall survive the termination or invalidity of this Contract or any term hereof.

8.12.5 Any award rendered by the arbitrators shall be final and binding upon the parties. Any judgment upon such award may be entered in any court having jurisdiction or application may be made to such court for judicial confirmation of such award and judgment or order of enforcement, as the case may be.

8.12.6 **GOVERNING LAW & JURISDICTION**

This CONTRACT shall be interpreted in accordance with and shall in all respects be subject to the Indian Law.

All disputes arising out of this transaction shall be subject to the jurisdiction of courts situated at Mumbai, India

8.13 **ENTIRE AGREEMENT/ WAIVERS**

8.13.1 This Contract sets forth the entire CONTRACT between Company and Contractor which shall supersede all previous communication/ agreements either oral or written. No terms, conditions, understandings or agreements supporting to modify or vary the terms of the Contract (whether written or oral) of the parties made prior to the date of this Contract shall apply except where Company and Contractor have expressly varied the same in writing under the terms of this Contract.

8.13.2 None of the provisions of this Contract shall be considered waived by Company unless Company gives such waiver in writing. No such waiver shall be of any past or future default, breach or modification of any terms, provisions or conditions of this Contract unless expressly set forth in such waiver.

8.13.3 None of the following shall release Contractor from any of the warranties or obligations of this Contract or be deemed a waiver of any right or remedies as to any prior or subsequent default in accordance with the Contract:

i) Failure by Company to insist upon strict performance of any terms or conditions of this Contract,

ii) Failure or delay to exercise any rights or remedies provided herein or by law,

iii) Failure to properly notify Contractor in the event of breach, except for any breach which according to provisions of Contract has to be notified,

iv) Acceptance of or payment for any Service or review of any design, or

v) Warranty on the Equipment if sold to Company by the Contractor will continue up to the expiry of the warranty period even if the Contract is expired or terminated.

8.14 **LIQUIDATED DAMAGES**

8.14.1 **Liquidated damage**

Time is the essence of the Contract. If the Contractor, for any reason other than Force Majeure or reasons attributable to the Company, fails to complete the Work within the stipulated Completion Period or within any extended time granted by the Company, the Contractor shall be liable to pay Liquidated Damages to the Company. The Liquidated Damages shall be calculated at the rate of One percent (1%) of the total Contract Price for each week or part thereof of delay, subject to a maximum of Ten percent (10%) of the total Contract Price. The payment of Liquidated Damages shall not relieve the Contractor from its obligation to complete the Work or from any other obligations and liabilities under the Contract. The Company shall have the right to recover Liquidated Damages from any amounts due or becoming due to the Contractor under the Contract or by invocation of the Performance Bank Guarantee or any other security provided by the Contractor.

The payment of liquidated damages pursuant to this section shall not affect the rights of Company as per Contract or Applicable laws including the following rights:

a. Terminate the Contractor or a portion or part of the Work thereof at any time during the term of the Contract and / or,

b. Recover damages resulting from Contractor's breach of any of the provisions hereof from any kind of dues and / or,

c. Get the Work done by any other contractor at the risk and cost of the Contractor and/or,

d. Invoke bank guarantee or any other security provided by the Contractor and/or,

By way of abundant caution, it is clarified that in addition to recovering liquidated damages, Company may exercise any one or more of its rights mentioned above as per the Contract and the Applicable Law.

8.14.2 The Parties agree that the liquidated damages indicated hereinabove are genuine pre-estimate of the minimum loss/ damage which COMPANY can suffer on account of delay / breach on the part of the Contractor, and the said amount shall be payable without any requirement of proof of the actual loss or damage caused by such delay / breach.

8.14.3 Where Company is required to wait for any reason for a Contractor Equipment and/or personnel which is not made available on the site as per the schedule, in addition to liquidated damages payable by the Contractor, the Contractor shall also pay as pre-agreed damages an amount equivalent to daily **operating rate** for hired equipment, till time such equipment is made available to Company.

8.14.4 By way of abundant caution, it is clarified that during this period of delay, Contractor will not be eligible for any payment, whatsoever.

8.14.5 **Delay Recovery:-** If the delay in completion of the Work exceeds the maximum limit of Liquidated Damages specified in the Contract, or if the Company reasonably determines that the Contractor is unable to complete the Work within the stipulated Completion Period, the Company shall have the right, without prejudice to any other rights available under the Contract, to terminate the Contract and/or engage another contractor to complete the remaining Work at the risk and cost of the Contractor.
Any additional cost incurred by the Company for completing the Work beyond the Contract Price shall be recoverable from the Contractor and may be deducted from any amounts due to the Contractor or recovered through invocation of the Performance Bank Guarantee or any other security available under the Contract.

8.15 **NOTICES**

All notices and other communications provided for in this Contract shall be in writing and shall be delivered at the addresses for notices given in the Contract. A party may notify the other from time to time of changes in the address for notices. E -mails and facsimile transmissions shall be held to have been received at the time of transmission report.

8.16 **APPLICABLE LAW**

All questions, disputes or differences arising under, out of or in connection with this Contract and the relationship of the parties hereunder shall be governed by and interpreted in accordance with the laws of India (both procedural and substantive) and parties hereby agree to submit to the jurisdiction of the Courts in Mumbai / Mumbai, India.

8.17 **ACTS AND REGULATIONS, GUIDELINES**

THE MINES ACT, 1952 along with the OIL MINES REGULATIONS, 2017 and all their amendments issued including requirements of Good International Petroleum Industry Practice (GIPIP) for all services are to be followed till validity of contract**.**

8.18 **CONFIDENTIALITY**

8.18.1 "Confidential Information" shall be deemed to include all information including but not limited to any technical, commercial and financial information, improvement, inventions, know how, innovation , technology, trade secrets, professional secrets, copyrights and any other intellectual property, discoveries, ideas, concepts, papers, software in various stages of development, techniques, models, data, source code, object code, documentation, Manuals, flow charts, research, process, procedures, functions, customer names and other information related to customers, price lists and pricing policies. However, the Parties hereto acknowledge that Confidential Information shall not include any information that: -

a) is now or subsequently becomes publicly known or available without breach of this Contract.

b) was previously in the possession of the Receiving Party without any obligation of confidentiality and which was not acquired from, provided, given, sold or otherwise disclosed (directly or indirectly) by the Disclosing Party not through this Contract.

c) is required to be disclosed under any Applicable Law (subject however to the party who is required to disclose the information as such is providing reasonable notice of the same to the other party, prior to making any such disclosure).

8.18.2 The Contractor shall hold the information confidential and shall not divulge or disclose the information, or make the information available to any person or entity, other than its representatives

and ensure that only such authorized Representatives who are expressly authorized by it to and whose duties require them to possess the Confidential Information shall have access to the Confidential Information on a need-to-know basis. In case of any breach of these terms or any act or omission by any of its authorized Representatives, then damages alone may not be an adequate remedy and that the remedies of injunction and specific performance or any other equitable relief may imposed.

8.19 **ASSIGNMENT AND SUBCONTRACTING**

8.19.1 Company shall be entitled to freely assign its rights, obligations and duties under this Contract to its Affiliate or other Participant or JV, for any Blocks by giving written notice. Company shall be entitled to assign its rights and obligations under this Contract to any third party with prior written consent of the Contractor, which shall not be unreasonably withheld.

8.19.2 Contractor shall not sublet or subcontract in part or in whole the Services to any third party without prior written consent of Company. If the Contractor subcontracts part of the Contract to a sub-contractor, Contractor shall ensure that sub orders reflect the requirements under this Contract and the Contractor shall furnish to the Company within one month from the dated of signing of the Agreement, a signed copy of the complete Agreement. Further in case of any change in the Contract with the Subcontractors, the same shall be notified to the Company with in a period of 7days.

8.19.3 However, no such approval for sub-contracting shall relieve Contractor from any obligation or liability under the Contract and Contractor shall be fully responsible for acts and omissions of any sub-contractor or supplier and its employees and agents as though they were the acts and omissions of Contractor or its employees or agents. Also, in no case sub-Contractors shall pass on any claim/ liability to Company.

8.20 **INVOICING AND PAYMENT**

8.20.1 Invoices shall be itemized with a full break down of the Service performed /supplies made and shall be complete with all back-up details, documentation, information, receipts, packing list, ocean bills of lading, certificate of origin, etc. and shall set forth the facts relating to all activities and transactions handled for Company's account and shall be verified and signed by an authorized signatory designated by the Contractor to show the basis for Contractor's application of the Contract payments and the resultant value of the invoice.

8.20.2 Contractor shall invoice the Company on an monthly basis or as agreed for payments hereunder on Completion of Services. Unless and otherwise mentioned anywhere else in this Contract, Company shall make payment, of the correct/ undisputed / Certified invoice supported with job sheet / field ticket / any other relevant document, which is jointly signed by Engineer In-charge / Company representative along with the Contractor representative, within Thirty (30) working days period after receipt of invoice unless the Company disputes the invoice or a part thereof. Prices negotiated and finalized shall be firm and binding for the agreed Contract period as per Clause 3.2. (General Instructions) or till the completion of entire scope of Work, whichever is later. No interest shall be payable on delayed payments by the Company. Exchange Rate used for payment will be the average of SBI Selling and Buying rate prevailing one day prior to the date of release of payment.

The invoice should be submitted to Company only after having submitted the following documents at Mumbai, if applicable. The Contractor shall indemnify the Company at all times for the damages caused or losses incurred by the company due to non-compliance with the existing laws and regulations by the Contractor.

8.20.3 The settlement of any invoices shall not be deemed acceptance of the Services or any part thereof and shall not prejudice the right of Company to question the propriety of any such charge at any time thereafter. A written response to Company's claim for omission corrections or errors in charges and credits for Company's account shall be made by Contractor as soon as practicable and in no event later than sixty (60) days from the date of such claims.

8.20.4 Contractor shall support all invoices with any data and/or information reasonably requested by Company. Contractor agrees to retain all applicable documentation and records for a period of not less than Four (4) years from the end of the calendar year in which this Contract terminates. Company or any party nominated by Company shall be entitled to audit and examine all documents and/or records necessary to verify the correctness of charges contained in any invoice. The payment of an

invoice shall not preclude Company's right to audit any charge during said three-year period. Any discrepancies found in such audit shall be paid or reimbursed forthwith. Company shall have the right to reproduce any such documents which have been inspected.

Invoices shall be endorsed with the Contract number and title and shall be submitted in tri-plicate with one original and two Copies (clearly marked “Original” or “Copy”) once in each month and shall be forward

Head –Commercial & Supply Chain Management
Sun Petrochemicals Private Limited
8th, 9th & 10th Floor, ATL, Corporate Park, Opp. L&T Gate no. 7,
Saki Vihar Road, Chandivali, Powai, Andheri (E),
Mumbai – 400072, Maharashtra [INDIA]

8.20.5 All payments to the Contractor under this Contract shall be made in the currency quoted by them or Indian Rupees to the Indian Bidders or Indian Rupees or United States Dollars to the Foreign Bidders. The currency of price schedule shall not be allowed to be changed during the term of the Contract.

8.20.6 No payment shall be made for any portion of the Work which is rejected by the Company due to non-compliance with the specifications, standards or requirements of the Contract. The Contractor shall rectify, replace or re-perform such Work at its own cost and within the time specified by the Company. Any delay arising due to such rectification or replacement shall be solely to the Contractor’s account and shall not entitle the Contractor to any additional payment or extension of time unless otherwise approved by the Company in writing

8.20.7 **Audit**

The Company and its authorized representatives shall have access to, and the right to audit and obtain copies of any of Contractor's and its subcontractors' or agents' documents of whatsoever nature (except the confidential information of pricing formulate of the Contractor) relating to or in connection with the performance of the Work, including books, vouchers, receipts, invoices, correspondence, government correspondence, contracts, representations before statutory authorities, tribunals, courts and any other records. The Contractor will preserve and will cause its subcontractors and agents to preserve all such records for a period of four (4) years from the end of the calendar year in which this Contract terminates and will, upon written request, make them available to Company and its representatives. The Contractor shall provide photocopies of any documents within a reasonable period whenever demanded by the Company, Audits referred to in this Clause will be made during Contractor's normal working hours. Any payment made by the Company shall not imply acceptance of liability on the part of the Company. Company shall have the right to notify Contractor of any matters arising in an audit which may necessitate making an adjustment; and such adjustment, whether by reimbursement to Company or otherwise, shall then promptly be made. Company shall also have the right to obtain assistance and statements from any of Contractor’s Personnel to the extent it deems necessary, and Contractor and its subcontractors shall make such personnel available at their assigned locations if still under employment with Contractor or its subcontractors.

8.21 **TAXES AND DUTIES**

8.21.1 **Taxes:**

All rates and the Contract Price shall be inclusive of all concessional Taxes & duties and such other payments as may be payable under any Applicable Laws (except GST). Except as stated, Contractor shall bear all income, corporate, property, GST, work contract taxes and all other taxes, duties, levies, surcharges, imports and similar taxes and duties duly levied or imposed on Contractor on account of the payments received by Contractor from Company for the Services as may be payable under the Applicable Laws and any amendments thereto. GST if applicable shall be charged over and above the quoted prices and shall be paid by Company along with the invoice on submission of proof.

Company shall withhold from the payments to Contractor such amounts as determined by the prevailing taxation laws in respect of Contractor’s Services. Company shall deposit these tax withholdings at source with the Indian revenue authorities and provide Contractor all appropriate tax receipts and forms evidencing the deposit of these tax withholdings. Contractor shall be responsible for filing returns of income to Indian revenue authorities for payments made by the Company pursuant to this Contract in accordance with the prevailing taxation laws.

8.21.2 **Personnel Taxes**

All employment taxes and contributions imposed by any law, regulations or by trade unions with respect to or measured by the compensation, wages, salaries or other compensation paid to employees of the Contractor, including without limitation, taxes and contribution or unemployment compensation insurance, medical and health insurance, welfare funds, pensions and annuities and disability insurance shall be paid by Contractor. In the event that Contractor fails to do so and Company is liable to any interest or any penalty arising out of such personnel taxes, Company shall have the right to recover all such amounts from Contractor.

8.21.3 **Custom Duty, Entry taxes, etc.**

Equipment, materials and supplies imported for use solely and exclusively on matters (inter alia) related to petroleum operations. Company and Contractor agree to cooperate and to use all reasonable endeavors to obtain any exemption to which Company and/or Contractor is entitled in accordance with such notifications. Contractor expressly agrees to furnish necessary documentation, bonds or undertakings to Government authorities and / or to Company, which may be required for availing such concessional exemption. It is expressly understood that Contractor shall be required to re-export any of its Equipment (unless consumed during performance of Services) and left-over chemicals / additives imported under this Contract to enable Company to avail exemption of custom duties. Contractor undertakes to re-export Equipment at the earliest but not later than within fifteen (15) days of completion or termination of Services and shall be solely responsible for all customs formalities for import and export of Contractors Equipment and materials at the Contract rt of entry or the Contract rt of export as the case may be.

8.21.4 Contractor shall protect, indemnify and hold harmless Company, its Co-ventures, their directors, officers, and employees from any and all claims or liability for incorrect or under valuation of tax payable on income excess profits, customs duties, royalty or other taxes assessed or levied by any government agency including any tax assessed or levied on account of property or equipment of contractor, wages salaries or other benefits paid to Contractors employees or employees of sub-contractors, on Company its Co-ventures, their directors, officers and employees' including from any and all claims or on account of any payment made to or earned by contractor.

8.21.5 **Change in Law**

8.21.5.1 In the event of any change or amendment of any Act or law, Rules or Regulations of Government of India or Public Body, which becomes effective after the effective date of this Contract and which results in increased / decrease cost of the works under the Contract though increased / decreased liability of taxes, (other than personnel and Corporate taxes), duties, the Contractor shall be indemnified for any such increased cost by the Company subject to the production of documentation proof provided the rates and all applicable taxes along with the tax rate, were clearly indicated at the time of Bid submission by contractor.

8.21.5.2 Company shall not bear any liability in respect of (i) Personnel taxes on the employees of Contractor and the employees of all its sub-Contractors etc. (ii) Corporate taxes in respect of the Contractor and its sub-Contractors." (iii) Any taxes for which the Contractor or any or all of his sub-contractors are directly assessable i.e. corporate taxes in respect of Contractors and all of their sub-contractors, agents etc.

8.22 **INSURANCE**

8.22.1 For its risks and liabilities assumed hereunder, the Contractor shall, at its own expense procure and maintain as a minimum, the insurances set out in this Clause and ensure that they are in full force and effect throughout the life of the Contract. All such insurances (including insurances provided by Sub-Contractors) other than Employers Liability Insurance / Workmen's Compensation to the extent of the liabilities assumed by the Contractor under the Contract,

8.22.2 The provisions of this Clause shall in no way limit the liability of the Contractor under the Contract. All such insurances shall be placed with reputable and substantial insurers acceptable to the Company.

Contractors Insurances shall be primary to and receive no contribution from Company insurances. If the Contractors neglects, fails, or refuses to obtain or maintain insurances required to be affected, or fails to provide certification etc., the COMPANY has the right to procure and maintain policies at Contractors risks and 5% more expense.

8.22.3 The Contractor shall be responsible for and shall save, indemnify, defend and hold harmless SunPetro , Joint Venture partners of SunPetro, the Government of India, their respective officers, directors employees, agents and other persons with whom Company may be associated (the COMPANY) from and against all claims, losses, damages, costs (including legal costs) expenses and liabilities in respect of:

a. loss of or damage to property of the Contractor whether owned, hired, leased or otherwise provided by the Contractor arising from or relating to the performance of the Contract,

b. personal injury including death or disease to any person employed by the Contractor arising from or relating to the performance of the Contract.

8.22.4 Prior to commencement of services / delivery / work hereunder or within 7 days of signing of Contract, whichever is later, Contractor shall deliver to Company the following certificate(s)

a) evidencing the issuance of insurance containing the coverage required herein and

b) providing that insurance shall not be cancelled or materially changed without thirty (30) days prior written notice to the Company. Commencement or performance of services/work without delivering the certificates of insurance shall not constitute a waiver of contractor's obligation to provide the required coverage.

8.22.5 The insurance shall cover the following:

1. All consequences of occupational accidents or illness Employer's Liability Insurance, in such amounts as may be required by the laws of India or any other country or Contract political subdivision thereof applicable to any employee engaged in performance of the work; as per regulations, extended to cover benefits provided under maritime law, if applicable. Contractor has the obligation to comply with Indian Social Security laws and regulations.

2. Commercial or comprehensive General Liability Insurance, including coverage for contractual Liability to cover liability under this contract and cross liability Sudden and Accidental pollution, in the amount equal to the contract value combined single limit each occurrence with an aggregate limit of contract value for bodily injury and property damage provided that there will not be any excess/deductibles in the Contract policy to be taken by the contractor. The coverage should provide insurance for any incident or series of incidents covering the operations of the Contractor in the performance of the Contract. If Contractor's Liability Insurance is written on a "claims made" form it must provide for (I) a retroactive date prior to, or coincident with, the commencement of service under this contract and (ii) a minimum extended claims reporting period of one (1) year. This Contract policy shall include Company and its directors, officers, employees and agents as additional insured.

3. Comprehensive Automobile Liability Insurance, covering owned, non-owned and hired motor vehicles, with a limit of liability as per regulations/ laws including passenger liability.

4. Personal Accident and Medical Insurance for each of Contractor's Personnel valid for the area(s) in which Work is to be performed and for any travel for any period(s) during which Work is being performed. This insurance should include cover for all hospital and medical costs, and all costs for repatriation.

5. Contractor shall carry or cause to be carried insurance covering all Contractor's Equipment against loss or damage at all times including during transport to/from the site and at the site. However, Contractor reserves the right to self-insure its own assets.

6. The Contractor will be required to have insurance coverage for "Oil Industries Endorsement" in its insurance policy.

General Conditions for Insurance

A. Contractor hereby waives its right of subrogation against the additional insured and shall cause its insurers to waive their rights of subrogation against the additional insured.

B. No form of contractor liability self-insurance, including but not limited to insuring with a parent, subsidiary, or affiliate organisation, is acceptable or allowable under the terms of this contract, unless agreed to by Company prior to commencement of services hereunder.

C. Contractor assumes full responsibility for the insurance or self-insurance over his personnel, assets, machinery and equipment, including third party to be used in the performance of this contract. Therefore, except as otherwise provided herein, any damage or injury suffered due to a total or partial loss to such

assets, machinery and equipment will be at Contractor's expense. Contractor must insure for full replacement value of any and all equipment used in performing the Work.

D. All exclusions and indemnities given under this Contract shall apply irrespective of cause and notwithstanding the negligence, breach of duty (whether statutory or otherwise) or other failure of any nature of the indemnified party or any other entity or party and shall apply irrespective of any claim in tort, under contract or otherwise at law.

8.23 **CONTRACTOR'S OBLIGATIONS AND WARRANTIES**

8.23.1 The general allocation of responsibilities between Company and Contractor are set out in responsibility matrix and other clauses mentioned in this document and the Exhibits.

8.23.2 Contractor represents that it is engaged in such specialized operations and represents that it has adequate resources and personnel in accordance with Good international Petroleum Industry Practices and shall perform the Work strictly in accordance with this Contract and shall comply with and adhere strictly to Company's instructions and directives on any matter concerning the Work. Contractor warrants that it is aware of all the Site conditions, local environment and statutory regulations applicable to the Work Site.

8.23.3 At all times Contractor shall respond promptly and shall accurately furnish to Company information about the Work as requested.

8.23.4 Contractor shall take full responsibility for the protection and security of materials and equipment while such materials and equipment are temporarily stored in Contractor's facility awaiting for transportation or otherwise in Contractors custody.

8.23.5 Contractor shall advise Company immediately in writing of any labour dispute or anticipated labour dispute, which may be expected to affect the performance of the Work.

8.23.6 Contractor shall use all reasonable care to ensure that the equipment is delivered and maintained in a fit condition for the intended Work and shall at its cost and expense man operate replace supply, repair and maintain the equipment.

8.23.7 **Contractor Personnel**

Contractor shall use all reasonable care to provide, at Contractors sole risk and cost, competent, skilled personnel to perform Work and shall take responsibility for their actions. Contractor shall ensure that the necessary personnel are available at the Work Site / Location when required by SunPetro for commencement of the Work and shall continuously be available during the duration of the Contract. Contractor shall be solely responsible throughout the period of this Contract for providing all the requirements of its personnel, including but not limited to, accommodation, transportation, meals, medical attention, vacations and time-off allowance, travel and any other benefits due to such employees under any law or otherwise. SunPetro shall have no responsibilities or liability whatsoever in this regard.

8.23.8 Sunpetro shall be entitled, without prejudice, to any other rights or remedies available to SunPetro under this Contract or otherwise in law to object to and require Contractor to remove from the Work any person who in the reasonable opinion of SunPetro is incompetent, misconduct's himself, is negligent in the proper performance of his duties or is otherwise considered to be undesirable. In such an event, Contractor shall forthwith remove such person from the Work, and such person shall not be again employed upon the Work without the written permission of Company. Contractor shall forthwith replace within 2 working days, at Contractor's sole expense, any such discharged person with a suitable qualified and experienced person satisfactory to Company without affecting the work.

8.23.9 **Permits and Instructions**

Contractor shall obtain all requisite permits and approvals under Applicable Law for the performance of the Scope of Work / supplies. In the event of Contractor receiving instructions from Company to stop Work/supplies operations, Contractor shall comply with the same with immediate effect.

8.24 **FORCE MAJEURE**

8.24.1 "Force Majeure" shall mean any act which is insurmountable and outside the reasonable control of the parties Events of Force Majeure shall include, but shall not be limited to, acts of God, lightning, earthquake, flood, fire, explosion, major storm (hurricane, typhoon, cyclone, etc.) or tidal wave, act of war (declared or undeclared) or public enemy, riots (otherwise than amongst Contractor's personnel), strike (excluding strikes, lockouts or other industrial disputes or action solely among employees of Contractor or its subcontractors), act or omission of sovereign states or those purporting to represent sovereign states, blockade, embargo, quarantine, public disorder, sabotage or any other events beyond the control of the parties or either of them., Strikes shall only be considered as Force Majeure if they are officially declared/ accepted strikes. However, Force Majeure shall not include occurrences as follows:

8.24.1.1 Late delivery of materials caused by congestion at supplier's plant or elsewhere, an oversold condition of the market, inefficiencies, or similar occurrences

8.24.1.2 Late performance by Contractor and/or a sub-contractor caused by unavailability of equipment, supervisors or labor, inefficiencies or similar occurrences;

8.24.1.3 Mechanical breakdown of any item of Contractor's or its Sub-contractor's equipment, plant or machinery; or

8.24.1.4 Delays due to ordinary storm, inclement weather, seasonal rains or monsoon; or

8.24.1.5 Non-conformance by Sub-contractors.

8.24.1.6 Financial distress of Contractor or any Sub-contractor

8.24.1.7 Failure to carry out operations in accordance with the instructions of the Company on account of any accident, breakdown or non-performance or unsatisfactory performance of the Rig or any rig equipment(s) or on account of any reason within the control of the Contractor.

Neither Party hereto shall be liable to the other, for the payment of money, for failure to perform any obligations hereunder when performance is hindered or prevented by Force Majeure. The affected party shall inform the other party immediately in writing (within 24 hours) of its inability to meet its obligations hereunder, specifying the cause of Force Majeure, and shall do all that is reasonably within its Contract power to remove the Force Majeure conditions. Such party shall advise the other party when such Force Majeure ceases (within 24 hours of ceasing of Force Majeure) and shall resume performance of its obligations hereunder as soon as reasonably possible thereafter. No payment will be due to the Contractor between the commencement of Force Majeure and commencement of Normal operations by the affected party.

8.24.2 The affected party shall make every reasonable effort to. Should any act or acts of Force Majeure cause the suspension or artificial suspension of operations there under for all or part of the Work for a continuous period of more than seven (7) days, the parties shall meet and determine the appropriate measures to be taken. In the event that a condition of Force Majeure exists at the Site for a period of at least fifteen (15) consecutive days, Company shall have the right to terminate this Contract by giving two (2) days advance notice to Contractor.

8.25 **WARRANTIES AND REMEDIES**

8.25.1 Contractor represents that is it is engaged in such specialized operations and represents that it has adequate resources, service capability and personnel in accordance with GIPIP and shall perform the Work strictly in accordance with this Contract and shall comply with and adhere strictly to Company's instructions and directives on any matter concerning the Work. Contractor agrees to comply with, and shall ensure that its Personnel comply with, all Applicable laws, International /Indian codes, rules, regulations and specifications applicable to the Equipment and Services. Contractor warrants that all items materials, equipment and works supplied under the Contract to Company under this Contract shall meet specifications as set forth in the contract and shall be in good working condition throughout the Contract period (ordinary wear and tear excepted). All Equipment, materials, machinery and works procured and supplied by Contractor under this contract, including, without limitation, service-related materials (collectively items) shall be of good quality and workmanship, safe and free from defects in workmanship. Time is of the essence of the Contract and Contractor shall perform all Services in

conformity with the time schedule, specifications and the obligations contained herein, unless the delay is due to Force Majeure or reasons wholly within Company's control. Any failure by Contractor to timely deliver the works / materials work at the Contract int of delivery and / or perform the services in timely manner shall attract the provisions of Clause indicated in Liquidated Damages.

8.25.2 The Service warranty applies to all services performed by Contractor as part of the Work. Contractor warrants that it shall perform all such services in a Good and Workman like Manner. Contractor may be required at Company's sole option (unless stated otherwise elsewhere in the Contract) to supervise the installation, running in or pulling out of the Equipment to enable it to be fully operational within the time specified in the Contract. Contractor warrants to Company that Contractor's Personnel who are skilled, experienced and competent in their respective positions, and who are fit for duty shall perform all Services. Contractor undertakes to ensure that its personnel comply with Company's regulations regarding health, safety and training which are in force at such time and at such place.

8.25.3 In the performance of the Services, if the Contractor fails to comply with the warranties and undertakings set forth, the Contractor shall as directed by the Company prior to demobilization, at Contractor's cost and without prejudice to any other right or remedy of Company under this Contract, re-perform the Services or correct such failure or furnish an alternative acceptable to Company in order to comply fully with the requirements of the Contract. Defects shall not be deemed waived by Company's failure to notify Contractor upon receipt of Services or by payment of invoice.

8.25.4 Contractor shall use all reasonable care to provide, at Contractors sole risk and cost, competent, experienced, skilled personnel to perform Work and shall take responsibility for their actions. Contractor shall ensure that the necessary personnel are available at the Work Site / Location when required by Company for commencement of the Work and shall continuously be available during the term of the Contract. Contractor shall be solely responsible throughout the period of this Contract for providing all the requirements of its personnel, including but not limited to, accommodation, transportation, meals, medical attention, necessary permits / licenses as per rules / laws, vacations and time-off allowance, travel and any other benefits due to such employees under any law or otherwise. Company shall have no responsibilities or liability whatsoever in this regard. Company shall provide boarding and lodging to the Contractor's personnel while at the work.

8.25.5 Day rates or compensation of whatsoever nature shall not apply to time when the Contractor's Equipment/tool is unable to perform to the satisfaction of the Company in accordance with the Contract for any reason.

8.25.6 If Contractor shall fail in its obligations under this Contract and does not remedy such default after having received prior written notice thereof, Company may on its own initiative arrange for alternative means of performance of Services. Any direct and reasonable costs or expenses incurred by Company thereby, shall, together with an additional five per cent (5%) of such costs and expenses, be payable by Contractor and may be deducted and set off against any monies owed by the Contractor by Company pursuant to the Contract. Should any time be lost during any such alternative arrangements in the performance of the Services, the Equipment and Personnel shall be at zero Rates for the lost time for that particular tool/ service in default and no Rates of whatsoever nature shall be payable for the duration of such default. The above shall be without prejudice to any other rights available to the Company under the Contract or as per Applicable Laws

8.25.7 Contractor shall take all measures necessary and / or proper to protect personnel, Work Site and facilities as well as observe all safety rules and regulations of Company, given to Contractor in writing provided such rules do not conflict with those of any Governmental Agency having jurisdiction over operations conducted hereunder. Contractor shall take all necessary safety measures to prevent accidents, fires, explosions and damage to the Work, personnel and property.

8.25.8 Contractor shall have no authority to make any statements, representations or commitments of any kind or to take any action which shall be binding upon Company, except as provided for herein or otherwise authorized in writing by Company.

8.25.9 Contractor shall notify Company promptly, but no later than twenty-four (24) hours, upon discovery of any instance where Contractor has not complied with the requirements of this Clause.

8.25.10 The Company reserves the right to Procurement / replace specific tools / equipment at any time during the Contract and include them in the Contract.

8.26 **LIENS**

Contractor shall immediately pay and discharge any lien, claim or encumbrance, of any nature, (or shall provide security for payment thereof) attributable to Contractor. Contractor shall indemnify and hold Company harmless from and shall keep Company's equipment and property free and clear of all liens, claims, assessments, fines and levies incurred, created, caused or committed by Contractor. If Contractor fails to pay and discharge any such lien, claim or encumbrance, then Company may do so and charge Contractor for all costs, with an additional five per cent (5%) of such costs and expenses, be payable by Contractor and may be deducted and set off against any monies owed to Contractor by Company pursuant to the Contract. Company shall have the right to retain out of any payment to be made to, or to be reimbursed to, Contractor, an amount sufficient to indemnify it completely against any such lien, claim, assessment, fine or levy exercised or made and all associated costs.

8.27 **INDEMNITY AND LIABILITIES**

8.27.1 **Contractor's Material, Equipment, Services and Property**

The Unit / equipment / services / tools (herein referred to as Equipment) to be deployed by the Contractor under the Contract shall continue to remain Contractor's property and shall always remain in the possession / control of the Contractor with the exclusive right to use of such equipment by the Contractor for providing services under the Contract. Contractor shall be responsible at all times, including time in storage, in transit, at the Work Site or any location designated by Company, for damage to or destruction of Equipment and any other property of Contractor or any of its subcontractors and their respective employees or agents, unless such loss, damage or destruction is caused by or contributed to by the Gross Negligence of Company Group.

8.27.2 **Limitation of Liability**

The total liability of the contractor shall be limited to 100% of the contractor value if no fault by contractor. In case intentional damages, it would be 200% of the contract value. The Company shall indemnify and hold harmless the Contractor against all claims and liabilities in excess of the above limits, provided that aforesaid cap for limitation of liability shall not apply and the Contractor shall continue to remain responsible for all liabilities which arise on account of:

- Breach of Applicable Laws by the Contractor Group.
- Liability for payment or non-payment of taxes and other statutory duties/ fees of any nature.
- Liability for breach of Intellectual Property Rights of any person.
- Breach of Confidentiality obligations.

8.27.3 **Consequential Damage**

Notwithstanding any provision to the contrary elsewhere in this CONTRACT and whether or not resulting from or contributed to by any negligence and /or breach of duty (statutory or otherwise):

(a) the COMPANY shall be liable for, and shall defend, indemnify and hold the CONTRACTOR GROUP harmless from and against the COMPANY GROUP's own consequential or indirect loss arising out of or in connection with the performance of this CONTRACT; and

(b) the CONTRACTOR shall be liable for, and shall defend, indemnify and hold the COMPANY GROUP harmless from and against the CONTRACTOR GROUP's own consequential or indirect loss arising out of or in connection with the performance of this CONTRACT.

8.27.4 **Certain Restrictions on Indemnities:**

Unless otherwise expressly admitted elsewhere herein the Contract, no indemnity or hold harmless provision of this Contract shall apply in favour of a Party who shall have caused loss or damage through Gross Negligence or Wilful Misconduct.

8.28 **PERFORMANCE BANK GUARANTEE**

Within fifteen (15) days of the issue of Letter of Intent/ award, the Contractor shall present to the Company a Performance Bond / Bank Guarantee (As per format in accordance to ***Annexure #8***) in the form of an irrevocable, unconditional, payable on first demand by Company, divisible bank bond in the format of ***Annexure #8*** issued by an approved bank. Failure to comply with this condition will constitute grounds for termination of the award / Contract.

The Performance Bank Guarantee shall be of 10% of the estimated contract value and shall be valid and be retained for Ninety (90) Days after the completion/termination of the Defect liability period of Contract except where claims are outstanding there under or where previously drawn by the Company but not later than Thirty (30) days after the final settlement of such claims or Ninety (90) Days

whichever is later If the Contractor does not submit the Performance Bank Guarantee as stipulated above, SunPetro reserves the right to cancel the award of LOI / LOA.

Company shall not be liable to pay any Bank Charges, Commissions or Interest on the amount of Performance Bank Guarantee. The performance bond provided by the Contractor is intended to operate as security for amounts (including damages where applicable) which becomes payable by the Contractor by virtue of this Contract and are not intended to be used as a penalty. Without prejudice to it's other rights under the Contract or at law, Company shall be entitled to forfeit the performance bond, should the Contractor fail to perform the Services in accordance with the provisions of the Contract or fail to comply with the provisions of this Contract. The Performance Bank Guarantee shall remain at the entire disposal of Company as Security for the satisfactory commencement, performance and completion of the Scope of Work under the conditions of the Contract / Contract including recovery of amounts due to the Company from the Contractor arising out of this Contract under whatever head.

Company reserves the right to invoke the performance bank guarantee for any of the following reasons including but without limitation to:

- Failure of contractor to start/commence the work as per LOA/LOI/Contract
- If Contractor fails to performs as per the terms and conditions of the contract.
- If contractor fails to perform as per prescribed scope of work.
- If contractor fails to work in work man like manner.
- If tools, machines, parts for the providing services are not fit for the performance of work.
- For breach of contract.

SunPetro will accept the bank guarantee from all public sector banks in India or any of the banks listed in the ***Annexure #9***.

8.29 **SEVERABILITY**

If any portion of this Contract is determined to be illegal, invalid or unenforceable, for any reason, then, insofar as is practical and feasible, the remaining portions of this Contract shall be deemed to be in full force and effect as if such invalid, illegal or unenforceable portions were not contained herein.

8.30 **NON-EXCLUSIVE CONTRACT**

This Contract is non-exclusive, and Company reserves the right to engage other contractors to perform similar or identical work. Contractor shall afford such other contractors' adequate opportunity to carry out their agreements and shall accomplish the work in cooperation with those contractors and with Company.

8.31 **EXPORT CONTROLS**

SunPetro confirms that the Equipment or Services to be provided under this Contract (Collectively 'Items') shall only be for use by it in India for the purpose of production of hydrocarbons. However, if for any reason whatsoever the end use or end user of these Items is required to be changed or if these items are to be taken for use in countries outside India to do any work associated with this Contract, then SunPetro would request the Contractor to obtain consent from the concerned authority in the Contractor's Country. The Contractor shall obtain such consent at its sole risk and costs.

8.32 **CHANGES**

COMPANY, may at any time direct, in writing, changes, including but not limited to changes in any one or more of the following: (1) drawings or specifications; (2) additions to or deletions from quantities ordered; (3) delivery schedule; (4) method of shipment or packing; (5) place of delivery; (6) General and Special Conditions. If any such change causes an increase or decrease in the cost of or the time required for performance of any part of the work or affects warranties and guarantees, an equitable adjustment may be made in the price or delivery schedule, or both, and the CONTRACT shall be modified by written Amendments executed by authorized representatives. However, any change in quantity shall not entitle CONTRACTOR to impose any penalty on the COMPANY as it is agreed between the PARTIES that no penalty shall be applicable in case of reduction of actual purchase quantity by the COMPANY.

Any claim by CONTRACTOR for adjustment under this Changes clause must be asserted within seven (7) calendar days from the date of receipt by CONTRACTOR of the notification of change. However, nothing in this clause shall excuse CONTRACTOR from proceeding with the order or CONTRACT as changed.

If this CONTRACT requires COMPANY to review and comment on CONTRACTOR's technical documents, CONTRACTOR shall assert any claims for adjustment which would result from implementation of

COMPANY's comments within seven (7) calendar days from the date of CONTRACTOR's receipt of such comments. No adjustment will be made after the CONTRACT has been dispatched and no adjustment of any type will be made hereunder unless COMPANY confirms the change in writing

8.33 SPECIAL CONDITIONS OF THE CONTRACT (SCC)

8.33.1. The job is to be performed in oil & gas installation, therefore, contractor to ensure all safety precautions as per Oil Mines Regulation Act but not limited to followings:

i. Preparation of Project Management Strategy, Construction Methodologies, Quality Documentation, Project Schedule (MSP), Resource Histogram, Mobilization Plan, Baseline Progress S-Curve & Bar Charts, Weekly Procurement Tracker, and Project Monitoring and Tracking Mechanism

ii. Contractor to perform the work under valid work Permit only.

iii. All material supplied at site shall have valid Material Test Certificates from accredited lab/ Test agency / TPI, which shall be new & shall not be older than one year from the date of manufacture.

iv. Contractor shall submit detailed drawings in 3 sets of hard copies and a soft copy for the work to be executed before start of work, for approval. After completion of work, 'As Built' 6 sets (One original + 5 in duplicate) of all drawings and documents shall be submitted.
In case of failure of submission of 'As Built' drawings, balance payment against the work shall not be released.

v. Contractor shall deploy persons who are medically fit & furnish physical Fitness certificate from authorized medical practitioner.

vi. Contractor to provide Police verification / Character certificate to apply for SUNPETRO premises Gate Pass at the time of Mobilization.

vii. Contractor to ensure use of proper PPE, HC detector etc. as per requirement of work

viii. Vessel Entry Permits to be taken before entering into any Vessel

ix. Contractor to ensure Oxy Acetylene Cylinder Test Certificate, Hose & Gas cutter Test certificates etc. for undertaking fabrication of work.

x. Contractor to ensure Welding Generator Electrical Test Certificates, Cables Test Certificate are available before undertaking work.

xi. All material handling equipment shall have valid load test certificates.

xii. Contractor to ensure transfer of Hazardous Waste / Waste generated during work to earmarked storage place for further disposal by self.

xiii. Contractor to ensure Earth moving / lifting Equipment etc. are deployed have valid certification.

xiv. Contractor shall provide adequate First Aid Kit at site. At least one personnel in Contractor's team shall have proper First Ait Training. Certification for the same shall be provided.

xv. The Contractor is responsible for implementing any regulations concerning the design, fabrication, inspection and testing of equipment which are mandatory by government of Gujarat.

xvi. Contractor shall get all the drawings approved by the Company before procurement/execution of work. After completion of works, 'As Built" drawings shall be prepared, approved by Company & submitted to Company.

xvii. Hired equipment shall be on Call-out basis & prior intimation of 3 days shall be given to the Contractor for mobilizing the equipment at Site.

xviii. Mobilization & Demobilisation charges are nil & are included in the rate.

xix. Damage of equipment, if any, during mobilization Commissioning & De-mobilization shall be on account of Contractor.

xx. Any failure of elements of equipment or system during operation shall be on account of Contractor & the same shall be replaced within 24hrs.

xxi. Day rate, if any, for equipment during non-availability for Operations are not payable.

Deployment of commissioning team

I. Once the contract is awarded and technically finalize, the team to be deployed for the execution of the job to be carried out at Bhaskar, Khambhat GUJARAT.

II. Sun Petro reserves the right to ask for replacement of any manpower deployed, found not suitable, and in such case, the Contractor has to provide suitable replacement within 2 days.

III. The duty pattern of Contractor's manpower at the Bhaskar Field shall be 9:00 AM to 5:30 PM. Sun-Petro has a right to change the duty pattern as per the job requirement.

8.33.2 **Transportation for:**

i. Crude Oil Transfer Pump House commissioning Personnel

Contractor at its own cost shall provide its employees, transportation to and from sites to Bhaskar, Khambhat Gujarat / or any other place.

8.33.3 **HSE Consideration**

- Contractor Employee Safety Management System implementation
- Calibration & Test certificate
- Accident: No compensation, penalty may be levied.

I. Contractor shall report all incident/accident/ Near miss to Company's HSE Manager immediately. In case of any accident on duty hours to contractors' employees, contractor shall provide all medical assistance to the injured person at the cost of contractor. First aid and support to be provided by the company as per factories act. On request of contractor's authorized person, Sun Petro shall provide support for treatment in Sun-Petro's empanelled hospitals at the cost of contractor.

8.33.4 **Transportation & Material handling**

Contractor scope

8.33.5 **Mobilization/demobilization charges**

Nil

8.33.6 **Designing and Engineering**

i. Specifications and Drawings:

The Contractor shall execute the detailed design and the engineering work in compliance with the provisions of the Contract (including the Technical Specification as per SOW), or where not so specified, in accordance with Good Industry Practice and shall be responsible for ensuring that the facilities are engineered and build to meet all guarantees and acceptance criterion stipulated in the Contract. Contractor shall be responsible for any discrepancies, errors or omissions in the specifications including Technical Specifications, drawings and other technical documents whether such specifications, drawings and other documents have been prepared by or reviewed and approved the Company or not.

ii. Codes and Standards:

Wherever references are made in the tender / SOW to codes and standards in accordance with the tender / SOW shall be executed, the edition or the revised version of such codes and standards current at the date of Bid submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied after approval by the Company and shall be treated in accordance with the tender/Contract.

8.33.7 **Clearance of Works**

i. The Contractor shall carryout prior route survey and take appropriate authorities' clearance as required for transportation of general cargo and over dimensioned consignments by road/rail wherever applicable.

ii. Contractor shall arrange for conduction inspection and other surveys with various agencies for all consignments landed in damaged/short, supplied condition and corrective action for timely replacement of items.

iii. The Contractor shall always remain responsible for any loss or damage to the works thus procured and supplied before these are incorporated in the facility and at all times prior to Operational Acceptance. The Contractor shall apart from its delivery obligations, immediately arrange to replace / repair the lost, defective or damaged works and supplies entirely at its own cost and irrespective of whether any claim for insurance in respect of such loss or damage, is made by or not.

iv. Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport for material / equipment of the Contractor.

8.33.8 **Defect Liability**

i. The Contractor warrants that the facilities or any part thereof shall be free from defects or failure in the design, engineering, materials and workmanship of the plant and equipment supplied and of the work executed and services provided.

ii. The Defect Liability Period shall be Twelve (12) months after Operational Acceptance or Provisional Acceptance of the work unless the Defect Liability Period has been extended or any part of the supplies hereof. Should any defect be found during operation of supplied equipment and services provided by the Contractor, the Contractor shall promptly, in consultation and agreement with the Company regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good to the full satisfaction of the company such defect as well as any damage to the facilities caused by such defect. The burden of proof of remedy of the defects shall be on the Contractor. Contractor shall reimburse Company all such costs

iii. The Company shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Company shall afford all reasonable opportunity for the Contractor to inspect any such defects and all necessary access to the facilities and the site to enable Contractor to perform its obligations under the clause.

iv. If the Contractor fails to commence the work necessary to remedy such defect or any damage to the facilities caused by such defect within a reasonable time (not more than 2 days), the Company may, proceed to do such work, and the costs and expenses incurred by the Company in connection therewith shall be paid to the Company by the Contractor or may be deducted by the Company from any monies due to the Contractor or claimed under the Performance Bank Guarantee.

v. If the facilities or any part thereof cannot be used by reason of such defect and/or any making good of such defect, the Defect Liability Period of the facilities or such part, as the case may be, shall be extended by a period equal to the period during which the facilities or such part cannot be used by the Company because of any of the aforesaid reasons.

vi. This clause shall also be applicable if any defect or failure is detected during Intelligent Pigging Process whenever it is carried out till defect liability period.

8.33.9 **Land for Contractor's Office, Godown and Workshop:**

Unless otherwise specified in the contract, the Contractor shall arrange, as required for his works, for the entire duration of the execution of the work arrange near the Site, land for construction of equipment stock yards, maintenance work shops, field offices and warehouses and for any purpose in connection with providing infrastructure required for the execution of the Contract. The Contractor shall bear all the cost related to the provisions of the site / land and sanitary arrangement as required without any recourse to the Company.

8.33.10 **Removal of temporary work done to execute contract**

On completion of the work undertaken by the Contractor, the Contractor shall remove all temporary works and have the Site cleared as directed by the Company. If the Contractor fails to comply with these requirements, the Company may, at the expenses of the Contractor, remove such surplus and rubbish materials and dispose se the same as the Company deems fit and get the site cleared at the risk and cost of Contractor.

Land for residential accommodation for staff and labour of Contractor shall, if so required by him, be arranged by Contractor at his own cost and risk with no recourse to the Company.

8.33.11 **Quality Assurance System**

The provisions related to Quality Assurance System shall be as per the Technical Specifications and the Scope of Work.

8.33.12 The quoted lump sum prices for various items are deemed to have appropriately catered for all mobilization, demobilization and all clearing of activities at all the sites and no separate claim whatsoever is allowed.

8.33.13 **Payment Terms**

1. Company shall pay the Contractor in the manner and at the following times, on the basis of the Price Breakdown given with reference to prices quoted in Price Schedule.

2. Contractor shall be paid by Company within 30 working days on submission of certified undisputed invoices.

3. In case, any of the activity/supply is carried out by SunPetro, the payment scheduled towards same shall deducted/deleted.

SECTION-IX

Annexures

LIST OF ANNEXURES

ANNEXURE No.	DESCRIPTION
ANNEXURE-1	Bidder's Response Acknowledgement Form for Receipt of Tender Document
ANNEXURE-2	Bid Bond Format
ANNEXURE-3	Check List Prior to Bidding
ANNEXURE-4	Exception / Deviation / Conditions Performa
ANNEXURE-5	CUT-OUT SLIP for Un-priced Technical Offer
ANNEXURE-6	CUT-OUT SLIP for Priced Offer
ANNEXURE-7	CUT-OUT SLIP for outer envelope
ANNEXURE-8	Performa of Performance Bank Guarantee
ANNEXURE-9	List of Approved Banks
ANNEXURE-10	Customs Notification
ANNEXURE-11	Check List Post Contract
ANNEXURE-12	Proforma for Provisional Acceptance Certificate
ANNEXURE-13	Proforma for Final Acceptance Certificate

ANNEXURE - 1

BIDDERS RESPONSE ACKNOWLEDGMENT FORM FOR RECEIPT OF TENDER DOCUMENT

As a delegated authority/representative of the organization named below, I have reviewed the contents of the package and on behalf of my Company, acknowledge the receipt of the same and advise that we will:

BID_____
NOT BID_____

Reason for no Bid
(optional):_____
_____
_____
_____
_____

For
Name of Company: _____
Signature : _____
Title : _____
Date : _____

Transmittal via facsimile:
ATTENTION
Head –Supply Chain Management
SUN PETROCHEMICALS PVT. LTD.
8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road,
Powai, Mumbai - 400 072, Maharashtra, BHARAT.
Tel: +91 22 69325300, + 91 22 28470484
Email: dheeraj.paroch@sunpetro.com

ANNEXURE – 2

BID BOND FORMAT

TO: Sun Petrochemicals Private Limited, a Company incorporated under the provisions of the Companies Act, 1956 and having its registered office at SUN PETROCHEMICALS PVT. LTD. 8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road, Powai, Mumbai - 400 072, Maharashtra, BHARAT. (hereinafter referred to as "Company").

WHEREAS:

.....(hereinafter referred to as "Tenderer") has submitted a proposal dated .....("hereinafter referred to as Proposal") against TENDER NO.: Tender No.: _____ , for _____Services dated _____for (hereinafter referred to as the "Tender").

NOW, THEREFORE,

(1) In response to the request made by the Tenderer, we (Name of Banker/Insurer :) _____ (hereinafter called the "Guarantor") hereby irrevocably and unconditionally guarantee the sum of Indian Rupees _____/- (INR_____ for Indian Bidders) and US $ _____United States Dollars _____ only – for Foreign Bidders) in favour of Company, if Tenderer fails to perform its obligations as set forth below:

(i) The Tenderer agrees to keep the Proposal open for acceptance by Company during the period of validity (150 days from the Closing Date) specified in the Tender.

(ii) The Tenderer, having been notified of acceptance of its Proposal by Company during the period of Tender validity:

(a) Fails or refuses to execute the agreed Contract, if required; or
(b) Fails or refuses to furnish the Performance Bank Guarantee in accordance with the format provided in the Tender document; or
(c) Seeks Variation or modification of Proposal; modifications to the agreed terms and conditions
(d) Tries to influence Company on bid evaluation, bid comparison or Contract award decision.

The sum shall become payable by us immediately on first demand by Company without proof or conditions notwithstanding any constitution or protest by the Tenderer or any other third party.

(2) Company shall have the fullest liberty without our consent and without affecting in any manner, our obligation hereunder, to relax any of the terms and conditions of the aforesaid Tender, from time to time, or to postpone any time any of the powers exercisable by Company against the said Tenderer and Guarantor shall not be relieved from its liabilities by reason of any such relaxation being granted to the Tenderer by Company or any indulgence by Company to the said Tenderer or by any such matters or things whatsoever.

(3) The Guarantor shall not be discharged or released from this Guarantee by any Contract made between the Tenderer and Company with or without the consent of the Guarantor or by any alteration in the obligations undertaken by the Tenderer or by any change in name or constitution of Company or the Tenderer.

(4) The Guarantee herein shall not be affected by any change in the constitution of the Bank or the Tenderer.

(5) This Guarantee shall not be revoked during its currency and shall remain in effect for One Hundred and fifty (150) days from the Tender Closing Date.

(6) This Guarantee shall be governed and construed in accordance with the laws of India and all of the parties to this Guarantee hereby irrevocably submit to the non-exclusive jurisdiction of the High Court of Mumbai.

IN WITNESS whereof this Guarantee has been duly executed by GUARANTOR the _____day of_____for and on behalf of (_____)

Name :_____
Designation :_____
Banker's Seal :_____
Address :_____

NOTE :

1. Bid bond required as Tender Security deposit /Earnest money
It is a condition precedent to the acceptance of any Tender by the Company that the Tenderer shall provide a Bid Bond by means of a Bank Guarantee for an amount stated in the Invitation to Tender in the prescribed format and valid for a period of 150 days from the Closing Date. The Tender may be disqualified in the absence of a Bid Bond in the prescribed format. In providing such a Bid Bond the bank shall also undertake to issue the Performance Bank Guarantee as required by Company in the event that the Tender is accepted.

2. Conditions for Invoking of Bid Bond Guarantee
The following conditions would also lead to the invoking of Bid Bond Guarantee:

a) If the Tender is withdrawn during the validity period or any extension thereof.
b) If the Tender is varied or modified in a manner not acceptable to Company during the validity or agreed extension validity period duly agreed by the Tenderer or after notification of award by Company and prior to signing of the Contract.
c) If the successful Tenderer is seeking modifications to the agreed terms and conditions after notification of award or declines to accept the Letter of Intent/Award.
d) If the successful Tenderer fails to furnish Performance Bank Guarantee within 15 days of the issue of the Letter of Intent/Award.
Any effort by the Tenderer to influence Company on bid evaluation, bid comparison or Contract award decision.

3. The formats for any of the Bank Guarantees shall not be changed except for any minor variations that the Bank may require. Failure to comply with this requirement may entail disqualification of the Tender**.**

ANNEXURE - 3
CHECK LIST FOR BIDDING

This portion of the Tender is intended to serve as a checklist to ensure that all information necessary to evaluate your proposal has been included. Please indicate Yes / No or Acceptable / Not Acceptable, whichever is not applicable.

TECHNICAL

1. Has the bidder quoted for full scope of work as specified in the tender?
   YES / NO

2. Has the bidder furnished the minimum personnel proposed to be assigned to this work in the format provided at Annexure 12?
   YES / NO

3. Quality Control Manual and/ or Quality Control Program along with the Unpriced Techno Commercial Bid

   YES / NO

COMMERCIAL

4. Confirm whether the bidder has submitted a Bid Bond as per Clause mentioned in the Instructions to Bidders
   YES / NO

5. Confirm whether the bidder agrees to furnish a performance Bank Guarantee
   YES / NO

6. Confirm that the prices quoted are firm and are inclusive of all taxes, duties, levies etc., applicable to personnel, equipment and materials to be used for execution of the Contract for the first thirty six (36) months and 12 months extension period if exercised.
   YES / NO

7. Confirm whether the prices quoted are firm and applicable even if the work is awarded only in part.
   YES / NO

8. Has the bidder confirmed the Commencement Date?
   YES / NO

9. Confirm acceptance of Insurance liability as per Clause of the Model Contract.
   YES / NO

10. Confirm acceptance of Force Majeure provision as per mentioned in the Model Contract.
    YES / NO

11. Confirm acceptance of Liquidated Damages provision as per the Model Contract.
    YES / NO

12. Confirm acceptance provision for Arbitration as per Clause of the Model contract.
    YES / NO

13. Confirm acceptance Taxes and Duties provision as per of the Model Contract.
    YES / NO

14. Confirm whether Unprized Technical bid with all annexures and enclosures have been furnished in duplicate (1Original + 1 copy) in a separate sealed cover. Ensure that Price Schedule of the Unprized Technical bid is blank.
    YES / NO

15. Confirm whether Priced Commercial Bid (1 Original +1 Copy) comprising only the Price Schedule has been furnished
    YES / NO

16. Has bidder ensured that there is no over-writing in the offer? Have corrections, if any, been properly attested/ initialled by the bidder
YES / NO

17. Has bidder ensured that all pages of the bid documents including additional sheets, if any, attached by the bidder signed by the duly authorized officer of the bidder?
YES / NO

18. Bidder ensured that proof of the signing authority
YES / NO

19. Does the bidder accept bid validity period?
YES / NO

20. If the bid is submitted by a consortium, confirm whether the MOU of the consortium / JVC has been furnished.
YES / NO

21. Have all the exceptions/deviations/conditions taken by the bidder, having cost impact or not, been listed in the format provided as Annexure 4 and attached with the Un priced Techno Commercial Bid, without including the cost impact, if any?
YES / NO

22. Has bidder proposed any incentive scheme?
YES / NO

23. Has the bidder included the cost impact of incentive schemes in the Priced Commercial Bid only?
YES / NO

24. Has the cost impact, if any, of the exceptions taken been attached with the Priced Commercial Bid?
YES / NO

25. Confirm whether the bidder agrees for applicability of Indian Laws
YES / NO

ANNEXURE – 4

EXCEPTION / DEVIATION / CONDITIONS PROFORMA

Any and all exceptions/deviations/conditions to the terms and conditions of Tender No.- _____

-should be indicated here and submitted along with the Unpriced Techno Commercial Bid without any price impact. Price impact, if any, of the exceptions/ deviations shall be duly completed, in this proforma, and attached to the Priced Commercial Bid only. If the bidder does not intend to take any exception / deviation then he shall mark "No Exceptions Taken" in this proforma. If the proforma is left blank or if this sheet is not attached to the bid, then it will be presumed that bidder has not taken any exception/deviation/condition to the terms and conditions of the TENDER DOCUMENT. Company shall not take cognisance of any exception/deviation/condition (if any) indicated elsewhere except in this proforma.

Tender No. -

Technical Part (attach to Unpriced Techno Commercial Bid)

Section No, Page No. and Clause No.	Description of exception/ deviation/ condition	Reason(s) for exception/ deviation/ condition	Whether there is a Cost impact? ** (Yes / No)	Effect on Commencement Date

** Please do not indicate the price impact, if any, here.

Tender No.-

Commercial Part (attach to Priced Commercial Bid)

Currency : _____

ANNEXURE -5

CUT-OUT SLIPS FOR TECHNICAL & UNPRICED COMMERCIAL BID

DO NOT OPEN - THIS IS A TENDER QUOTATION

(TECHNICAL & UN-PRICED COMMERCIAL BID)

Client : SUN PETROCHEMICALS PRIVATE LIMITED

Tender No. : _____

Project Name: _____

Bid Due Date: _____

From: **To:**

(Bidder's Details)	**Head-Supply Chain Management** SUN PETROCHEMICALS PVT. LTD. 8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road, Powai, Mumbai - 400 072, Maharashtra, BHARAT. Tel: +91 22 69325300, + 91 22 28470484 Email: dheeraj.paroch@sunpetro.com

ANNEXURE -6

CUT-OUT SLIPS FOR PRICED OFFER

DO NOT OPEN - THIS IS A TENDER QUOTATION

(PRICED COMMERCIAL BID)

Client : SUN PETROCHEMICALS PRIVATE LIMITED

Tender No. : _____

Project Name: _____

Bid Due Date: _____

From: **To:**

(Bidder's Details)	**Head-Supply Chain Management** **SUN PETROCHEMICALS PVT. LTD.** 8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road, Powai, Mumbai - 400 072, Maharashtra, BHARAT. Tel: +91 22 69325300, + 91 22 28470484 Email: dheeraj.paroch@sunpetro.com

ANNEXURE -7

CUT-OUT SLIPS FOR OUTER ENVELOPE

DO NOT OPEN - THIS IS A TENDER /QUOTATION

(OUTER ENVELOPE CONTAINING TECHNICAL & UN-PRICED COMMERCIAL BID + PRICED COMMERCIAL BID)

Client : SUN PETROCHEMICALS PRIVATE LIMITED

Tender No. : _____

Project Name: _____

Bid Due Date: _____

From: **To:**

(Bidder's Details)	**Head-Supply Chain Management** SUN PETROCHEMICALS PVT. LTD. 8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road, Powai, Mumbai - 400 072, Maharashtra, BHARAT. Tel: +91 22 69325300, + 91 22 28470484 Email: dheeraj.paroch@sunpetro.com

TO BE OPENED BY ADDRESSEE ONLY

ANNEXURE –8

PROFORMA OF PERFORMANCE BANK GUARANTEE

[To be executed on Stamp Paper of Rs. 100/- or such higher value as per the Stamp Act of the State in which the Guarantee is issued. Stamp Paper should be in the name of the Bank Issuing the Guarantee.]

To,
Sun Petrochemicals Pvt. Ltd. (SunPetro)
8th, 9th & 10th Floors, ATL Corporate Park,
Saki Vihar Road, Powai,
Mumbai - 400 072, Maharashtra,
BHARAT

Bank Guarantee No.:
Date:
Expiry Date:

This Guarantee is made on this _____ day of _____ 2026 by, _____ (Bank name and incorporation details) having its registered office at _____ (address of issuing branch) (hereinafter referred to as the "GUARANTOR", which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns) in favour **of Sun Petrochemicals Pvt. Ltd.,** a company registered under Part IX of the Companies Act, 1956 (CIN: U24219MH1995PTC464242) and having its registered office at 1004, 10th Floor, ATL Corporate Park, Saki Vihar Road, Powai, Mumbai-400072 and its Corporate office at 8th, 9th & 10th Floor, ATL Corporate Park, Saki Vihar Road, Powai, Mumbai - 400 072, Maharashtra, India (hereinafter referred to as the "**COMPANY**", which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns).

WHEREAS:

A. The COMPANY has issued Letter of Award/Rate Contract /Purchase Order/Contract/Work Order No. _____ dated _____ hereinafter referred to as the "LOA/RC/PO/WO/Contract") in favour of _____, a company registered under the laws of _____ having its registered office at _____ (hereinafter referred as the "**CONTRACTOR/CONSULTANT**" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and permitted assigns) for _____ (hereinafter referred to as the "PRODUCT" or "SERVICE)**.**

B. In accordance with the terms and conditions of the said Letter of Award/Rate Contract /Purchase Order/Contract/Work Order the CONTRACTOR/CONSULTANT has agreed to provide a Guarantee for Performance of the Letter of Award/Rate Contract /Purchase Order/Contract/Work Order in form of Bank Guarantee issued by a nationalized/Scheduled Bank for the sum specified therein.

In consideration of the COMPANY having issued a Letter of Award/Rate Contract /Purchase Order/Contract/Work Order with the CONTRACTOR/CONSULTANT for the supply of the PRODUCT/SERVICE; we, the _____, the GUARANTOR do hereby unconditionally and irrevocably Guarantee and undertake:

I) to pay merely on written demand by the COMPANY to extent of Rs. _____/- (Rupees _____ only) against any loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the COMPANY in the event of non-performance/delivery of the PRODUCT/SERVICE supplied/rendered against the LOA/RC/PO/WO/Contract, without any demur, reservations, recourse, contest or protest and without any reference to the COMPANY. Any such demand made by the COMPANY on the GUARANTOR shall be absolute, unequivocal, conclusive and binding on the GUARANTOR as regards the amount due and payable, notwithstanding any disputes raised/pending before any court, tribunal, arbitration or any other authority.

II) to make the payment hereby Guaranteed to the COMPANY not later than the expiry of 48 hours from the receipt of the written demand made by the COMPANY.

1. We, the Bank further agree that:

- the COMPANY shall be entitled at his option to enforce this Guarantee against the GUARANTOR as a principal debtor, in the first instance notwithstanding any other Security or Guarantee that it may have in relation to the CONTRACTOR/CONSULTANT 's liabilities.

- this Guarantee shall be without prejudice to the other rights, available to the COMPANY against the CONTRACTOR/CONSULTANT in the event of any breach of the terms and conditions of the said Letter of

Award/Rate Contract /Purchase Order/Contract/Work Order or unsatisfactory performance or failure or malfunctioning of the PRODUCT supplied/SERVICE rendered against the said Letter of Award/Rate Contract /Purchase Order/Contract/Work Order and giving of time by the COMPANY for repayment thereof, shall not in any way relieve the GUARANTOR of his liability under this Guarantee.

- this Guarantee shall not in any way be affected by the change in the constitution of the CONTRACTOR/CONSULTANT or by the fact that the CONTRACTOR/CONSULTANT has been wound up or any orders for winding up are passed or closed its business nor shall be affected by the change in the constitution, amalgamation, absorption or reconstruction of the GUARANTOR or the COMPANY or otherwise but shall ensure for and be available to and enforceable by the absorbing, amalgamated or reconstructed Company of the COMPANY.

- this Guarantee shall continue to be in force notwithstanding the discharge of the CONTRACTOR/CONSULTANT by operation of law and shall cease only on payment of the full amount by the GUARANTOR to the COMPANY of the amount hereby secured and on the claim of the COMPANY against the CONTRACTOR/CONSULTANT in respect of the said Letter of Award/Rate Contract /Purchase Order/Contract/Work Order being satisfied.

- this Guarantee shall be in addition to and not in substitution for any other Guarantee or security from the CONTRACTOR/CONSULTANT to be given to the COMPANY in respect of the said Letter of Award/Rate Contract /Purchase Order/Contract/Work Order.

2. The Guarantee herein contained shall remain in full force and effect till discharged by the COMPANY or upto _____ whichever is earlier and the GUARANTOR undertake not to revoke this Guarantee during its currency except with previous consent of the COMPANY in writing.

3. Notwithstanding anything contained herein:
- our liability under this bank Guarantee shall not exceed Rs. _____/- (Rupees _____ only);
- this bank Guarantee shall be valid upto _____ and

4. we are liable to pay the Guaranteed amount or any part thereof under this bank Guarantee only and only if you serve upon us a written claim or demand on or before _____. If a claim has been received by us on or before the said date, all the rights of the COMPANY under this Guarantee shall be valid and shall not cease until the claim has been satisfied.

5. All Claims of the COMPANY (beneficiary) against this Guarantee, shall be remitted by the ……..(GUARANTOR) to the following account of the COMPANY only through electronic transfer of funds, unless otherwise specifically communicated by the COMPANY:

1) Beneficiary Account Name: Sun Petrochemicals Private Limited
2) Bank Name: ICICI Bank Limited
3) Bank Account Number.: 054405013167
4) IFSC Code: ICIC0000544

IN WITNESS WHEREOF the _____ (please specify the name of the Bank), through its authorized officer/constituted attorney, has executed these presents as of the day and year first above written.

SIGNED AND DELIVERED FOR AND ON BEHALF OF _____ (Name of the Bank).

PLACE:

DATE:

Address:

IN PRESENCE OF:

1.

2.

ANNEXURE -9

LIST OF APPROVED BANKS

Guarantee issued from following banks will be accepted as PBG/SD/EMD/BID BOND

1. All Nationalised Banks including Public Sector Banks-IDBI Ltd

2. Private Sector Banks- Axis Bank, ICICI Bank and HDFC Bank

3. Commercial Banks:
   I. Kotak Mahindra Bank
   II. Yes Bank
   III. RBL Bank (The Ratnakar Bank Ltd)
   IV. IndusInd Bank
   V. Karur Vysya Bank
   VI. DCB Bank
   VII. Federal Bank
   VIII. South Indian Bank

ANNEXURE - 10

CUSTOMS NOTIFICATION

Custom Notifications will be applicable as per latest and relevant guidelines for goods imported in connection with the contract signed with the Government of India as applicable under the relevant Production Sharing Contract (PSC) / New Exploration Licensing Contract policy (NELP).

ANNEXURE - 11

CHECK LIST POST AWARD OF WORK

This check list is preliminary for vital compliance to be fulfilled by successful bidder at immediate post award stage and not limited to followings:

Commercial / Financial

a. Performance bank guarantee – value and validity

b. PAN / TAN / GSTN number

c. Bank Account number with documentary proof

Operational

a. Detailed sequence of operations with ball park time estimates

b. Availability of services & materials with time lines

c. Lead time of critical spares

d. Interface management of various services

e. Logistics control

f. Discussion and finalisation on incentives – Bonus/Malus

g. Organogram with HSE set up

General

a. Overall inputs required for meeting all operational needs

ANNEXURE-12

PROVISIONAL ACCEPTANCE CERTIFICATE

PURCHASE ORDER (PO) /PURCHASE ORDER (PO) NO : .....

Date: .....

DESCRIPTION OF SUPPLIES / SERVICE:

.....

The above SERVICES have been provisionally accepted with effect from ..... on behalf of _____ (COMPANY) in good order with the exceptions as described in Appendix-1(if applicable), subject to the Delivery and Warranty conditions contained in the AGREEMENT, effective from.....

For and on behalf of: _____

(COMPANY)

Name

Designation

Signature

Date

Appendix-1

EXCEPTIONS TO COMPLETION

Ref : PROVISIONAL ACCEPTANCE CERTIFICATE

COMPANY to detail below any and all exceptions to the completion of the SUPPLIES/SERVICES described in this PROVISIONAL ACCEPTANCE CERTIFICATE.

ANNEXURE-13

FINAL ACCEPTANCE CERTIFICATE

AGREEMENT/PURCHASE ORDER (PO) NO: .....

Date: .....

DESCRIPTION OF SUPPLIES

.....

The above SERVICE have been finally accepted on behalf of ----------(COMPANY) in apparent good order, subject to the Warranty conditions contained in the AGREEMENT, with effect from .....20....

For and on behalf of: _____

(COMPANY)

Name

Designation

Signature

Date

END OF TENDER DOCUMENT