

P&CS (MUMBAI REFINERY)

NOTICE INVITING TENDER FOR ER PROBE ASSEMBLY WITH PROBE ELEMENT

REQUEST FOR QUOTATION

CRFQ NO: 1000263024

E-TENDER REF: 15821

DUE DATE: 27.09.2016

TENDER FOR SUPPLY OF ER PROBE ASY WITH PROBE ELEMENT

- 1. Bharat Petroleum Corporation Limited is a Fortune 500 Navratna PSU engaged in manufacturing and Marketing of diverse range of Petroleum Products.
- **2.** BPCL intends to procure ER Probe ASY with probe element. We are pleased to invite the **BIDS** for the above mentioned job, as per tender specifications (enclosed).
- **3. EARNEST MONEY DEPOSIT (EMD):** EMD of amount as mentioned below as applicable is required to be submitted, in physical form at our office in a sealed cover addressed to Chief Manager P&CS, with following boldly super-scribed on the cover/ envelope:
 - i. CRFQ Number:
 - ii. E-Tender Ref No:
 - iii. Item:
 - iv. Closing Date/Time:
 - v. Name of the Bidder:

Sr No.	Item	Value
1	Supply & Supervision of Inline Crude Oil Blender	INR 1,00,000/- or USD 1500

• EMD can be submitted either in form of Demand Draft / Bank Guarantee or it can be directly transferred to BPCL account through NEFT transfer. The details are provided below:

EMD through Demand Draft:

The BIDDERS shall ensure that the EMD in the form of DD, drawn in favor of "Bharat Petroleum Corporation Limited", payable at Mumbai, from any Branch of Indian Nationalized Banks. It should be delivered to Chief Manager P&CS or sent by Registered Post / Couriered to the following address so as to reach on or before the due date & time of the tender.

SUBRAMANIAN KT Officer (P&CS Dept) 2nd Floor, South Block, Admin Building BPCL Mumbai Refinery, Mahul Gaon, Mumbai-400 074.

EMD through Bank Guarantee

A proforma of Bank Guarantee for EMD is attached along with this tender. In case the EMD is being paid through cash, the same has to be prepared exactly in line with the format provided.

EMD through NEFT transfer

Bidders may submit their EMD through NEFT mode through electronic funds transfer to BPCL Bank Account proof of which may be enclosed with your offer along with details of UTR no. BPCL Bank details are as under:

For Indian Bidders:

1.	Name of the Beneficiary		Bharat Petroleum Corporation Ltd
2.	Name of the Bank		Standard Chartered Bank
3.	Branch Code	••	222
4.	Branch Address	•	90, M G. Road, Mumbai 400 001
5.	Branch Telephone	:	18002663666/18001033666
6.	Fax no	••	022-267588081/26758822
7.	NEFT IFSC Code	:	SCBL0036001
8.	Account Type	••	11 (Current)
9.	Account No.	••	22205020115
10.	MICR Code	:	400036002

For Foreign Bidders:

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1.	Beneficiary Name	Bharat Petroleum Corporation Limited	
2.	Bank Name	Standard Chartered Bank	
3.	Branch Address	90, M G Road, Fort, Mumbai-1	
4.	USD Account no	22205032520	
5.	Swift Code	SCBLINBBXXX	
6.	BSR Code	6470036	

Bidders may kindly note that Standard Chartered bank debits BPCL towards charges for collection of amounts remitted from abroad. These charges are to be borne by bidders. As such, during final settlement of the EMD amount remitted by the bidder, there may be some deductions towards the collection charges if any debited by Bank.

- BPCL will not be responsible for non-receipt of instrument (s) due to postal delay/ loss in transit etc. Bid received without the EMD, if applicable, is liable to be rejected.
- Scanned copy of EMD shall be uploaded on BPCL eprocurement website and later shall be sent to above mentioned address before due date of the tender.
- EMD shall be valid for period of 8 months from the date of submission of bids.

4. EXEMPTION FROM EARNEST MONEY DEPOSIT:

- Micro and Small Enterprises registered with District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises, are exempted from payment of Earnest Money provided -
- Vendors have to upload the necessary documents as mentioned above to claim exemption for Earnest Money Deposit. The document should clearly specify the 'item Category' for which the vendor is registered with MSME.
- 5. APART FROM VENDORS REGISTERED UNDER MSE ALL OTHER VENDORS ARE REQUIRED TO SUBMIT THE EMD INCLUDING BPCL REGISTERED VENDORS & PSUs.

6. EMD FOREFEITURE AND RETURN OF EMD:

i. EMD submitted shall be returned on finalization of the order. No interest on this EMD is payable.

ii. EMD will be forfeited in the event of:

- 1. Withdrawal of offer while the offer is under consideration during the offer validity period.
- 2. Bidder not accepting our Purchase Order, if placed without prejudice to our rights to recover damages on account of breach of contract.
- 3. Non-confirmation of acceptance of order within the stipulated time after placement without prejudice to our rights to recover damages on account of breach of contract.
- 4. Any unilateral revision made by the Bidder during the validity period of the offer.
- **7. PRE-BID MEETING:** A pre-bid meeting has been arranged for all the interested bidders on **12.09.2016 at 10.30 am** at below mentioned address. Bidders are requested to inform the concerned person in advance the details of persons visiting our office along with the authorization letters.

P&CS CONFERENCE ROOM, 2nd FLOOR, SOUTH BLOCK, ADMIN BUILDING, BHARAT PETROLEUM CORP LTD, MUMBAI REFINERY, MAHUL CHEMBUR MUMBAI 400 074

8. This is a **TWO-PART-BID** Tender. E-bids should be submitted online through BPCL's e-procurement site https://bpcleproc.in "Two Bid System", i.e. Part-I: Bid Qualification Criteria and Techno-Commercial Un-Priced Bid and Part-II: Priced Bid. Bidders are required to register themselves at BPCL's e-procurement site https://bpcleproc.in.

For any assistance regarding online submission of e-bids on BPCL E-Procurement web site, bidders may contact Mr. Mahendra on all working days (Mon - Fri) on Tel. Nos. +91-9920038902 / +91 - 22 - 65354113 / +91 - 22 - 65595111 between 09.00 hrs to 17.00 hrs. IST or helpdesk of M/s. ETL on email support@bpcleproc.in.

9. The Techno-Commercial / Unpriced Bids shall be opened on 27.09.2016 at 14:00 hours

PART - A: QUALIFICATION CRITERIA & TECHNO-COMMERCIAL (OTHER THAN PRICE) 16BID

The attached tender document consists of the following Attachments

- BID-QUALIFICATION CRITERIA.
- TENDER DOCUMENT WITH SCOPE OF WORK AND APPLICABLE TERMS AND CONDITIONS.
- GENERAL PURCHASE CONDITIONS
- GENERAL TERMS AND CONDITIONS.
- MEMORANDUM OF AGREEMENT.
- SPECIAL SAFETY CONDITIONS.

- FINANCIAL DETERRENT FOR VIOLATION.
- GENERAL CONDITIONS OF CONTRACT.
- COMMERCIAL QUESTIONNAIRE.
- UNPRICED BID
- PRICED BID
- TECHNICAL DEVIATIONS FORM
- COMMERCIAL DEVIATIONS FORM
- Information pertaining to Bid Qualification, Technical, Techno-commercial & Other Details shall be filled, signed, stamped and uploaded on bpcl eprocurement website under respective categories.

PART - A: UNPRICED BID

- All the applicable taxes and duties shall be quoted (in percentage only) in the unpriced bid form on e-portal.
- NO PRICES SHOULD BE INDICATED IN THE UNPRICED BID. BIDS CONTAINING PRICES, INDICATED ANYWHERE APART FROM PRICED BID SHALL BE DIRECTLY REJECTED.

PART - B: PRICE BID

- Vendors have to fill in the Prices in the format provided in the e-portal only.
- 10. All the tender documents and Annexure and Price Bids shall be required to be duly signed and stamped the authorized signatory. The authorized signatory shall be:
- a) Proprietor in case of proprietary concern.
- b) Authorized partner in case of partnership firm.
- c) Director, in case of a limited Company, duly authorized by its board of directors to sign.

OPENING OF BIDS: This being Two-Part-Bid, the Qualification Criteria and Techno-Commercial Bid will be opened first and evaluated. Bidder to note that qualification of bidder and evaluation of bid is being taken up simultaneously and therefore issue of TQ/CQ and or Techno-commercial discussions shall not be construed as the bidder is qualified.

Please contact **Mr. Namit Chittoria** for any technical queries on **+91-22-022 25533237** or **Mob.No. 8108880516**.

11. The vendors who are on BPCL's Black /Holiday List will not be considered.

- 12. BPCL reserves the right to accept/ reject any or all the Offers at their sole discretion without assigning any reason whatsoever.
- 13. BPCL decision on any matter regarding Bid qualification of vendors shall be FINAL and any vendor shall not enter into correspondence with BPCL unless asked for.
- 14. BPCL would also consider information already available with them regarding Vendor's Credentials.
- 15. BPCL may call for additional documents if required.
- 14. For clarifications, if any, please feel free to contact undersigned on +91-022-25524289 on any working day between 08:00 am to 4:00 pm.



BHARAT PETROLEUM CORPORATION LIMITED

INSTRUCTIONS TO BIDDERS ON E-TENDERING

- 1.1. The bidder is requested to download the tender from BPCL's e-tendering website https://bpcleproc.in and participate in the tender as per the instructions given above and herein, on or before the due date and time of the tender. The tender available on the BPCL website can be downloaded for reading purpose only. For participation in the tender, please fill up the tender online on the e-tender system available on https://bpcleproc.in.
- 1.2. For registration on the e-tender site https://bpcleporc.in, bidder needs to download the Instructions to Vendors document from the site and read it. They shall select "Register" and complete the "Bidder Registration Form" by filling in all the information correctly. Kindly remember the login id (e-mail), password entered therein. After completing this process, you will receive a system generated e-mail, click on the link and complete balance Registration process.
- 1.3. As a pre-requisite for participation in the tender, bidders are required to obtain a valid Digital Certificate of Class III and above as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCIA), Controller of Certifying Authorities (CCA). The cost of obtaining the digital certificate shall be borne by the Bidder. In case any Bidder so desires, he may contact our e-procurement service provider M/s. E Procurement Technologies Limited, (Contact Number Mobile 9920038902 /9768298601) for obtaining the digital signature certificate. Please note that generally, it takes 5 working days for obtaining a digital certificate after the submission of all required documents / fees. Non availability of Digital Certificate shall be considered as the bidder's regret.
- 1.4. In case any corrigendum/amendment is issued after the submission of the bid by any bidders, then such Bidders, who have submitted their bids, shall be intimated about the corrigendum / amendment by a system-generated email. It shall be assumed that the information contained therein has been taken into account by the Bidder. They have the choice of making changes in their bid before the due date and time. No communication other than the above will be circulated regarding Corrigendum / amendment, if any.
- 1.5. Bidders are required to submit their bid online on or before the due date and time of closing of the tender as depicted in this document. Bidders shall have to log on to the website (https://bpcleproc.in) for submitting their bid. The system time (Indian Standard Time IST) that will be displayed on e-Procurement web page shall be the time considered for determining the expiry of due date and time of the tender and no other time shall be taken into cognizance. Bidders are advised in their own interest to ensure that their bids are submitted in e-Procurement system well before the closing date and time of bid. If the Bidder intends to change/revise the bid already entered, he may do so any number of times till the due date and time of submission deadline. However, no bid can be modified after the deadline for submission of bids. Once the entire process of submission of online bid is complete, the Bidders are required to go to option 'own bid view' through dashboard and take the print of the envelope receipt as a proof of submitted bid.

- 1.6. Bids / Offers shall not be permitted in e-procurement system after the due date /time of tender. Hence, no bid can be submitted after the due date and time of submission has elapsed.
- 1.7. No manual bids / offers along with electronic bids / offers shall be permitted.
- 1.8. Once the PQ Bid / Technical (or) un-priced bids are opened, bidders can see the list of Bidders who have participated in the bid by logging on to the portal under their user ID and password and clicking on "Other Bids" view. Subsequently, in case the price bids are opened in E Tendering platform, Bidders can see the rates quoted by all the participating bidders using the same option.
- 1.9. No responsibility will be taken by BPCL and / or the e-procurement service provider for any delay due to connectivity and availability of website. They shall not have any liability to Bidders for any interruption or delay in access to the site irrespective of the cause. It is advisable that Bidders who are not well conversant with e-tendering procedures, start filling up the tenders much before the due date / time so that there is sufficient time available with him/her to acquaint with all the steps and seek help if they so require. Even for those who are conversant with this type of e-tendering, it is suggested to complete all the activities ahead of time. It should be noted that the individual bid becomes viewable only after the opening of the bid on/after the due date and time. Please be reassured that your bid will be viewable only to you and nobody else till the due date/ time of the tender opening. The non availability of viewing before due date and time is true for e-tendering service provider as well as BPCL officials.
- 1.10. BPCL and/or the e-procurement service provider shall not be responsible for any direct or indirect loss or damages and or consequential damages, arising out of the bidding process including but not limited to systems problems, inability to use the system, loss of electronic information etc.

For any assistance regarding online submission of bids on BPCL E-Procurement web site, you may contact Mr. Mahendra Hole on Tel: +91 - 22 - 2554 0717 Mobile 9920038902 or email on all working days (Mon-Fri) between 0900 hrs to 1700 hrs and Mr. Nigam Mhatre on Tel: +91 - 22 - 2554 0717 Mobile 9768298601 or email: nigam@abcprocure.com

BPCL support desk numbers for e-tendering is provided below:

HelpDesk support	Contact	Mail
Helpdesk Support	079 40016868	support@bpcleproc.com

SUPPLY, INSTALLATION AND COMMISSIONING OF ER (ELECTRICAL RESISTANCE) PROBE BASED ON LINE INTERNAL CORROSION MONITORING SYSTEMS AT TOTAL 13 NUMBER OF PUMPING AND INTERMEDIATE PIGGING LOCATIONS OF MUMBAI – MANMAD – BIJWASAN PIPELINE AND BINA KOTA PIPELINE

1.0 PREAMBLE:

BPCL is operating cross country pipelines from Mumbai- Manmad- Bijwasan and Bina - Kota and for transportation of finished petroleum products (MS / HSD / SKO) from Mumbai and Bina Refinery. This pipeline is having various pumping and intermediate pigging stations along the pipeline route at various locations in various states.

BPCL requires to install ER (Electrical Resistivity) probe system to be provided at total 13 locations (total 16 numbers) of MMBPL & BKPL. The details of the locations is enclosed in clause no 2.0. The total scope of work in brief is as follows:

For real time monitoring of the pipeline internal corrosion in SCADA and for optimizing the dosing of corrosion inhibitor in the pipeline an online corrosion monitoring system is proposed for which following jobs are involved:

- Supply, installation & commissioning of ER probes based pipeline internal corrosion monitoring system and associated accessories like probe assembly, access fitting, corrosion data transmitters etc.
- 2. HOT work for installation of ER probes assembly on station piping. (Offline welding of access fitting and line tapping).
- 3. Supply, laying, testing of cables including all the civil work (excavation / restoration / grouting, anchor fasteners / RCC / PCC / dismantling), laying of control cables in HDPE casing from ER probe transmitter to control room and restoration.
- 4. Cable terminations at ER probe transmitter end and PLC end.
- 5. Commissioning of the system at all locations and imparting training during commissioning.

2.0 Details of locations for supply, installation and commissioning of ER probes:

SI. No.	Location	State	Cross Country	Pipe line grade	Pipe thickness
			Pipeline	0	
			Diameter		
1	Mumbai	Maharashtra	18"	API-5L-X-65	9.5 mm – 15.2mm
2	Washala	Maharashtra	18"	API-5L-X-65	9.3 mm – 14.2mm
3	Manmad Receipt	Maharashtra	18"	API-5L-X-65	9.6mm – 12.2mm
4	Manmad Despatch	Maharashtra	14"	API-5L-X-60	9.9mm – 16.6mm
5	Sanghvi	Maharashtra	14"	API-5L-X-60	9.8mm – 16.6mm
6	Gujri	Madhya Pradesh	14"	API-5L-X-60	9.4mm – 26mm
7	Manglya Receipt	Madhya Pradesh	14"	API-5L-X-60	7.6mm – 10.6mm
8	Manglya Despatch	Madhya Pradesh	16"	API-5L-X-60	9.8mm – 16.6mm
9	Kota	Rajasthan	16"	API-5L-X-60	7.8mm – 26mm
10	Malarna	Rajasthan	16"	API-5L-X-60	11.8mm – 21mm
11	Bharatpur	Rajasthan	16"	API-5L-X-60	12.6mm – 13.6mm

12	Mathura	Uttar Pradesh	16"	API-5L-X-60	17.5mm – 22mm
13	Piyala Receipt	Haryana	16"	API-5L-X-60	12.3mm – 21.8mm
14	Piyala Despatch	Haryana	8"	API-5L-X-56	11.2mm – 13.8mm
15	Bijwasan	Delhi	8"	API-5L-X-56	8.2mm – 12mm
16	Bina	Madhya Pradesh	18"	API-5L-X-65	13mm – 26mm

3.0 SCOPE OF WORK:

The scope of work this contract shall be as follows and vendor shall quote lump sum charges for each item.

3.1: SUPPLY OF ER PROBES AT VARIOUS LOCATIONS OF PIPELINES

- 1. Item no 10: Supply of ER probes and associated accessories at Mumbai
- 2. Item no 20: Supply of ER probes and associated accessories at Washala
- 3. Item no 30: Supply of ER probes and associated accessories at Manmad receipt
- 4. Item no 40: Supply of ER probes and associated accessories at Bina
- 5. Item no 50: Supply of ER probes and associated accessories at Manglya dispatch
- 6. Item no 60: Supply of ER probes and associated accessories at Kota
- 7. Item no 70: Supply of ER probes and associated accessories at Malarna
- 8. Item no 80: Supply of ER probes and associated accessories at Bharatpur
- 9. Item no 90: Supply of ER probes and associated accessories at Mathura
- 10. Item no 100: Supply of ER probes and associated accessories at Piyala receipt
- 11. Item no 110: Supply of ER probes and associated accessories at Manmad dispatch
- 12. Item no 120: Supply of ER probes and associated accessories at Sanghvi
- 13. Item no 130: Supply of ER probes and associated accessories at Gujri
- 14. Item no 140: Supply of ER probes and associated accessories at Manglya receipt
- 15. Item no 150: Supply of ER probes and associated accessories at Piyala dispatch
- 16. Item no 160: Supply of ER probes and associated accessories at Bijwasan

Bidder shall quote lump sum charges per location for supply of ER (Electrical Resistance) probes and all other related accessories like data transmitters and receivers inclusive of flame proof enclosures, intrinsic safety barriers and canopy stand, etc as mentioned in the scope of work

<u>PART B</u>: INSTALLATION AND COMMISSIONING OF ER PROBES AT VARIOUS LOCATIONS OF PIPELINES

1. Item no 10: HOT work for installation of ER probes on station piping

Bidder shall quote lump sum charges per location for hot work required job such as offline welding of access fitting and tapping on station piping to be done for installation of ER probe assembly in station piping inclusive of all the associated mechanical works, necessary tools, HOT Tap machines, lifting equipments, necessary tools and tackles and necessary manpower at all the 16 locations as per the scope of work including mobilization and demobilization.

2. Item no 20. Civil work for, excavation for laying of cables from pump house area to control room, etc

Bidder shall quote lump sum charges per running meter for excavation of cable trench required for laying of cables from pump house area to control room, restoration of the areas along the cable route nearer to the original condition. This item includes supply and laying of single brick layer over the cable along with all materials, labour, supervision, tools and tackles required for the job.

3. Item no 30: SUPPLY & LAYING OF HDPE PIPE CONDUIT FOR CABLE LAYING

Bidder shall quote lump sum charges per running meter for supply of heavy duty ISI mark HDPE cable conduit of 2" diameter and laying of ER probe cable from transmitter to control room through HDPE conduit. Scope includes all necessary material transportation to individual locations.

4. Item no 40 : SUPPLY, INSTALLATION AND COMMISSIONING OF HOT DIP GALVANIZED CABLE TRAYS

Bidder shall quote lump sum charges per running meter for **SUPPLY & INSTALLATION** of 14 SWG GI cable trays of 2" width by means of structural steel supports / brackets fabricated by the bidder on walls / structures / columns / walkaway / bridge,etc. including supply and fixing of GI clamps, saddles, spacers etc. for fixing cables on cable trays/ walls/ stuctures. Cable tray shall be hot dip galvanised and thickness of coating shall be minimum 50 microns.

5. Item no 50 : SUPPLY , LAYING , TESTING & COMMISSIONING OF CONTROL CABLE FROM ER PROBE TRANSMITTER TO CONTROL ROOM

Bidder shall quote lump sum charges per running meter for supply, laying, testing ,commissioning and termination of instrumentation cables (from ER probe transmitter to PLC in control room) of 660V grade 2Cx1.5 MM SQ cables as per details mentioned in RFQ

The rates shall include laying, pulling of cables through cable trench and through HDPE conduits, proper dressing of cables on cable trays, racks, vertical raceways and supply and installation of saddles, spacers and nylon chord for tying as required, tagging of cables, clamps. It also includes the cost of transportation of cables from owner's warehouse; cable identification tags at strategic points / every 50 meter interval for identification of cable; etc. complete. The straight through joints in the cables should be avoided. **Note**: Cable shall be supplied as per the detailed specifications as mentioned in RFQ.

6. Item no 60: SUPPLY & LAYING OF PCC FOR RESTORATION WORKS

Bidder shall quote lump sum charges per cubic meter for supply and laying of PCC (1:2:4). PCC shall be required for restoration of the excavated area like road crossings, flooring, brickwork and other places which are excavated along the cable route for laying of instrument cable from ER probe transmitter to PLC panel in control room as per requirement and as directed by BPCL Engineer in Charge

7. Item no 70: RELAYING OF AVAILABLE CONCRETE PAVER BLOCKS

Bidder shall quote lump sum charges per square meter for or refixing of any paver blocks removed for excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room.

8. Item no 80: SUPPLY AND LAYING OF CEMENT FLOOR TILES

Bidder shall quote lump sum charges per square meter for supply and laying of cement tiles per square meter for restoration of area where the cement floor tiles have been damaged during excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room.

9. Item no 90: SUPPLY AND CONSTRUCTION OF BRICK MASONRY WORK

Bidder shall quote per cubic meter for supply and construction of brick masonry work which shall be used for restoration of any brickwork damaged during excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room.

10. Item no 100: PLASTERING WITH CEMENT MORTAR 1:4 MIX (1 CEMENT: 4 FINE SAND)

Bidder shall quote lumpsum charges for plastering of concrete and brick masonry surface or for restoration of any cement plaster damaged during excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room.

11. Item no 110: PROVIDING AND APPLYING EXTERIOR GRADE WEATHER PROOF PAINT

Bidder shall quote lumpsum charges per square meter for painting of surface with weather proof paint. This item shall be used for restoration of any paint work damaged during excavation and restoration of cable trench for cable laying from ER probe transmitter situated in pump house to PLC panel inside control room.

4.0 SYSTEM SPECIFICATIONS

4.1 TECHNICAL REQUIREMENTS

The electrical resistance (ER) probes to be installed at the Despatch and Receipt Stations as indicated in clause 2.0 shall be retrievable from the line under pressure.

Tubular type ER probes shall be used on the pipeline. All materials in contact with fluid shall be in accordance with NACE Standard MR-0175

Pipeline inlet pressure may vary according to pipeline pressure drop due to different flow rate. Hence the corrosion monitoring system shall be suitable for operation under this fluctuating pressure and flow conditions.

Each probe shall be connected to a transmitter (6 wire system) to give an output of 4~20 mA, in proportion to metal loss. The transmitters shall be intrinsically safe certified. The 4-20mA output from the transmitter (2 wire system) shall be available for interfacing with SCADA / PLC. The suitable safety barrier between transmitters & SCADA shall be provided by the vendor. The Bidder shall provide operation manual for these instruments.

4.2 MATERIAL

Scope of supply shall consist as minimum requirement of the following components

4.2.1 ER PROBE

- i. Probe (16 nos): 1Nos. each location as indicated in clause 2.0.
- ii. Transmitter (16 nos): 1 nos for each location as indicated in clause 2.0
- **iii.** Probes shall be high pressure tubular type with velocity shields and body material shall be same as that of probe element for installation with high pressure hollow plug access fitting assembly.
- iv. The probe shall be suitable for measurement of corrosion rate in the range of 0-10 mpy.
- v. Probe life shall be at least 2 yrs. at 1 to 2.5 mpy corrosion rate.
- vi. Probe element thickness shall be 20 mills having minimum 10 mills useful probe life.

4.2.2 TRANSMITTER

Transmitter shall be with 4-20 mA current loop for communication and for interfacing with PLC. It should have intrinsically safe certificate from authorized certifying agency in India

i. Type: 2 wire typeii. Input: ER probeiii. Output: 4-20 mA

iv. Operating temperature: (-)18 degree centigrade to (+)60 centigrade

v. Dimensions: As per vendor standard specifications

vi. Weight: As per vendor standard specifications

vii. Cable lead: Minimum 5ft for connection with ER probes or as per site requirement

viii.Power supply: 24V DC Loop powered from receiver unit

ix. Mounting: At site near probe by bracket / yoke support on MS stand with canopy

x. Transmitter to control room distance: Upto 3000 meter

xi. Hazardous area classification: Zone-1, gas group IIA, IIB & temperature grade T3

xii. Enclosure: IP 65

xiii.Complaince: CE, ATEX & CCOE certificate

4.2.3 ACCESS FITTING ASSEMBLY FOR ER PROBE

16 Nos. for ER Probe, 1 for each location as indicated in clause 2.0

2" NB, 5.25" height, flare weld access Fitting Assembly (non-tee), body carbon steel, acme thread outlet with hollow-plug assembly in AISI-316 along with heavy duty protective C.S. cover complete with essential spare.

i. Access fitting size: 2 inch

ii. Access fitting height – 5 to 6 inches

iii. Access fitting type: Flar weld (non tee) as per ASME B 31.3

iv. Access fitting body material: As per ASTM A 105

v. Plug: Hollow plug assembly in stainless steel (AISI316) with heavy duty CS cover

vi. Temperature rating: (-)26 degree centigrade to (+) 204 degree centigrade

vii. Mounting: Flar weld, non tee and to be welded directly on non piggable portion of pipeline

viii. Specification: As per NACE MR0175

Access fitting assembly shall be supplied with all the necessary packing gaskets, sealing nuts etc suitable for high temperature and high pressure rating as per specifications

A. Testing and applicable standards

1. Test pressure: 1.5 times design pressure

Design code : ASME B 31.4
 End connection : ASME B 16.25

4. Dimensions : as per Bidders standards

B. Pipeline data

1. Service: SKO(SUPERIOR KEROSINE OIL), and 2 grades of MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)

2. Pressure rating: 3600 psi

C. Documentation

- 1. GA drawings
- 2. Catalogue/datasheets
- 3. Installation, operation & maintenance manual
- 4. Material test certificates
- 5. Transmitter calibration certificate
- 6. Wake frequency calculations
- 7. Warranty certificate for 2 years
- 8. ITP/QAP
- 9. Fat(factory acceptance test)
- 10. Transmitter ATEX/CCOE certification

5.0 INSPECTION AND TESTS

The Bidder & Bidder shall perform all inspection and tests as per the requirements of this specification and the relevant codes, prior to shipment from his Works. Such inspection and tests shall be, but not limited to, the following:

- 5.1 All assemblies and components shall be 100 % visually inspected & hydro tested and test certificates for the same shall be provided.
- 5.2 Dimensional checks shall be carried out as per the approved drawings.
- 5.3 Chemical composition and mechanical properties including hardness shall be checked as per relevant material standards and this specification.

5.4 Non-destructive inspection of the probe assembly shall be carried out as given below:

- 5.4.1 All butt and repair welds of pressure containing parts if any shall be examined 100% by radiography. Acceptance limits shall be as per ASME B31.4.
- 5.4.2 Welds, which in purchaser's opinion cannot be inspected by radiographic methods, shall be checked by ultrasonic or magnetic particle methods. Methods of examination shall be as per ASME Section VIII Div.1 Appendix 12 and Appendix 6 respectively.
- 5.4.3 All forgings shall be wet magnetic particle inspected on 100% of forged or extruded surfaces. Method and acceptance shall comply with MSS-SP-53.
- 5.4.4 The end section of the components to be welded shall be 100% ultrasonically tested for

- lamination type defects for a distance of 50 mm from the ends prior to being prepared. The presence of any discernible defects shall be cause for rejection.
- 5.4.5 All fillet welds of thickness < 6 mm shall be examined 100% by Magnetic Particle Inspection and 6 mm shall be examined 100% by angle probe UT. Acceptance criteria for MPT and UT shall be as per ASME Sec. VIII Div.1 Appendix 6 and Appendix 12 respectively.
- 5.4.6 BPCL / BPCL nominated TPI may also perform stage wise inspection and witness tests at Bidder's Works prior to shipment. Bidder shall give reasonable notice of time and shall provide, without charge, reasonable access and facilities required for inspection by the BPCL / BPCL nominated TPI. Inspection and tests performed/witnessed by the BPCL / BPCL nominated TPI shall in no way relieve the bidder's obligation to perform the required inspection and tests.
- 5.4.7 The hydro test water shall be clean, non-toxic, non-corrosive, neutral fresh water with chloride contents not exceeding 250ppm.
- 5.4.8 Test procedure and ITP shall be addressed to BPCL for review and approval.

6.0 TEST CERTIFICATES

Bidder shall submit the following certificates:

- a) Test certificates relevant to the chemical analysis and mechanical properties including of the materials used for the manufacture as per relevant material specification.
- b) Test reports on non-destructive testing.
- c) Test certificates for hydrostatic tests.
- d) Test reports of heat treatment carried out.
- e) Dimensional & visual check report.
- f) Surface preparation and painting, marking report.
- g) Inspection release note.

Certification for use in hazardous area shall be as follows:

- a) Certificates from statutory authorities like BASEEFA, FM, PTB, UL, and CENELEC etc. for items of foreign origin, and from CMRI etc. for items of Indian origin.
- b) Approval certificate from PESO (Petroleum Explosive Safety Organizer) / CCE (Chief Controller of Explosives) for items to be installed in India, irrespective of country of origin and the same is mandatory. In case PESO (Petroleum Explosive Safety Organizer) / CCE certificate is not available at the time of quotation, bidder shall confirm that the certificate shall be furnished before shipment.
- c) Approval certificate from BIS (Bureau of Indian Standards) for all flameproof instruments of Indian origin.

7.0 PAINTING, MARKING AND SHIPMENT

- 1. After all inspection and test required have been carried out; surface shall be thoroughly cleaned, freed from rust and grease and applied with sufficient coats of corrosion resistant paint.
- **2.** Each assembly shall be tagged and stamped legibly on the edge of the inlet flange using die stamps with characters at least 12 mm high.
- **3.** The assembly shall be fitted with a stainless steel nameplate, attached to the body with stainless steel wire. At least the following information shall be clearly stamped on the plate
- a) Bidder's name
- b) Rating

- c) Material Body/plug etc
- d) P. O. Number and Tag No's.
- **4**. All necessary precautions shall be taken for adequate protection of the assemblies during shipment and storage.

8.0 DOCUMENTATION

8.1 DOCUMENT TO BE SUBMITTED ALONG WITH THE OFFER

The bidder shall submit the following documents with the quotation:

- a) Preliminary cross sectional drawing of ER probe assemblies showing all the parts, material list & critical dimensions along with Data Sheets for all components.
- b) Offered Inspection and Testing.
- c) Table of compliance (Appendix A) and data sheet duly filled by the vendor.
- d) Mechanical data sheet duly completed and certified clearly highlighting the acceptance / deviations offered.
- e) List of spares required for commissioning and start-up.
- f) List of spares required for two year of operation.
- g) Operating and Maintenance manual.
- h) Quality control plan

8.2 DOCUMENTS TO BE SUBMITTED AFTER PLACEMENT OF PURCHASE ORDER/LOI

The bidder shall submit, but not limited to, the following documents for BPCL's approval.

- a) Fabrication drawings, material details.
- b) Welding, Heat Treatment, Inspection and Testing Procedures.
- c) Quality Control Manual and Quality Control Plan/ITP.
- d) Packaging and transportation details.
- e) Proposed painting procedure.
- f) Spare part list for 2 years operation.
- g) Spare part list for commissioning and start-up.
- h) Operating & maintenance manual.
- i) Engineering, purchasing and construction schedule.
- j) Intrinsically safe certificates with catalogue wherever applicable.
- k) Preservation procedure for coupons, probes and other spare accessories.
- I) Instrument Index.
- m) Cable Schedule.
- n) Junction Box Schedule
- o) Loop Drawing.
- p) Power Consumption.
- q) Graphics Details.
- r) Datasheets and Specification of Systems.
- s) System architecture drawing.
- t) Modbus mapping details.

Bidder shall submit total index of drawings / documents required for review/records based on PO/PR/MR along with schedule date of submission of each drawing/document. The drawing schedule shall be submitted in to BPCL for approval. The drawing schedule shall be specific with

regard to drawing/ document no, the exact title and size of the drawing / document. For submission of drawing schedule, the supplier shall proceed based on PO/PR/MR and subsequent correspondence. With each submission of drawings / documents, supplier shall submit index with schedule v/s actual submission dates, submission of drawings, revision no, date of approval etc. Any submission without index shall not be entertained for review. It shall be ensured that proper sequencing of the drawings/documents to be submitted is maintained in the drawing schedule.

- **8.3** Manufacture of corrosion coupon assembly fittings shall commence only after approval of the above documents. Once approval has been given by BPCL, any changes in design, material and method of manufacture shall be implemented only after subsequent and specific approval of BPCL in writing.
- **8.4** On receipt of written approval, the bidder shall submit to BPCL all documents as listed in Clause 8.2 above.
- **8.5** Prior to shipment, the Bidder shall submit test certificates as listed in Clause 6.0 of this specification.
- **8.6** Documents shall be in the English language only.

8.7 PROGRESS REPORTING:

Bidder shall submit monthly progress report and updated procurement, engineering and manufacturing status (schedule Vs actual) every month in, beginning within 2 weeks from PO. In case of exigencies, BPCL can ask for report submission as required on weekly / fortnightly / adhoc basis depending on supply status and bidder shall furnish such reports promptly without any price implication. Format of progress report shall be submitted by the bidder during kick off meeting or within one week of receiving PO whichever is earlier.

9.0 QUALITY ASSURANCE & CONTROL

- 9.1 The bidder shall operate a Quality System meeting the requirements of the relevant Part of ISO 9000. The Bidder shall have in effect at all times a QA/QC program which clearly establishes the authority and responsibility of those in charge of the quality system. Persons performing quality functions shall have sufficient and well defined authority to enforce quality requirements that initiate, identify, recommend and provide solutions to quality problems and verify the effectiveness of the corrective action.
- **9.2** A copy of the Bidder's QA/QC program shall be submitted to the BPCL with its quotation for BPCL's review and concurrence prior to award. If Bidder's QA/QC program and facility, where the work is to be performed, is ISO 9000 certified, then only a copy of the bidder's ISO 9000 certificate is required.
- 9.3 The bidder shall ensure that his sub-suppliers operate a quality system meeting the specified conformance criteria to ISO 9000. The Bidder's quality system shall be subject to the BPCL's approval prior to commitment to a Purchase Order.
- **9.4** Major sub-suppliers shall be subject to identical approvals. BPCL reserves the right to conduct a Quality Audit at the Bidder's/sub-supplier's facilities at any stage during manufacture.
- **9.5** The bidder shall identify in purchase documents to its sub-vendors all applicable QA/QC requirements imposed by BPCL, and shall ensure compliance thereto. On request, bidder shall provide objective evidence of its QA/QC surveillance of its sub Vendor's activities.
- **9.6** The bidder shall submit certified reports of production tests as soon as the tests are completed satisfactorily.

9.7 BPCL reserves the right to inspect materials and workmanship at all stages of manufacture and to witness any or all tests. The bidder shall provide the BPCL with a copy of its Manufacturing and Inspection Plan for review and inclusion of any mandatory witness points 30 days after award but prior to the pre-inspection meeting.

10.0 SCOPE OF SUPPLY:

10.1 BPCL'S SCOPE:

- 1. Necessary work permit & clearance.
- 2. Necessary approvals for materials and procedures.
- 3. Electricity/power if required for the site shall be provided to the Bidder free of cost. Necessary cabling from the supply point shall be carried out by the Bidder.

10.2 BIDDER'S SCOPE:

- All the material , installation & commissioning , supervision of installation & commissioning , cable laying from transmitter to corrosion meter in control room including excavation and area restoration ,software for training , inspection ,tests and test certificates, painting, marking and shipment, material preservation at site till commissioning, quality assurance, quality control and all the documents.
- 2. Supply all necessary supervision / skilled manpower of various categories for carrying out the complete job as per the detailed scope of work and to the satisfaction of Engineer In Charge
- 3. Supply of necessary PPEs (Personal Protective Equipments) to all workmen including supervisor.

11.0 SPECIAL TERMS AND CONDITIONS OF THE CONTRACT:-

- 1. Bidder shall submit QAQC procedure and get it approved before carrying out the job.
- 2. The Bidder should do manual excavation where ever possible. Use of diesel driven excavator may be permitted after identification of all utilities (electric cables, drain pipe, HDPE pipe) going through the excavation area. Any damage caused to utilities during excavation shall be rectified by the Bidder at no extra cost to BPCL
- 3. Bidder shall arrange for the proper barricading of the trench/pits and safety warning boards at site.
- 4. Cable laying philosophy shall be as follows:
 - A. Paved area: Cable tray/ buried underground
 - B. Unpaved area: Buried under ground
 - C. Type of cable trays: Hot dip galvanized prefabricated
 - D. Cable protection sleeve: HDPE pipe

Bidder to note that the exact cable routing shall be decided at site based on actual site conditions. Exact cable quantities/sizes shall be based on actual measured route lengths at site by Bidder in coordination with Engineer-in-Charge/Client. Bidder shall ensure that there is no surplus or shortage of cables at site and procure cables accordingly. The payment of cable will be for the actual length of cable laid.

After award of work, vendor shall start to visit all the locations for fixing of ER probes within a week and take all measurements (cable route, hot tapping location, procurement quantities of cable, HDPE pipe, GI cable trays etc) related to the installation of the system, as directed by

- BPCL Engineer In Charge. Prepare layout drawings in details for cable route and system installation for approval from BPCL.
- 5. The supervisor of Bidder or Bidder himself must be present at site during the execution of work
- 6. Supplier shall note that training for BPCL personnel shall be arranged and carried out by an experienced and trained corrosion monitoring specialist of the Corrosion Monitoring System supplier during commissioning stage at any of the locations mentioned in Annexure 2 as convenient to BPCL and no separate payment shall be made for the same
- 7. The housekeeping at the site shall be maintained by the Bidder on daily basis. The place of storage of material shall be designated and after the completion of work, all the area shall be cleaned to its original position.
- 8. Bidder shall deploy skilled as well as experienced supervisor and skilled workers as per the instructions / approval of the site in charge following all the safety conditions strictly. Bidder should provide all personal safety / protective equipments to the laborers /workers/supervisors.
- 9. The damages occurred during daily execution of job shall be rectified by the Bidder at no extra cost.
- 10. The quantities indicated in the schedule of quantities and rates are indicative and payment shall be made against RA bills(to be raised monthly) based on actual/jointly certified measurements for the work done during the preceding month on the basis of item rates as agreed in the contract, on the terms and manner as described above.
- 11. Bidder shall arrange for the lodging, boarding as well as the transport arrangement of his personnel to the work site.
- 12. The Bidder shall ensure strict compliance in respect as to time or mode of execution of any work or as to any precaution to be taken and / or temporary or alternative arrangement to be made.
- 13. The excavated earth shall be deposited away from the trench sides, in such a manner so as not to create artificial surcharge to the trench sides and also obstruct other operations to be carried out later on.
- 14. Bidder shall note that BPCL shall not be responsible for any theft of Bidder's material from site. No complaint shall be entertained in this regard.
- 15. Water used for civil construction jobs shall be made available by the Bidder .Water used should be potable drinking water and should not be hard/salty.
- 16. Proper curing of RCC / PCC support to be done as per IS codes. Water used for curing shall be potable drinking water only.
- 17. The Bidder shall maintain good housekeeping on day to day basis at the site.
- 18. BPCL shall not allow for night stay of the vendor personnel in any of their premises.
- 19. Bidder shall satisfy all contract labour / supervisors entry rules and regulations including police verification of all the labours / workers and supervisors prevalent at respective ER probe installation locations. No relaxation shall be provided to Bidder for the same.
- 20. During execution of the job, in case if any damages occurred to the BPCL property then the damages to be rectified by the vendor without any extra cost to BPCL. Otherwise BPCL reserves the right to get the job done at risk and cost of the bidder.
- 21. For any assistance / clarifications required you may contact Shri.S.S.Varadkar, Sr.Manager (Mech. Maint.), MMBPL on Mobile No. 9833356451 or Mr.Namit Chittoria, (Dy.Mgr Maint) on mobile no 8108880516.

12.0 DEFECT LIABILITY PERIOD:

1. Defect liability period for the entire job shall be two year from the date of completion of the job.

13.0 CONTRACT VALIDITY:

- 1. Contract shall be valid for a period of 6 months from the PO date.LD clause shall be applicable as per memorandum of agreement.
- 2. Bidder shall maintain a hindrance register for daily updating and get it certified by BPCL site in charge. Responsibility to prove the delay in work on account of BPCL shall be based on entries made in the hindrance register only.

14.0 SAFETY CONDITIONS:

- 1. Use of PPE is must while executing the work. The Bidder shall provide proper personnel protective equipment to personnel carrying out the work.
- 2. All the safety precautions shall be taken while working inside the premises and as mentioned in the work permit issued by BPCL.
- 3. The job is being carried out inside BPCL Installations and therefore all the safety terms and conditions mentioned in the work permit towards the safety shall be binding to the Bidder. No idling charges shall be entertained in case of non compliance of safety issue or stoppage of the work due to the operational requirement etc.

15.0 PAYMENT TERMS:

A. MATERIAL SUPPLY:

70% payment against material supply shall be done on receipt of material at all the respective locations.

Balance 30 % payment against material supply shall be done after completion of all the jobs and commissioning of the system in all respects to the satisfaction of Engineer In Charge and as per the detailed scope of work.

B. SERVICE JOBS

For service jobs payment shall be done monthly against the bills raised for executed jobs.

10% retention money shall be retained for a period one year or till completion of guarantee period whichever is later.

C. PERFORMANCE BANK GUARANTEE

Bidder shall submit a PERFORMANCE BANK GUARANTEE VALID FOR A PERIOD OF TWO YEARS in lieu of warranty of the system for a period of two years.

APPENDIX A: - TABLE OF COMPLIANCE.

The Bidder shall submit the complete table of compliance as part of the technical offer. The Bidder shall confirm compliance with each clause of this specification by writing "yes" in the column headed "Compliance". Where the Bidder is unable to comply with a particular clause, the Bidder shall write "no" in the column headed "Compliance" and shall describe the deviation with justification in the appropriate adjacent cells, which may be extended on separate pages as required.

Ref.clause no	Compliance (yes/no)	Deviation	Justification / remarks
2			
3			
15			

In the commercial offer the Bidder shall clearly identify the non-compliant Clause Number and the price reduction available to the Purchaser should the Purchaser technically accept the proposed deviation.

The corrosion monitoring items shall be procured from one of the following vendors:

- A. CAPROCO
- B. ROHRBACK COSASCO SYSTEMS CORROSION MANAGEMENT
- C. METAL SAMPLES
- D. CORMON
- E. CorrOcean
- F. Emerson Process Management

G

All the components shall be purchased from a single Bidder only

DATA SHEET TO BE FILLED BY BIDDER ER PROBES BASED CORROSION MONITORING SYSTEM FOR PIPELINES

Α	General Design data	REQUIREMENTS PERTAINING TO PROBE	VENDOR ACCEPTANCE / DEVIATIONS		
1	PIPELINE	MUMBAI —MANMAD — BIJWASAN PIPELINE			
2	PIPELINE LINE SIZE /THICKNESS	REFER SECTION 2.0 of scope of work			
3	PIPELINE MATERIAL	REFER SECTION 2.0 of scope of work			
4	SERVICE / SERVICE CODE	SKO AND 2 GRADES OF MS & HSD			
5	CLASS/PRESSURE RATING	3600 PSI			
6	CORROSION ALLOWANCE	0.5 MM			
7	INSTALLATION POSITION	12 O' CLOCK			
8	PIPELINE PIGGABLE	NOT APPLICABLE			
9	AMBIENT TEMPERATURE	5 DEGREE TO 48 DEGREE CENTIGRADE			
В	MATERIAL & CONSTRUCTION DETAILS				
	PROBE TYPE	ELECTRICAL RESISTANCE, RETRIEVABLE			
1		TYPE, ON 2" ACCESS SYSTEM			
2	ER PROBE MOUNTING	2 INCH ACCESS SYSTEM ASSEMBLY			
3	ER PROBE LENGTH	VENDOR TO ADVICE AS PER PIPE DIA			
4	ER PROBE MONITORING POSITION	BOTTOM OF PIPELINE			

_			
5	ER PROBE ELEMENT TYPE	CYLINDRICAL TUBE	
6	ELEMENT MATERIAL	EQUIVALENT TO THE APPLICABLE	
		PIPELINE MATERIAL GRADE	
7	ELEMENT SEAL MATERIAL	WELDED	
8	ELEMENT FILL MATERIAL	CERAMIC	
9	VELOCITY SHIELDS	REQUIRED	
10	ELEMENT THICKNESS	20 MILLS(MINIMUM 10 MILLS USEFUL	
		LIFE), SUFFICIENT FOR 2 YEARS AT 1 TO	
		2.5 MPY CORROSION RATE	
	SS FITTING	la mau	
11	ACCESS FITTING SIZE	2 INCH	
12	ACCESS FITTING TYPE	FLAR WELD (NON TEE) AS PER ASME B	
		31.3, TO BE DIRECTLY WELDED ON NON PIGGABLE PORTION OF PIPELINE	
13	ACCESS FITTING BODY MATERIAL	ASTM A105	
14	PLUG	HOLLOW PLUG ASSEMBLY IN AISI316	
14	PLOG	WITH HEAVY DUTY CS COVER	
TEST	ING & APPLICABLE STANDARDS	WITH HEAVY BOTT ES COVER	
15	TEST PRESSURE	1.5 TIMES DESIGN PRESSURE	
16	DESIGN CODE	ASME B 31.4	
17	END CONNECTION	ASME B 16.25	
18	DIMENSIONS	BIDDERS STANDARD	
19	DESIGN LIFE (YEARS)	25	
	ISMITTER FOR PROBES	23	
20	TYPE	2 WIRE	
21	INPUT SOURCE	ELECTRICAL RESISTANCE PROBE	
22	OUTPUT (SWITCH SELECTABLE)	CORROSION RATE IN MPY OR MICRO	
22	OOT OT (SWITCH SELECTABLE)	MPY	
		METAL LOSS IN MILS OR MICRO MILS	
22	OUTPUT RESOLUTION	+/- 0.1MPY/0.01MIL	
23	OUTPUT	4 - 20mA LINEAR	
24	CABLE LEAD FROM PROBE TO	MINIMUM 5 FEET OR AS PER SITE	
- '	TRANSMITTER	REQUIREMENT	
25	DISTANCE BETWEEN TRANSMITTER	MINIMUM 3000 FEET	
	& PLC / SCADA PANEL		
	(TRANSMITTER RANGE)		
26	POWER SUPPLY	24V DC	
27	LOCATION & MOUNTING	ON FIELD, NEAR PROBE ON A BRACKET	
		BY SUPPORT ON MS STAND WITH	
		CANOPY INCLUDING NECESSARY	
20	AAADIENIT TEAADED ATUSE	GROUTING	
28	AMBIENT TEMPERATURE	5 DEGREE TO 48 DEGREE CENTIGRADE	
29	COMPLAINCE	CE, ATEX & CCOE CERTIFICATE	
30	ENCLOSURE	IP65	
31	WEIGHT	VENDOR TO SPECIFY	
32	DIMENSIONS	VENDOR TO SPECIFY	
33	HAZARDOUS AREA CLASSIFICATION	Zone-1 , Gas group IIA, IIB & TEMPERATURE GRADE T3	

ADDITIONAL REQUIREMENTS / NOTES:

- 1. Bidder to provide three sets of calibration test probes ,with each set having three nos of test probes to check 0%, 50% and 100% of transmitter output range of 4 to 20mA. No extra payment shall be made by BPCL for provision of test probes.
- 2. Owner will provide 24VDC power supply for transmitter. Necessary cabling shall be done by the bidder from power supply point to transmitter. Transmitter shall relay 4-20 mA signal proportional to metal loss through the same two-wire cable for interfacing with PLC / SCADA.

TECHNICAL ATTACHMENTS (to be filled by bidder)

1. LIST OF COMMISSIONING SPARES

Sr no	DESCRIPTION	PART NUMBER	QUANTITY

2. LIST OF SPECIAL TOOLS AND TACKLES

Sr no	DESCRIPTION	PART NUMBER	QUANTITY

3. LIST OF RECOMMENDED SPARES FOR 2 YEARS OF NORMAL OPERATION

Sr no	DESCRIPTION	PART NUMBER	QUANTITY

NOTES

- 1) In case spares are offered as a kit, the individual items making up a kit shall be listed.
- 2) Bidder shall list spares separately for each item as applicable.

BIDDER QUALIFICATION CRITERIA

SCOPE OF WORK:

1.0 BIDDER SCOPE OF WORK : The proposed job of supply, installation and commissioning of ER probes shall include following jobs under various categories as follows,

(A) Instrumentation Jobs:

- 1. Supply, installation and commissioning of retrievable type probe element with 2" access fitting assembly.
- 2. Supply, installation and commissioning of 2 wire transmitter with power supply input of 24V DC and output as 4-20mA linear and having IP65 enclosure including test probes of different range and suitable for hazardous area classification: zone-1, gas group IIA, IIB & temperature grade T3.
- 3. Supply, laying, testing & commissioning of armored signal cable from ER probe transmitter to control room. Signal cable shall be encased with 2" HDPE pipe in the underground portion and for above ground portion, Hot Dip Galvanized cable tray shall be supplied and erected for laying of cable.
- 4. All the electrical and instrumentation items shall meet the required area classification with due approvals from PESO / CCOE.

(B) Mechanical Jobs:

1. Welding of the access fitting assembly on the hydrocarbon pipeline and necessary associated mechanical works, DPT, MPT, Hot tapping and installation of ER probes.

(C) Civil Jobs:

- 1. Excavation of cable trench for laying of signal cable from transmitter to control room.
- 2. Supply and laying of bricks over underground cable.
- 3. Removal and refixing of concrete paver blocks.
- 4. Supply and fixing of concrete floor tiles.
- 5. Supply and laying of PCC, Brick masonry work, plastering, and painting for restoration of area. damaged during excavation of cable trench.
- 6. Backfilling of the trench and restoration of the site nearer to original condition.

(D) Submission of Documents:

- 1. Final as built drawing.
- Test certificates of supplied material, calibration certificates of transmitter, catalogue/datasheets
 , installation, operation & maintenance manual , material test certificates wake frequency
 calculations, warranty certificate for 2 years, ITP/QAP, transmitter ATEX/ CCoE certification

(E) Warranty

1. Bidder shall provide two years warranty for performance of the system.

2.0 BPCL SCOPE OF WORK:

- 1. Drawing approvals.
- 2. Integration of ER probe data with SCADA / PLC.
- 3. Necessary work permits

3.0 BID QUALIFICATION CRITERIA:

Bidder has to qualify the BQC criteria to be eligible for technical and commercial evaluation.

4.0 TECHNICAL QUALIFICATION CRITERIA:

- The Bidder shall have carried out similar job of supply, erection and commissioning of Electrical Resistance (ER) probe based corrosion monitoring system for cross country pipelines for oil and gas industries in India or abroad in last five years. List of the similar type of jobs carried out in last five years to be enclosed along with Purchase Order copies for information with the details.
- PROVEN TRACK RECORD (PTR)
 - The bidder shall submit end users certificate (minimum two end users) of different organizations for successful operation of two years of ER probe system installed and commissioned by bidder. The bidder shall also enclose the PO copy of the job placed by the end user for particular PTR.
 - The Bidder shall submit a declaration to the effect that they are not currently serving any Holiday Listing orders issued by BPCL or Ministry of Petroleum and Natural gas (MOPNG) debarring them from carrying on business dealings with the BPCL\ MOPNG or serving a banning order by another Oil PSE.
 - In case any Indian bidder is bidding for this job and their OEM is foreign vendor then bidder must submit the confirmation letter of logistics support from OEM for a period of 10 years starting from 2016.

5.0 COMMERCIAL QUALIFICATION CRITERIA:

5.1 Commercial Experience

Bidder should have successfully executed minimum value of similar job in any of the last seven years ending last day of month previous to the one in which applications are invited should be either of the following:

 Three similar completed works, each costing not less than the amount equal to 74.42 Lakhs each excluding taxes and duties

OR

Rs

2. Two similar completed works, each costing not less than the amount equal to Rs 93.03 Lakhs each excluding taxes and duties

OR

3. One similar completed work costing not less than the amount equal to Rs 148.84 Lakhs excluding taxes and duties

5.2 Financial capability:

Bidder must have average annual financial turnover of **Rs. 55.82 Lacs** during last three financial years. As a proof for turnover, bidder is required to submit copy of the Audited Balance sheets clearly highlighting the above fact.

5.3 Net-worth

Audited Profit and Loss account and Balance sheet for last three audited preceding financial year's up-to 2014-15, Net worth should be positive.

NOTE:

- 1. Bidder shall submit the Company profile indicating organization structure of bidding entity along with pre-qualification bid.
- 2. For pre-qualification criteria with respect to experience, financial year in which job is commenced shall be considered.
- 3. As a proof for the turnover, bidder is required to submit copy of the Audited Balance sheets clearly highlighting the above fact.
- 4. Submission of authentic documents is the prime responsibility of the bidder. Wherever BPCL has concern or apprehension regarding the authority / correctness of any document, BPCL reserves the right of getting the documents cross verified from the document issuing authority. In case of non-submission of the required documents or ambiguity or incomplete documents, BPCL reserves the right to reject the bidder's tender without assigning any reason.
- 5. Similar work shall mean the experience of executing contract of providing **Supply, Installation** and **Commissioning of ER (Electrical Resistance) probe systems for corrosion monitoring** for cross country pipelines.
- 6. Bidders meeting the technical as well as commercial qualification criteria as stated above should submit documentary evidence to substantiate above data in a separate envelope, along with their quotation in English.



BHARAT PETROLEUM CORPORATION LIMITED (BPCL), REFINERY

FINANCIAL DETERRENT FOR VIOLATION OF SAFETY NORMS BY CONTRACTORS [APPLICABLE TO ALL WORKS CARRIED OUT IN THE REFINERY BY CONTRACTORS]

All contractors working inside Refinery have to strictly follow safety norms as per BPCL rules and regulations. Contractors who are violating safety norms while executing the job will be penalized financially. Penalty amount and Reporting Authority for violation / non adherence of various safety norms is given below.

Sr. No.	VIOLATION OF HSE NORMS	PENALTY AMOUNT	REPORTING AUTHORITY
N	ION ADHERENCE OF WORK PERMIT CON	DITIONS	
1.	Working without proper Authorisation / Permit (Cold work)	Rs 6000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
2.	Hot work without proper Authorisation/ Permit	Rs. 12000/- per occasion and delisting / holiday listing of 3 years if repeated.	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
3.	Violation of any of the conditions specified in the permit	Rs 2000/- per permit.	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
4.	Use of mechanically propelled equipment/engine/generator set without/ with faulty spark arrestor	Rs. 1000/- per equipment	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
5.	Non-display of name board, permit etc., at site	Rs 600/- per location where job is being executed. Penalty will be repeated if not rectified within 3 days.	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
V	VIOLATION OBSERVED WHILE WORKING	AT HEIGHT	
6.	Working at height without safety belt arrangement as required i.e. without safety belt / Non use of double lanyard safety belt.	Rs 1000 / per person	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
7.	Throwing up/down any material from height or not making proper provision to bring down material safety from height	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
8.	Non standard/unsafe platform/ladder	Rs. 2000/- per case per day	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates

9.	Non standard/unsafe Scaffolding Use of Uncertified Scaffolding	Rs. 2000/- per case per day Rs. 2000/- per case per	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates Engineer-in-charge,
		day	Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
N	ION USE OF PERSONAL PROTECTIVE EQUIPM	ENT	
11.	For not using Non Respiratory Personal Protective Equipment (Helmet, goggles, gloves, safety belts, Boiler suit etc, Shoes .)	Rs. 1000/- Per day/item/person	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
12.	For not providing Respiratory -Personal Protective Equipment prescribed in Work permit/job safety plan /B.A. set/canister mask/B.A. compressor etc)	Rs. 5000/- per case per day	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
V	IOLATION OBSERVED IN ELECTRICAL WORK		
13.	Non use of ELCB, using poor joints of cable, using naked wire without top plug into the socket, laying wire/cables on the roads, carrying out electrical jobs by incompetent person	Rs 5000/- per item per day	Chief Maint Manager (Elect), Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
14.	Non deployment of the Licensed electricians for electrical job.	Rs. 2000/- per person	Chief Maint Manager (Elect), Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
15.	Working/ on live electrical circuits without work permit/authorization	Rs. 5000/- per case per day	Chief Maint Manager (Elect), Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
v	IOLATIONS IN EXCAVATION WORK		
16.	Unsatisfactory fencing / barricading of excavated areas, not providing proper shoring / strutting / proper slope and not keeping the excavated earth at least 1.5 M away from excavated area	Rs. 2000/- per item per day	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
v	IOLATIONS OBSERVED IN ROAD SAFETY		
17.	Driving BPCL or Contractor's vehicle without authority from transport operations.	Rs. 1000/- per case	Any employees through Head of Dept (F&S)

19.	Driving hydra/Crane/fork lift above its speed limit fixed for BPCL refinery roads or Driving hydra without being escorted by cleaner who is sitting left side of the driver to guide hem	Rs. 1000/- per case	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
20.	Entry of contractor's vehicle in No Entry Area without proper authorization.	Rs. 1000/- per case	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
21.	Entry of any person in barricaded area marked with tape.	Rs. 1000/- per person	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
22.	Riding on material handling vehicles or trolleys	Rs. 500/- per case	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
23.	Sitting or allowing sitting along with the drivers on fork lift.	Rs. 500/- per case	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
24.	Vehicle Accident- i.e. overturning, falling in pits, damaging equipment, hitting another vehicle etc.	Rs 5000/- per case plus replacement/repair charges incurred by BPCL for BPCL owned material	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
N	ON DEPLOYEMENT OF REQUIRED MANPOWE	R	
25.	Non-deployment of safety supervisor / supervisor responsible for safety at work site required as per Special Safety Conditions	Rs2000 per person per day	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
26.	Failure to maintain safety register and record by Contractor Safety Supervisor or Supervisor responsible for safety	Rs.2000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
27.	Failure to have weekly safety site inspection / audit and monthly safety meeting and maintain record (by contractors themselves)	Rs. 2000/- per occasion	Engineer-in-charge, Head of Dept. F&S
28.	Failure to conduct tool box meeting every day and maintain the records of the same.	Rs. 500/- per day	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
29.	Failure to submit the monthly HSE report by 5 th of next month to Engineer-in-charge	Rs. 200/- per day	Engineer-in-charge,
v	IOLATION OF STATUTORY REQUIREMENT		
30.	Acting in contravention to any of the provision mentioned in Factories Act 1948 and/or the rules framed there under including all amendments thereto.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM

31.	 Failure to maintain records as per statutory requirement like Form No. 1A – for the shed/s constructed by contractor Form No. 6 – Certificate of fitness Form No. 10 – Register of workers attending machinery Form No. 11 – Report of Examination of Hoist/Lift/Lifting tackles. Form No. 13 – Report of Examination of any pressure vessel brought by the contractor at refinery site. Form No. 16 – Notice of periods of works for adult workers Form No. 17 – Register of adult workers Form No. 23 – Special certificate of fitness Form No. 29 – Muster Roll 	Rs. 10000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
c	OCCURENCES OF INDUSTRIAL ACCIDENTS		
32.	Failure to furnish a first information report (FIR) as per prescribed Pro-Forma within 4 hours of the incident.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
33.	Failure to arrange immediate investigation / evidences /documents of the incident and furnish within 24 hours to BPCL Engineer-In-Charge.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
34.	Keep and maintain proper records of all incidents occurred at work site	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
35.	Failure to report to BPCL supervisor on - the - job, medical centre and area safety officer any injury to his employees or any near miss or any hazardous/ dangerous incident at work site within the Refinery premises or hiding of any accident or near miss.	Rs. 5000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
36.	Negligence on contractor's part which has resulted in an Injury/fire Lost Time Injury Fatality	Rs.1,00,000/- per person Rs. 5,00,000/- per person	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
37.	Negligence on contractors part which has resulted in Minor Fire/Explosion/ etc Major Fire (Reportable)	Rs 1,00.000/- Rs 2,00.000/-	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
v	VIOLATION OF LABOUR LAWS		
38.	Working beyond statutory limits by contractor's workers	Rs. 1000/- per person per day	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
39.	Deployment of contractor's employees including supervisors without receiving necessary training on safety for working in the refinery.	Rs. 5000/- per person per day and holiday listing of contractor for 6 months if repeated	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates

40.	Deployment of contractor's employees including supervisors without undergoing their medical examination, by the authorized medical professional having qualification of MBBS + AFIH. Deployment of workers on high risk jobs like working in confined space, working at height, working under water, etc. without being examined and certified as medically fit for such jobs by the doctors who are authorized to certify for such jobs.	Rs. 1000/- per person	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
41.	Non subjecting to periodic medical examination after every six months after deployment of workers including supervisors on the job by the certifying surgeon as per Rule 73V of Maharashtra Factories Rule 1963.	Rs. 1000/- per person	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
42.	Deployment of child or adolescent	Rs. 10,000/- per person	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
43.	Use of untested and uncertified pressure vessel.	Rs. 5000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
44.	Use of untested and uncertified lifting tools/tackle	Rs. 5000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
V	OLATION IN MATERIAL HANDLING		
45.	Improper material handling/ Manually handling of heavy material when it is require using mechanical equipment/use of substandard/defective material handling trolleys/hand cart.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
46.	Failure to submit duly filled pre use check list for any new machine or equipment brought at site	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
47.	Inadequate supervision at work site(absence of supervisor/designated employee as supervisor from site for more than 30 Minutes when work is in progress)	Rs. 2000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
S	AFETY PERFORMANCE DISPLAY BOARD		
48.	Safety performance score board not displayed.	Rs. 100/- per day	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
V	OLATIONS IN USE OF GAS CYLINDERS		
49.	Unsafe handling of compressed gas cylinders No trolley or jubilee clips or double gauge regulator or flash back arrestor on both gas lines & both ends or improper storage / handling or cylinders without caps when not in use/damaged hoses)	Rs. 500/- per item per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates

V	IOLATIONS DURING RADIOGRAPHY PROCES	S	
50.	Radiography without authorization	Rs. 10000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
51.	Non barricading the area during radiography	Rs. 10000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
52.	Non announcement on PA system/alerting people working in vicinity, before start of Radiography jobs	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
N	IISCELLANEOUS		
53.	Damage to fire hydrant & monitors, fire extinguishers including non return of extinguishers	Cost incurred by BPCL for repair/replacement	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
54.	Poor House-keeping	Rs. 5000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
55.	Removal of grating/cover/lid on any opening in floor or vessel.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
56.	Use of dangerous portable tools/hand tools like grinding machine, drilling machine, pneumatic excavators/drill by unskilled worker.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
57.	Operating/allow to operate any machine without having guard on its dangerous/rotating part of the machine or an equipment.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
58.	Horseplay at work site	Rs1000 /- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
59.	Shifting of debris from one location to another/dumping debris at unauthorized place.	Rs. 10000/- per occasion	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates
60.	Use of mobile in plant areas	Rs 1000/- per person per occasion.	Engineer-in-charge, Head of Dept. F&S, Head of Dept. (Process/PD/Maint./MM PL/Tech./CS&S), Section Head Estates

Please note that:

- 1. The above penalties will be applicable for all the contracts jobs carried out inside Refinery and covered by BPCL HSE norms / work permit system.
- 2. Site Engineers, Operations Officers, Safety Officers will report such violation through their Department Head /Engineer-in-charge (Reporting Authority) to the respective contracting department (P&CS/RMP) for necessary action. Reporting Authority has been indicated against each violation.
- 3. On advice from Reporting Authority, respective contracting departments shall make the deductions from the next payment due to the contractor.
- 4. The above penalties shall be double in case of violations more than 3 times during the contract period for a particular contract. For annual and other rate contracts POs awarded as part of rate contract shall be considered for this.
- 5. In case of frequent penalties for a particular contractor, necessary action such as holiday listing / delisting will be taken.
- 6. In addition to the safety conditions mentioned in Special safety Conditions attached, contractors are required to adhere to the following additional safety requirement for which penalties are applicable as above for violation of these conditions:
 - a. All contractors shall themselves arrange weekly safety site inspection / audit and monthly safety meeting and record should be maintained.
 - b. All contractors shall submit monthly HSE report to respective Engineer-In-Charge by 5th of next month. Report should carry details of precautions against accident and injury to any of the workers or to any person or persons or of weekly safety site inspection / audit, monthly safety meeting, details about records maintained by Safety Supervisor and any other information felt necessary by Engineer-in-Charge for safe execution of job.
- Implementation of above financial penalties for violation of HSE norms does not absolve contractors from their responsibilities to take at all times due and proper precautions to avoid injuries and accidents.
- 8. Contractors shall own the full responsibility for any accident and injury to any of the workers or to any person or persons or property arising due to violation of HSE norms by contractors even though financial penalty is not applied for such violation. Implementation of these financial penalties does not absolve Contractors from any of the responsibility as per General Contract Conditions (Latest Revision), General Terms and Conditions and Special Safety Conditions.
- 9. All such financial penalties imposed on contractors shall be displayed / publicized appropriately by the respective Contracting department.

GENERAL CONDITIONS OF CONTRACT (GCC)



BHARAT PETROLEUM CORPORATION LIMITED

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GENERAL CONDITIONS OF CONTRACT

SECTION - I

DEFINITION OF TERMS

In the contract documents as herein defined where the context so admits, the following words and expressions will have following meanings:

- 1) "The Owner/Company/BPCL" means the Bharat Petroleum Corporation Limited, incorporated in India having its registered office at 4 & 6, Currimbhoy Road, Ballard Estate, Mumbai 400 038 or their successors or assigns
- 2) "The Contractor" means the person or the persons, firm or Company whose tender has been accepted by the Owner and includes the Contractor's legal representative, his successor and permitted assigns.
- 3) The "Managing Director" shall mean the Chairman and Managing Director of the Bharat Petroleum Corporation Limited or his successor in office designated by the Owner.
- 4) The "Engineer-in-Charge" shall mean the person designated as such by the Owner and shall Include those who are expressly authorised by the Owner to act for and on his behalf for operation of this contract.
- 5) The "Work" shall mean the works to be executed in accordance with the contract or part thereof as the case may be and shall include extra, additional, altered or substituted works as required for purpose of the contract.
- 6) The "Permanent Work" means and includes works which will be incorporated in and form a part of the work to be handed over to the Owner by the Contractor on completion of the contract.
- 7) The "Construction Equipment" means all appliances, Tools/Tackles and equipment of whatsoever nature for the use in or for the execution, completion, operation or maintenance of the work unless intended to form part of the Permanent work.
- 8) The "Site" means the areas on which the permanent works are to be executed or carried out and any other places provided by the Owner for purpose of the contract.
- 9) The "Contract Document" means collectively the Tender Document. Designs. Drawings or Specifications, agreed variations, if any, and such other document constituting the tender and acceptance thereof.
- 10) The "Consultant" means the consulting engineers Nominated/appointed by the Owner for this Project / job.
- 11) The "Sub-Contractor" means any person or firm or Company (other than the Contractor) to whom any part of the work has been entrusted by the Contractor, with the written consent of the Engineer-in-Charge, and the legal personal representatives, successors and permitted assigns of such person, firm or company.
- 12) The "Contract" shall mean the Agreement between the Owner and the Contractor for the execution of the works including therein all contract documents.
- 13) The "Specification" shall mean the various technical specifications attached and referred to in the tender documents. It shall also include the latest editions, including all addenda/corrigenda, of relevant Indian Standard Specification, specifications of the other country published before entering into Contract.
- 14) The "Drawings" shall include maps, plans and tracings or prints thereof with any modifications approved in writing by the Engineer-in-Charge and such other drawings as may, from time to time, furnished or approved in writing by the Engineer-in-Charge.
- 15) The "Tender" means the tender submitted by the Contractor for acceptance by the Owner.
- 16) The "Alteration Order" means an order given in writing by the Engineer-in-Charge to effect additions to or deletion from and alterations in the works.
- 17) The "Completion Certificate" shall mean the certificate to be issued by the Engineer-in-Charge to the contractor when the works have been completed to his satisfaction.
- The "Final Certificate" in relation to a work means the certificate issued by the Engineer-in-Charge after the period of liability is over for releasing the retention money/PBG.
- 19) The "Period of Liability" in relation to a work means the specified period during which the Contractor stands responsible for rectifying all defects that may appear in the works.

SECTION - II

GENERAL INFORMATION ABOUT SITE

2.1 **LOCATION OF SITE & ACCESSIBILITY:**

The site location is described in the Special Conditions of Contract. The intending tenderer should inspect the site and make himself familiar with site conditions and available facilities.

Entry into the BPCL areas is restricted depending on location/site. Only pass holders as also vehicles with special permits are permitted in such restricted areas. Inside the premises access to various work spots is also further regulated by permits issued for each area. Non-availability of access roads or permits for entry of vehicles/equipment to any specific area shall in no case be the cause to condone any delay in execution of works or be the cause for any claims or extra compensations.

2.2 **SCOPE OF WORK**

The scope of work is defined in the Special Conditions of Contract and specifications. The Contractor shall provide all necessary materials, equipments / Tools and Tackles / Supervision / labour etc. for the execution and maintenance of the work till completion unless otherwise mentioned in these tender documents. All materials that go with the work shall be approved by Engineer-in-Charge prior to procurement and use.

2.3 LAND FOR CONTRACTOR'S FIELD, GODOWN AND WORKSHOP:

The tenderer should visit the site and acquaint himself with site conditions, availability of water, electricity, approach roads, construction materials as per specifications, shelter for his staff, etc. since these are to be provided/arranged by the tenderer (unless otherwise specified) at his cost.

The owner will, at his discretion and convenience based on availability for the duration of the execution of the work, make available, land for construction of contractor's field office, go-downs, workshop and fabrication yard required for the execution of the contract. The contractor shall at his own cost construct all these temporary buildings and provide suitable water supply and sanitary arrangement approved by the Engineer-in-Charge.

On completion of the works undertaken by the Contractor, he shall remove all temporary works/ shed erected by him and have the site cleaned as directed by Engineer-in-Charge if the contractor shall fail to comply with these requirements, the Engineer-in-charge may at the expenses of the Contractor remove such surplus and rubbish material, dispose off the same as he deems fit and get the site cleared as aforesaid; and the contractor shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such surplus materials disposed off as aforesaid. But the Owner reserves the right to ask the Contractor any time during the pendency of the contract to vacate the land by giving seven days notice on security reasons or on material interest otherwise.

2.4 SAFETY STANDARDS FOR TEMPORARY BUILDINGS

All temporary buildings, sheds, workshops, field stations etc. shall be constructed in conformation with the safety and security regulations of the owner as regards location and type of structure.

SECTION - III

GENERAL INSTRUCTION FOR THE TENDERER

3 SUBMISSION OF TENDER:

- 3.1 The quotation should be submitted only in the manner and the form prescribed in the Request For Quotation (RFQ)/Tender enquiry.
- 3.2 Addenda/Corrigenda to this tender document if issued must be signed and submitted along with the tender document. The tenderer should consider the Addenda/Corrigenda and should price the work based on revised quantities when amendments for quantities are issued in addenda.
- 3.3 Tenders should always be placed in double sealed covers, superscribing Tender No ______ Tender for ______ (name of job), Bharat Petroleum Corporation Limited, due for opening on

The full name, postal address and telegraphic address of the tenderer shall be written on the bottom left hand corner of the sealed cover. (This will not be applicable in the case of e-tenders) Tenders received in open condition (priced bid) are liable to be rejected.

3.4 <u>Instructions for two part bidding</u>

- i) The bid should be submitted in two parts viz.
 - a. Techno-commercial bid.
 - b. Price bid.
- ii) Techno-commercial bid shall have the following information/details
 - a. Technical deviation if any.
 - b. Commercial deviation if any like extra taxes, duties etc.
 - c. Copy of price bid with prices blanked off.
 - d. Any other relevant information.
- iii) Price Bid shall have only prices as per schedule of Rates.
- iv) Techno-commercial bid and price bid shall be enclosed in two separate envelopes with the subject job, type of bid, bidders name super-scribed on top. Both these envelopes shall be sealed in a common envelope and submitted as specified above and in covering letter. (This will not be applicable in the case of e-tenders)

4 **DOCUMENTS:**

4.1 The tenders, as submitted shall include all documents/details asked for by BPCL in the RFQ/Tender enquiry.

4.2 All pages to be initialed:

Wherever signed tender documents are submitted, all signatures in the documents shall be dated, as well as all the pages of the documents shall be initialed at the lower right hand corner and signed wherever required in the tender papers by the tenderer or by a person holding power of attorney authorizing him to sign on behalf of the tenderer before submission of tender. Tenders without signatures as stated above are liable to be rejected.

4.3 Rates to be in Figures and Words:

The tenderer should quote the rates in English both in figures as well as in words. Offers received without the rates in figures and in words are liable for rejection. In case of discrepancy exists between the rate quoted in figures and in words, the rates quoted in words will prevail.

4.4 <u>Corrections and Erasures:</u>

All corrections and alteration in the entries of tender papers will be signed in full by the tenderer with date. No erasures or over-writings are permissible.

In case of priced bids containing overwriting/cuttings/erasures in the quoted rates and in case these are not attested by the signatory of the bid, such priced bids are liable to be rejected without giving any further notice.

4.5 <u>Signature of Tenderer:</u>

The tender shall contain the name, residence and place of business of person or persons making the tender and shall be signed by the tenderer with his usual signature with company stamp. Partnership firms shall furnish the full names of all partners in the tender. It should be signed in the partnership name by all the partners or by duly authorized representative followed by the name and designation of the person signing with company stamp. Tender by Company or Corporation registered under the relevant companies act, shall be signed by the authorized representative and a power of attorney in that behalf shall accompany the tender.

5 TRANSFER OF TENDER DOCUMENTS:

Transfer of tender documents issued to one intending tenderer to another is not permissible.

6 (a) EARNEST MONEY:

The tenderer must submit/ deposit earnest money, if specified in the RFQ/Tender enquiry, failing which the tender is liable to be rejected. The earnest money can be deposited in the form of Demand Draft or Bank Guarantee in favour of Bharat Petroleum Corporation Limited. Earnest Money deposit (EMD) is not applicable for registered contractors of BPCL.

NOTE: The Bank Guarantee so furnished by the tenderer shall be in the proforma prescribed by the owner. No interest shall be paid by the Owner on the earnest money deposit by the tenderer. The earnest money of the unsuccessful tenderer will be refunded.

(b) SECURITY DEPOSIT:

Unless otherwise specified in the special conditions of contract, in the case of contractors not registered with BPCL, the earnest money deposit (EMD), of the contractor whose tender may be accepted, will be converted to security deposit for due performance of the contract. The "performance security deposit/retention money" vide clause 18 shall also be applicable limiting to a maximum of 10% of the contract value.

7 **VALIDITY:**

Tender submitted by tenderers shall remain valid for acceptance for a period of four months from the date of opening of the tender (Technical Bid in the case of two bid). The tenderer shall not be entitled during the said period of four months, without the consent in writing of the Owner, to revoke, or cancel his tender or vary the tender given or any term thereof. In case of tenderer revoking or canceling his tender, varying any terms in regard thereof without the consent of Owner in writing, appropriate penal action will be taken by BPCL as deemed fit including putting the tenderer/contractor on 'Holiday listing'/Delisting' barring the tenderer/contractor from participating in future tenders for an appropriate period from the date of revocation/cancellation/varying the terms. Further in the case of contractors who are not registered with BPCL, the earnest money deposited by him will be forfeited. Once the quotation is accepted the rates quoted shall be firm till the entire work is completed.

8 ADDENDA / CORRIGENDA:

Addenda/ Corrigenda to the tender documents may be issued prior to the date of opening of the tenders to clarify documents or to effect modification in the design or tender terms. All addenda/corrigenda issued shall become part of tender Document.

9 RIGHT OF OWNER TO ACCEPT OR REJECT TENDER:

- 9.1 The right to accept the tender will rest with the Owner. The Owner, however, does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all the tenders received without assigning any reason whatsoever.
- 9.2 The whole work may be split up between two or more contractors or accepted in part and not entirely if considered expedient.
- 9.3 Tenders in which any of the particulars and prescribed informations are missing or are incomplete in any respect and/or the prescribed conditions are not fulfilled are liable to b rejected.
- 9.4 Canvassing in connection with tenders is strictly prohibited and tenders submitted by the tenderer who resort to canvassing will be liable to rejection.
- 9.5 Tender containing uncalled remarks or any additional conditions are liable to be rejected.

10 INTEGRITY PACT (IP):

Vendors are requested to sign & return our pre-signed IP document, if applicable. This document is essential & binding. Vendor's failure to return the IP document duly signed along with Bid Document may result in the bid not being considered for further evaluation.

11 COLLECTION OF DATA TENDERER'S RESPONSIBILITY & TIME SCHEDULE:

The tenderer shall visit the site and acquaint himself fully of the site and no claims whatsoever will be entertained on the plea of ignorance or difficulties involved in execution of work or carriage of materials.

The time period allowed for carrying out the job shall be as shown in tender document. Request for revision for time schedule after tenders are opened will not be received for consideration.

12 RETIRED GOVERNMENTS OR COMPANY OFFICER:

No Engineer of Gazetted rank or other Gazetted Officer, employed in Engineering or Administrative duties in an Engineering Department of the States/Central Government or of the Owner is allowed to work as a Contractor for a period of two years after his retirement from Government service or from the employment of the Owner without the previous permission of the Owner. The contract, if awarded, is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person, who had not obtained the permission of the State/Central Government, or of the Owner as aforesaid before submission of tender, or engagement in the Contractor's service as the case may be.

13 **SIGNING OF THE CONTRACT:**

The successful tenderer shall be required to execute an agreement in the proforma attached with tender enquiry within a period of one month of the receipt by him of the notification of acceptance of tender. The payment will not be processed till the time the agreement is executed.

14 FIELD MANAGEMENT:

The field management will be the responsibility of the Engineer-in-Charge, who will be nominated by the Owner. The Engineer-in-Charge may also authorize his representatives to perform his duties and functions. Coordination of Work - The Engineer-in-Charge shall coordinate the work of various agencies engaged at site to ensure minimum disruption of work carried out by different agencies. It shall be the responsibility of the contractor to plan and execute strictly in accordance with the site instructions to avoid hindrance to the works being executed by other agencies.

15 **CONSULTANCY CONTRACTS:**

This General Conditions of Contract (GCC) will be binding for Consultancy jobs only to the extent of its applicability to the context of consultancy jobs.

SECTION - IV

INTERPRETATION OF CONTRACT DOCUMENTS

15 INTERPRETATION OF CONTRACT DOCUMENT:

- Except if and to the extent otherwise provided by the Contract, the provisions of the General Conditions of Contract and special conditions shall prevail over those of any other documents forming part of the contract. Several documents forming the contract are to be taken as mutually explanatory. Should there be any discrepancy, inconsistency, error or omission in the contract or any of the matter may be referred to Engineer-in-Charge, who shall give his decisions and issue to the Contractor instructions directing in what manner the work is to be carried out. The decision of the Engineer-in-Charge shall be final and conclusive and the contractor shall carry out work in accordance with this decision.
- Works shown upon the drawing but not mentioned in the specifications or described in the specification without being shown on the drawings shall nevertheless be held to be included in the same manner as if they had been specifically shown upon the drawings and described in the specifications.
- 15.3 Headings and marginal notes to the clauses of these General Conditions of Contract or to specifications or to any other tender document are solely for the purpose of giving a concise indication and not a summary of the content thereof, and they shall never be deemed to be part thereof or be used in the interpretation or construction thereof of the Contract.
- 16.4 Singular and Plural:
 - In these contract documents unless otherwise stated specifically, the singular shall include the plural and vice-versa wherever the context so requires. Words indicating persons shall include relevant incorporated companies/ registered as associations/ body of individual/ firm or partnership.

16 SPECIAL CONDITIONS OF CONTRACT:

- 16.1 Special Conditions of contract shall be read in conjunction with the General Conditions of Contracts, specification of work, Drawings and any other documents forming part of this contract wherever the context so requires.
- Notwithstanding the sub-division of the documents into these separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.
- 16.3 Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract then, unless a different intention appears the provisions of the Special Conditions of Contract shall be deemed to over-ride the provision of the General Conditions of Contract and shall to the extent of such repugnance or variations, prevail.
- Wherever it is mentioned in the specifications that the Contractor shall perform certain work or provide certain facilities, it is understood that the contractor shall do so at his own cost.
- 16.5 The materials, designs and workmanship shall satisfy the relevant Indian Standards, the Job specifications contained herein and codes referred to. Where the job specifications stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied.

17 **CONTRACTOR TO OBTAIN HIS OWN INFORMATION:**

The contractor in fixing rate shall for all purposes whatsoever be deemed to have him self independently obtained all necessary information for the purpose of preparing his tender. The contractor shall be deemed to have examined the Contract Documents, to have generally obtained his own information in all matters whatsoever that might affect the carrying out the works at the scheduled rates and to have satisfied himself to the sufficiency to his tender. Any error description of quantity or omission there from shall not vitiate the contract or release the Contractor from executing the work comprised in the contract according to drawing and specifications at the scheduled rates. He is deemed to have known the scope, nature and magnitude of the works and the requirements of materials and labour involved etc. and as to what all works he has to complete in accordance with the contract documents whatever be the defects, omissions or errors that may be found in the Contract Documents. The Contractor shall be deemed to have visited surrounding to have satisfied himself to the nature of all existing structures, if any, and also as to the nature and the conditions of the Railways, roads, bridges and culverts means of transport and communications, whether by land, water or air, and as to possible interruptions thereto and the access to and regress from the site, to have made enquiries, examined and satisfied himself as to the sites for obtaining sand, stones, bricks and other materials, the sites for disposal of surplus materials the available accommodation as to whatever required, depots and such other building as may be necessary for executing and completing the works, to have made local independent enquiries as to the sub-soil water and variations thereof, storms, prevailing winds, climate conditions and all other similar matters affecting these works. He is deemed to have acquainted himself as to his liability for payment of Government taxes, customs duty and other charges.

Any neglect or failure on the part of the Contractor in obtaining necessary and reliable information upon the foregoing or any other matters affecting the contract shall not relieve him from any risk or liabilities or the entire responsibility from completion of the works at the scheduled rates and time in strict accordance with the contract documents.

No verbal agreement or inference from conversation with any officer or employee of the owner either before or after the execution of the contract agreement shall in any way affect or modify any of the terms or obligations herein contained.

18 PERFORMANCE SECURITY DEPOSIT/RETENTION MONEY:

18.1 To ensure performance of the contract and due discharge of the contractual obligations, the successful contractor will have to provide security deposit of 10% of the contract value unless otherwise specified in the Special Conditions of Contract.

This Security deposit may be furnished in the form of an Account payee Demand Draft payable to BPCL or Bank Guarantee in the prescribed format. The contractor shall have the option to adjust any Earnest Money Deposit-(EMD) if paid by demand draft towards security deposit if he so desires or otherwise if submitted by way of bank guarantee the validity of the same to be extended suitably as advised by BPCL.

In the case of security deposit submitted in the form of Bank guarantee, the Bank Guarantee shall be valid and remain in force till the contractual completion period (expiry of the defect liability period- refer clause-72, if applicable) and with a claim period of six months thereafter. The Bank Guarantee shall be in the form prescribed.

In case the successful contractor is not furnishing the performance security deposit as referred above on award of the job, the same shall be deducted from each running account bills at the rate of 10% of bill value till overall security deposit of 10% as mentioned above is collected.

The security deposit will be retained till the successful completion of the work and thereafter till the expiry of the defect liability period (refer clause-72), if applicable. This retention money/Bank guarantee held shall be released after the expiry of the defect liability period provided that any defects appearing during that period are corrected by the contractor and subject to Clause 18.2 below.

In the case of value/rate/quantity contracts, the security deposit shall be based on individual release orders issued.

- If the contractor/ sub-contractor or their employees shall break, deface or destroy any property belonging to the Owner or other agency during the execution of the contract, the same shall be made good by the Contractor at his own expenses and in default thereof, the Engineer-in-Charge may cause the same to be made good by other agencies and recover expenses from the contractor (for which the certificate of the Engineer-in-Charge shall be final). These expenses can be recovered from the security deposit/retention money if recovery from other sources is not possible.
- All compensation or other sums of money payable by the contractor to the Owner under terms of this contract may be deducted from his security deposit/retention money or from any sums which may be or may become due to the contractor by the Owner on any account whatsoever and in the event of his security deposit/retention money being reduced by reasons of any such deductions. The contractor shall within ten days thereafter make good any sum or sums, which may have been deducted from his security Deposit/retention money. No interest shall be payable by the Owner from sum deposited as security deposit/retention money.
- The security deposit shall be held by the Owner, as security for the due performance of the Contractor's obligations under the contract, provided that nothing herein stated shall make it incumbent upon the Owner to utilize the security deposit/retention money in preference to any other remedy which the Owner may have, nor shall be construed as confining the claims of the Owner against the contractor to the quantum of the Security Deposit/retention money.
- The Bank guarantee if submitted shall be from any Indian scheduled bank or an international bank of repute having a branch in India or a corresponding banking relationship with an Indian scheduled bank. The security deposit/retention money shall be in Indian Rupee in the case of domestic bidders and in US Dollars in the case of foreign bidders.

19 TIME OF PERFORMANCE:

- 19.1 The work covered by this contract shall be commenced as detailed in the purchase order or as per the instructions of the Engineer in charge and be completed in stages on or before the dates as mentioned in the time schedule of completion of work. The contractor should bear in mind that time is the essence of this agreement unless such time be extended pursuant to the provision of clause No. 21. Request for revision of Completion time after tenders are opened will not receive consideration.
- Time Schedule of Completion: The general time schedule of completion is given in the tender document. Contractor should prepare a detailed monthly and weekly execution programme, jointly with the Engineer-in-Charge within two weeks of receipt of Letter of Intent or acceptance of tender. The work shall be executed strictly as per the time schedule given in this document. The period of completion given includes the time required for testing, rectifications, if any, retesting and completion in all respects to the entire satisfaction of the Engineer-in-Charge.

20 **FORCE MAJEURE:**

Any delays in or failure of the performance of either part hereto shall not constitute default here under or give rise to any claims for damages, if any, to the extent such delays or failure of performance is caused by occurrences such as Acts of God or the public enemy expropriation or confiscation of facilities by Govt./authorities, compliances with any order or request of any Government authorities, acts of war, rebellion or sabotage or fires, floods, explosions, riots or strikes. The contractor shall keep records of the circumstances referred to above and bring these to the notice of Engineer-in-Charge in writing immediately on such occurrences.

21 **EXTENSION OF TIME:**

If the contractor shall desire an extension of the time for completion of the work on the grounds of his having been unavoidably hindered in its execution or on any other grounds, he shall apply in writing to the Engineer-in-Charge within two weeks of the date of hindrance on account of which he desires such extension as aforesaid, and the Engineer-in-Charge shall if in his opinion (which shall be final), reasonable grounds have been shown thereof, authorize such extension of time as may in his opinion be necessary or proper.

In the event of extension of Time of the contract, if granted, the contractor shall be required to suitably extend the period of Bank Guarantee if submitted, towards security Deposit/retention money suitably.

22. LIQUIDATED DAMAGES FOR DELAY:

- Time is the essence of the contract. In case the contractor fails to complete the whole work within the stipulated period, he shall be liable to pay liquidated damages of 0.5% of the value of contract per week and or part thereof of the delay subject to a maximum of 5% of the value of the contract. The parties agree that this is a genuine preestimate of the loss/damage which will be suffered by the owner on account of delay on the part of the contractor and the said amount will be payable on demand without there being any proof of the actual loss or damages having been caused by such delay/breach. The owner shall be at liberty to adjust or deduct the said amount of liquidated damages from any amount due to the contractor including Security Deposit.
- 22.2 The owner shall be at liberty to deduct or retain from any amount payable to the contractor periodically, the proportionate or full amount of liquidated damages as the case may be for the delay periodically caused by the contractor.

23 SUM PAYABLE BY WAY OF COMPENSATION TO BE CONSIDERED AS REASONABLE COMPENSATION WITHOUT REFERENCE TO ACTUAL LOSS:

All sums payable by way of compensation under any of the conditions shall be considered as reasonable compensation without reference to the actual loss or damage, which shall have been sustained by the Owner.

24 TERMINATION/OFFLOADING:

- 24.1 The contractor fully understands that timely completion of the work as per the schedule is of paramount necessity as otherwise it would lead to adversely affecting the schedules of other works/project with resultant financial and other losses to the Company/owner. In view of this, the contractor unconditionally agrees and binds himself to be liable for all the consequences for non-completion of the work within the stipulated time.
- In case a situation is brought about by the contractor warranting termination/off-loading of the whole or any part of the work for any reason whatsoever, the Company/owner shall have the liberty and right to entrust/engage/award the work so terminated/off loaded at the risk and cost of the contractor to any other agency/contractor by adopting any mode of inviting tenders, i.e. open/limited/single party/negotiation basis etc. in order to ensure completion of the work as per the schedule or at the quickest possible time.

25. **FORFEITURE OF SECURITY DEPOSIT:**

Whenever any claim against the Contractor for the payment of a sum of money arises out of or under the contract, the Owner shall be entitled to recover such sum by appropriating in part or whole, security deposit of the contractor, forming whole or part of such security being insufficient or if no security has been taken from the Contractor then the balance or the total sum recoverable, as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor. The contractor shall pay to the owner on demand any balance remaining due.

26 ACTION WHEN WHOLE OF SECURITY DEPOSIT IS FORFEITED:

In any case in which, under any clause or clauses of this contract, the contractor shall have forfeited the whole of his security deposit (whether paid in one sum or deducted by installment) or have committed a breach of any of the terms contained in this contract the owner shall have power to adopt any of the following courses as he may deem best suited to his interest.

- a) To rescind the contract (of which rescission notice in writing to the contractor under the hand of the owner shall be conclusive evidence) in which case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of the Owner.
- b) To employ labour paid by the owner and to supply materials to carry out the work any part of the work, debiting contractor with the labour cost of tools and plants and equipment charges, the cost of the materials for which a certificate of the Engineer-in-Charge shall be final and conclusive against the Contractor and 10% of costs as above to cover all departmental charges and crediting him with the value of the work done in all respects in the manner and at the same rates as if it had been carried out by the Contractor under the term of his contract. The certificate of Engineer-in-Charge as to the value of the work done shall be final and conclusive against the contractor.
- c) To measure up the work of the contractor and to take such part thereof as shall be unexecuted out of his hand to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess, the certificate in writing of the Engineer-in-Charge shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by the Owner under the contract or otherwise or from his security deposit or from the proceeds of sale thereof, of a sufficient part thereof.

In the event of any of the above course being adopted by the Owner, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any agreements or made any advances on account of or with a view to the execution of the work of the performance of the contract. In case the Contractor shall not be entitled to recover or be paid any sum for any work actually performed under this contract unless the Engineer-in-Charge will certify in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

27 CONTRACTOR REMAINS LIABLE TO PAY COMPENSATION IF ACTION NOT TAKEN UNDER CLAUSE 26:

In any case in which any of the powers conferred upon the owner by clause 26 thereof shall have become exercisable and the same had not been exercised, the non exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercised in the event of any further case of default by the contractor for which any clause of hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Owner putting in force the power under sub-clause (a), (b) or (c) vested in him under the proceeding clause he may, if he so desires takes possession of all or any tools and plants materials and stores in or upon the works or the site thereof belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates or in case of these not being applicable at current market rates to be certified by the Engineer-in-Charge whose certificate thereof shall be final otherwise the Engineer-in-Charge may give notice in writing to the contractor or his clerk of the works, supervisor or other authorized agent, requiring him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice) and in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractors expense or sell them by auction or private sale on account of the contractor and at his risk in, all respects without any further notice as to the date, time or place of sale and the certificate of the Engineer-in-Charge as to the expense of any such removal and the amount of proceeds and any expenses of any such sale shall be final and conclusive against the contractor.

28 NO COMPENSATION FOR ALTERATION IN OR RESTRICTION OF WORK:

If at any time from the commencement of the work the owner shall for any reasons whatsoever, not require the whole or part thereof as specified in the tender to be carried out, the Engineer-in-Charge shall give notice in writing of the fact to the contractor, who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out, neither shall he have any claim for compensation by reason of any alterations having been made in the original specifications, drawings, designs and instructions which shall involve any curtailment of the work as originally contemplated.

29 **CHANGES IN CONSTITUTION:**

Where the contractor is a partnership firm, the prior approval, in writing, of the Owner shall be obtained before any change is made in the constitution of the firm, where the contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before sub-contractor enters into any agreement with other parties, where under the reconstituted firm would have the right to carryout the work hereby undertaken by the contractor. In either case if prior approval as aforesaid is not obtained, the contract shall be deemed to have been allotted in contravention of clauses 35 hereof and the same action may be taken and, the same consequence shall ensure as provided in the said clause.

30 IF THE CONTRACTOR DIES:

Without prejudice to any of the rights or remedies under his contract, if the contractor dies, the Owner shall have the option of terminating the contract without compensation to the contractor.

31 EMPLOYEES OF THE OWNER NOT INDIVIDUALLY LIABLE:

No director or official or employee of the Owner shall in any way be personally bound or liable for the acts or obligations of the Owner under the contract or answerable for any default or omission in the observance or performance of any of the acts, matters or things which are herein contained.

32 OWNER NOT BOUND BY PERSONAL REPRESENTATIONS:

The contractor shall not be entitled to any increase on the item rates of the contract or any other right or claim whatsoever by reason of representation, explanation or statement or alleged representation, promise or guarantees given or alleged to have been given to him by any person.

33 **CONTRACTOR'S OFFICE AT SITE:**

The contractor shall provide and maintain an office at the site, if space provided by the owner, for the accommodation of his agent and staff and such office shall be open at all reasonable hours to receive instruction, notices, or other communications.

34 **CONTRACTOR'S SUBORDINATE STAFF AND THEIR CONDUCTS:**

- 34.1 The contractor, on or after award of the work shall name and depute a qualified personnel having sufficient experience in carrying out work of similar nature to whom the equipments materials, if any, shall be issued and instructions for works given. The contractor shall also provide to the satisfaction of the Engineer-in-Charge sufficient and qualified staff to supervise the execution of the-works, competent sub-agents, supervisor and leading hands including those specially qualified by previous experience to supervise the type of works comprised in the contract in such manner as will ensure work of the best quality, expeditious working. Whenever in the opinion of the Engineer-in-Charge, additional properly qualified supervision staff is considered necessary, they shall be employed by the contractor without additional charges on account thereof. The Contractor shall ensure to the satisfaction of the Engineer-in-Charge that sub-contractors, if any shall provide competent and efficient supervision over the work entrusted to them.
- If and whenever any of the Contractor's or sub-contractor's agents, sub-agents, assistants supervisor or other employees shall in the opinion of Engineer-in-Charge be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties or that in the opinion of the owner or Engineer-in-Charge, it is undesirable for administrative or any other reason for such person or persons to be employed in the works, the contractor, if so directed by the Engineer-in-Charge, shall at once remove such person or persons from employment thereon. Any person or persons so removed from the works shall not again be employed in connection with the works without the written permission of the Engineer-in-Charge. Any person so removed from the works shall be immediately replaced at the expense of the contractor by a qualified and competent substitute. Should the contractor be requested to repatriate any person removed from the works he shall do so and shall bear all costs in connection herewith.
- 34.3 The contractor shall be responsible for the proper behaviour of all the staff, supervisor, workmen and others and shall exercise a proper degree of control over them and in particular, and without prejudice to the said generality, the contractor shall be bound to prohibit and prevent any employees from trespassing or acting in any way detrimental or prejudicial to the interest of the community or of the properties or occupiers of land and properties in the neighborhood and in the event of such employee so trespassing, the contractor shall be responsible therefore and relieve the Owner of all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the Engineer-in-Charge upon any matter arising under this clause shall be final. Contractor shall ensure that none of their employees are ever engaged in any anti-national activities.
- 34.4 All contractor's personnel entering upon the Owner's premises shall be properly identified by badges issued by owner which must be worn all times on Owner's premises.

35 **SUB-LETTING OF WORK:**

Sub letting of contracts shall not be generally permitted. However owner may permit sub letting of work on specific cases subject to the following:-

i) No part of the contract nor any share of interest there shall in any manner or degree be transferred assigned sublet by the contractor directly or indirectly to any firm or corporation whosoever except as provided for in the succeeding sub-clause, without the consent in writing of the Owner.

- ii) Sub Contractors for Temporary Works Etc.:- The Owner may give written consent to sub-contract for execution of any part of the works at the site, being entered into by the contractor provided each individual sub-contract is submitted to the Engineer-in-Charge before being entered into and is approved by him.
- iii) List of Sub-Contractors to be supplied: At the commencement of every month the contractor shall furnish to the Engineer-in-Charge list of all sub-contractors or firms engaged by the contractor and working at the site during the previous month with particulars of the general nature of the sub-contract or works.
- iv) Contractor's Liability Not Limited By Sub-Contractors:- Notwithstanding any sub-letting with such approval as aforesaid and notwithstanding that the Engineer-in-Charge shall have received copies of any sub-contracts, the contractor shall be and shall remain solely responsible for the quality and proper and expeditious execution of the works and the performance of all the conditions of the contract in all respects as if such sub-letting or sub-contracting had not taken place and as if such work had been done directly by the Contractor.
- v) Owner may Terminate Sub-Contracts:- If any sub-contractor engaged upon the works at the site executes any work which in the opinion of the Engineer-in-Charge is not in accordance with the Contract documents, the owner may by written notice to the contractor request him to terminate such sub-contract and the contractor upon the receipt of such notice shall terminate such sub contract and the latter shall forthwith leave the works, failing which the owner shall have right to remove such sub-contractors from the Site.
- vi) No Remedy For Action Taken Under This Clause:- No action taken by the owner under the clause shall relieve the contractor of any of his liabilities under the contract or give rise to any right to compensation, extension of time or otherwise failing which, the owner shall have right to remove such sub-contractors from the Site.

36 **POWER OF ENTRY:**

If the contractor shall not commence the work in the manner previously described in the contract document or if he shall, at any time in the opinion of the Engineer-in-Charge.

- i. Fail to carryout the works in conformity with the contract documents, or
- ii. Fail to carryout the works in accordance with the time schedule, or
- Substantially suspend work or the works for a period of Fourteen days without authority from the Engineer-in-Charge, or
- iv. Fail to carryout and execute the works to the satisfactions of the Engineer-in-Charge, or
- Fail to supply sufficient or suitable constructional equipments, temporary works, labour materials or things, or
- vi. Commit or suffer or permit any other breach of any of the provisions of the contract on his part to be performed or observed or persist in any of the above mentioned breaches of the contract for the fourteen days, after notice in writing shall have been given to the Contractor by the Engineer-in-Charge requiring such breach to be remedied, or
- vii. Abandon the works, or
- viii. During the continuance of the contract, become bankrupt, make any arrangement or composition with his creditors, or permit any execution to be levied or go into liquidation whether compulsory or voluntary not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction.

Then in any such case, the Owner shall have the power to enter upon the works and take possession thereof and of the materials, temporary works, constructional equipment, and stock thereon, and to revoke the contractor's license to use the same, and to complete the works, by his agents, other contractor or workmen, or to re-let the same upon any terms and to such other person firm or corporation as the Owner in his absolute discretion may think proper to employ and for the purpose aforesaid to use or authorize the use of any materials, temporary works constructional equipment, and stock as aforesaid without making payment or allowances to the contractor for the said materials other than such as may be certified in writing by the Engineer-in-Charge to be reasonable, and without making any payment or allowance to the contractor for the use of the temporary said works, constructional equipments and stock or being liable for any loss of damage thereto, and if the Owner shall by reason of his taking possession of the works or of the works being completed by other contractors (due account being taken of any such extra work or works which may be omitted) then the amount of such excess as certified by the Engineer-in-Charge shall be deducted from any money which may be due for work done by the contractor under the contract and not paid for. Any deficiency shall forthwith be made good and paid to the Owner by the contractor and the Owner shall have power to sell in such manner and for such price as he may think fit all or any of the constructional equipment, materials etc. belonging to and to recoup and retain the said deficiency or any part thereof out of the proceeds of the sale.

37 **CONTRACTORS RESPONSIBILITY WITH OTHER AGENCIES:**

Without repugnance to any other condition, it shall be the responsibility of the contractor executing the work of civil construction, to work in close co-operation and co-ordinate the works with other contractors or their authorized representatives and the contractor will put up a joint scheme, showing the arrangements, with other contractors / agencies for carrying his portion of work to the Engineer-in-Charge, and get the approval. The contractor before finally submitting the schemes to the Engineer-in-Charge shall have the written agreement of the other agencies. The Engineer-in-Charge before communicating his approval of the scheme, with any required modifications shall get the final agreement of all the agencies, which shall be binding. No claim shall be entertained on account of the above.

The contractor shall conform in all respects with the provisions of any statutory regulations, ordinances or by laws of any local or duly constituted authorities or public bodies which may be applicable from time to time to the works or any temporary works. The contractor shall keep the Owner Indemnified against all penalties and liabilities of every kind arising out of non-adherence to such statutes ordinances, laws, rules, regulations, etc.

38 **OTHER AGENTS AT SITE:**

The contractor shall have to execute the work in such place and condition where other agencies might also be engaged for other works such as site grading, filling and leveling, electrical and mechanical engineering works etc. No claim shall be entertained to works being executed in the above circumstances.

39 **NOTICES:**

Any notice hereunder may be served on the contractor or his duly authorized representative at the job site or may be served by registered mail direct to the address furnished by the Contractor. Proof of issue of any such notice could be conclusive of the contractor having been duly informed of all contents therein.

40 **RIGHTS OF VARIOUS INTERESTS:**

- i) The Owner reserves the right to distribute the work between more than one contractor. The contractor shall cooperate and afford other contractors reasonable opportunity for access to the works for the carriage and storage of materials and execution of their works.
- ii) Whenever the work being done by any department of the Owner or by other contractors employed by the Owner is contingent upon work covered by the contract, the respective rights of the various interests involved shall be determined by the Engineer-in-Charge to secure the completion of the various portions of the work in general harmony.

41 RIGHT OF OWNER TO DETERMINE / TERMINATE CONTRACT

- i) Owner shall, at any time be entitled to determine and terminate the contract, if in the opinion of the Owner the cessation of the work becomes necessary owing to paucity of funds or for any other cause whatsoever, in which case, the cost of approved materials at the site at current market rates as verified and approved by Engineer-in-Charge and of the value of the work done to date by the contractor shall be paid for in full at the rates specified in the contract. A notice in writing from the Owner to the contractor of such determination and termination and the reason thereof, shall be the conclusive proof of the fact that the contract has been so determined and terminated by the Owner.
- ii) Should the contract be determined under sub-clause (i) of this clause and the contractor claims payments to compensate expenditure incurred by him in the expectation of completing the whole of the work, the Owner shall consider and admit such claim as are deemed fair and reasonable and are supported by vouchers to the satisfaction of the Engineer-in-Charge. The Owner's decision on the necessity and propriety of any such expenditure shall be final and conclusive and binding on the contractor.

42 **PATENTS AND ROYALTIES:**

42.1 The contractor, if licensed under any patent covering equipment, machinery, materials or compositions of matter to be used or supplied or methods and process to be practiced or employed in the performance of this contract, agrees to pay all royalties and licence fees which may be due with respect thereto. If any equipment, machinery, materials or composition matters, to be used or supplied or methods and process to be practised or employed in the performance of this contract, is covered by a patent under which contractor is not licensed then the contractor before supplying or using the equipment, machinery, materials, compositions method or processes shall obtain such licences, and pay such royalties and licence fees as may be necessary for performance of the contract. In the event, the contractor fails to pay any such royalties or obtain any such licence, any suit for infringement of such patents which is brought against the contractor or the Owner as a result of such failure will be defended by the contractor at his own expenses and the contractor will pay any damages and costs awarded in such suit. The contractor shall promptly notify the owner if the contractor has acquired knowledge of any patent under which a suit for infringement could be reasonably brought because of the use by the Owner of any equipment, machinery, materials, and process methods to be supplied hereunder. The contractor agrees to and does hereby grant to Owner, together with the right to extend the same to any of the subsidiaries of the Owner as irrevocable, royaltyfree licence to use in any country, any invention made by the contractor or his employee in or as a result of the performance of the work under the contract.

The Owner shall indemnify and save harmless the contractor from any loss on account of claims on contractor for the contributory infringement of patent rights arising out and based upon the claim that the use by the Owner of the process included in the design prepared by the Owner and used in the operation of the plant infringes on any patent right with respect to any sub-contract entered into by contractor pursuant to the provisions of subcontractor an undertaking to provide the Owner with the same patent protection that contractor is required to provide under the provisions of this clause.

- 42.2 All drawings, blue prints, tracings, reproducible, models, plans, specification and copies thereof, furnished by the Owner as well as drawings, tracings, reproducible, plans specifications, design, calculations etc. prepared by the contractor for the purpose of execution of works covered in or connected with this contract shall be the property of Owner and shall not be used for any other work but are to be delivered to the Owner at the completion of the contract.
- 42.3 Where so desired by Engineer-in-Charge, the contractor agrees to respect the secrecy of any document, drawings etc. issued to him for the execution of this contract, and restrict access to such documents, drawing etc. to the minimum and further, the contractor agrees to execute an individual SECRECY agreement from each or any person employed by contractor having access to such documents, drawings and to any other agency or individual, without the written approval by Engineer-in-Charge.

43 **LIENS**:

- 43.1 If, at any time, there should be evidence or any lien or claim for which the Owner might have become liable and which is chargeable to the contractor, the Owner shall have the right to retain out of any payment then due or thereafter to become due an amount sufficient to completely indemnify the owner against such lien or claim and if such lien or claim be valid the Owner may pay and discharge the same and deduct the amount so paid from any money which may be or may become due and payable to the Contractor. If any lien or claim remain unsettled after all payments are made, the contractor shall refund or pay to the Owner all moneys that the latter may be compelled to pay in discharging such lien or claim including all costs and reasonable expenses.
- Contractor will not disclose details of the work to any person or persons except those engaged in its performance, and only to the extent required for the particular portion of the work being done.

 Contractor will not give any items concerning details of the work to the press or a news disseminating agency without prior written approval from Engineer-in-Charge. Contractor shall not take any pictures on site without written approval of Engineer-in-Charge

44 **OPERATION OF CONTRACT:**

44.1 Law Governing:

Regardless of the place of contracting, place of performance or otherwise, this Agreement, and all amendments, modifications, alterations, or supplements, thereto shall be governed by the laws of India and respective state laws for the nature, validity and interpretation thereof.

44.2 Non-Waiver of Default:

Any failure by the Owner or Contractor at any time, or from time to time, to enforce or require the strict keeping and performance of any of the terms or conditions of this agreement, or to exercise a right hereunder, shall not constitute a waiver of such terms, conditions or rights, and shall not affect or impair same, or the right of the Owner or the Contractor, as the case may be at any time to avail itself of same.

SECTION - V

PERFORMANCE OF WORK

45 **EXECUTION OF WORKS:**

- 45.1 All the works shall be executed in strict conformity with the provisions of the contract documents and with such explanatory detailed drawings, specifications, and instructions as may be furnished from time to time to the contractor by the Engineer-in-Charge whether mentioned in the contract or not. The contractor shall be responsible for ensuring that works throughout are executed in the most substantial, proper and workman like manner with the quality of material and workmanship in strict accordance with the specifications following all safety requirements of BPCL and as stipulated in work permits as per the directions and to the entire satisfaction of the Engineer-in-Charge.
- Wherever it is mentioned in the specifications that the Contractor shall perform certain work or provide certain facilities/materials, it is understood that the contractor shall do, so at his cost unless otherwise specified.
- 45.3 The materials, design and workmanship shall satisfy the relevant Indian Standards, the Job specification contained herein and codes referred to. Where the job specification stipulate requirements in addition to those contained in the standards codes and specifications, these additional requirements shall also be satisfied.

46 **COORDINATION AND INSPECTION OF WORK:**

The coordination and inspection of the day-to-day work under the contract shall be the responsibility of the Engineer-in-Charge. The written instructions regarding any particular job will be normally be passed by the Engineer-in-Charge or his authorized representative. A work order book / logbook will be maintained by the Contractor for each job in which the aforesaid written instructions will be entered. These will be signed by the contractor or his authorized representative by way of acknowledgment within 12 hours. The non maintaining of the order book or non signing by the contractor shall not preclude the contractor from complying with the instructions.

47 WORK IN MONSOON AND DEWATERING:

- 47.1 The completion of the work may entail working in the monsoon also. The contractor must maintain a minimum labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No extra rate will be considered for such work in monsoon.
- During monsoon and other period, it shall be the responsibility of the contractor to keep the construction work site free from water at his own cost.

48 WORK ON SUNDAYS AND HOLIDAYS:

For carrying out work on Sundays and Holidays if needed, the contractor will approach the Engineer-in-Charge or his representative at least two days in advance and obtain permission in writing. No special compensation on this account will be payable.

49 GENERAL CONDITIONS FOR CONSTRUCTION AND ERECTION WORK:

49.1 Place of Work:

The work has to be executed at specified premises as per the tender. Contractor should apprise himself of all the conditions prevailing in such location and the restrictions placed on movement of personnel and equipment, types of equipment and tools permitted, working methods allowed etc. in the light of security and safety regulations operative in the area.

The safety regulations to be complied with, by the contractor will also be provided along with the tender. No idle time wages or compensation for temporary stoppage of work or restrictions would be paid, and the rate quoted for the various items of work should cover the cost of all such contingencies and eventualities. Substantial structures and utilities exist both above ground and underground, adjacent to the work site. (The construction activity gets restrained by the existence of such structures and utilities). Special care is necessary in transportation, storage, working on equipments and other construction activities to protect the existing features and prevent damage to any facility. Necessary protective structures barricades etc. have to be erected at various places as directed by Engineer-in-Charge. No extra payment of such protective works will be made unless specially provided in the tender.

- 49.2 The working time or the time of work is 48 hours per week normally. Overtime work is permitted in cases of need and the Owner will not compensate the same. Shift working at 2 or 3 shifts per day may become necessary and the contractor should take this aspect into consideration for formulating his rates for quotation. No extra claims will be entertained by the Owner on this account.
- 49.3 The contractor must arrange for the placement of workers in such a way that the delayed completing of the work or any part thereof for any reasons whatsoever will not affect their proper employment. The Owner will not entertain any claim for idle time payment whatsoever.

49.4 The contractor shall submit to the Owner reports at regular intervals regarding the state and progress of work. The details and preforma of the report will mutually be agreed after the award of contract.

50 **DRAWINGS TO BE SUPPLIED BY THE OWNER:**

- Where drawings are attached with tender, these shall be for the general guidance of the contractor to enable him to visualize the type of work contemplated and scope of work involved. The contractor will be deemed to have studied the drawings and formed an idea about the work involved.
- Detailed working drawings on the basis of which actual execution of the work is to proceed will be furnished from time to time during the progress of the work. The contractor shall be deemed to have gone through the drawings supplied to him thoroughly and carefully and in conjunction with all other connected drawings and bring to the notice of the Engineer-in-Charge, discrepancies, if any, therein before actually carrying out the work.
- 50.3 Copies of all detailed working drawings relating to the works shall be kept at the contractor's office of the site and shall be made available to the Engineer-in-Charge at any time during the contract. The drawings and other documents issued by the Owner shall be returned to the Owner on completion of the works. Reference is also invited to clause 42.2 and 42.3 above regarding drawings and other documents.

51 DRAWINGS TO BE SUPPLIED BY THE CONTRACTOR:

- Where drawings/data are to be furnished by the contractor, they shall be as enumerated in the special conditions of contract, and shall be furnished within the specified time.
- Where approval of drawings before manufacture / construction / fabrication has been specified, it shall be contractor's responsibility to have these drawings prepared as per the directions of Engineer-in-Charge and got approved before proceeding with manufacture construction / fabrication, as the case may be. Any changes that may have become necessary in these drawings during the execution of the work shall have to be carried out by the contractor to the satisfaction of Engineer-in-Charge at no extra cost. All final drawings shall bear the certification stamps duly signed by both the contractor and the Engineer-in-Charge.
- A period of 3 weeks from the date of receipt shall be required normally for approval of drawings by the Engineer-in-Charge.

52 **SETTING OUT WORKS:**

- 52.1 The Engineer-in-Charge shall furnish the contractor with only the four corners of the work site and a level bench mark and the contractor shall set out the works and shall provide efficient staff for the purpose and shall be solely responsible for the accuracy of such setting out.
- The contractor shall provide, fix and be responsible for the maintenance of all stacks, templates, level marks, profiles and other similar things and shall take all necessary precaution to prevent their removal or disturbance and shall be responsible for the consequence of such removal or disturbance should the same take place and for their efficient and timely reinstatement. The contractor shall also be responsible for the maintenance of all existing survey marks, boundary marks, distance marks and centre line marks, either existing or supplied and fixed by the contractor. The, work shall be set out to the satisfaction of the Engineer-in-Charge. The approval thereof or joining in setting out the work shall not relieve the contractor of any of his responsibilities.
- Before beginning the works, the contractor shall at his own cost, provide all necessary reference and level posts, pegs, bamboos, flags, ranging rods, strings and other materials for proper layout of the work in accordance with the scheme, for bearing marks acceptable to the Engineer-in-Charge. The centre, longitudinal or face lines and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct marks at the centre to enable theodolite to be set over it. No work shall be started until all these points are checked and approved by the Engineer-in-Charge in writing but such approval shall not relieve the contractor of any of his responsibilities. The contractor shall also provide all labour, material and other facilities, as necessary, for the proper checking of layout and inspection of the points during construction.
- 52.4 Pillars bearing geodetic marks located at the site of work under construction should be protected and fenced by the contractor.
- 52.5 On completion of works, the contractor must submit the geodetic documents according to which the work was carried out.

RESPONSIBILITY FOR LEVEL AND ALIGNMENT:

The contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment, the levels and correctness of every part of the work and shall rectify effectually any errors or imperfections therein. Such rectifications shall be carried out by the contractor, at his own cost, when instructions are issued to that effect by the Engineer-in-Charge.

54 MATERIALS TO BE SUPPLIED BY CONTRACTOR:

The contractor shall procure and provide the whole of the materials required for construction including tools, tackles, construction plant and equipment for the completion and maintenance of the works except the materials which will be issued by Owner and shall make his own arrangement for procuring such materials and for the transport thereof. The materials procured by the contractor shall be BPCL approved/specified quality.

- All materials procured should meet the specifications given in the tender document. The Engineer-in-Charge may, at his discretion, ask for samples and test certificates for any batch of any material procured. Before procuring, the contractor should get the approval of Engineer-in-Charge for any material to be used for the works.
- Manufacturer's certificate shall be submitted for all materials supplied by the contractor. If, however, in the opinion of the Engineer-in-Charge any tests are required to be conducted on the materials supplied by the contractor, these will be arranged by the contractor promptly at his own cost.

55 MATERIALS SUPPLIED BY OWNER:

- If the specifications of the work provides for the use of any materials of special description to be supplied from the Owner's stores, price for such material to be charged therefore as herein after mentioned being so far as practicable for the convenience of the contractor but not so as in any way to control the meaning or effect of the contract. The contractor shall be bound to purchase and shall be supplied such materials as are from time to time required to be used by him for the purpose of the contract only. The sums due from the contractor for the value of the actual materials supplied by the Owner will be recovered from the running account bill on the basis of the actual consumption of materials in the work covered and for which the running account bill has been prepared. After the completion of the works, however, the contractor has to account for the full quantity of materials supplied to him as per relevant clauses in this document.
- The value of the materials as may be supplied to the contractor by the Owner will be debited to the contractor's account at the rates shown in the schedule of chargeable materials and if they are not entered in the schedule, they will be debited at cost price, which for the purpose of the contract shall include the cost of carriage and all other expenses whatsoever such as normal storage supervision charges which shall have been incurred in obtaining the same at the Owner's stores. All materials so supplied to the contractor shall remain the absolute property of the Owner and shall not be removed on any account from the site of the work, and shall be at all times open for inspection to the Engineer-in-Charge. Any such materials remaining unused at the time of completion or termination of the contract shall be returned to the Owner's stores or at a place as directed by the Engineer-in-Charge in perfectly good condition, at contractor's cost.

56 **CONDITIONS FOR ISSUE OF MATERIALS:**

- i) Materials specified to be issued by the Owner will be supplied to the contractor by the Owner from his stores/location. It shall be the responsibility of the contractor to take delivery of the materials and arrange for its loading, transport and unloading at the site of work at his own cost. The materials shall be issued between the working hours and as per the rules of the Owner framed from time to time.
- ii) The contractor shall bear all incidental charges for the storage and safe custody of materials at site after these have been issued to him.
- iii) Materials specified to be issued by the Owner shall be issued in standard sizes as obtained from the manufacturer.
- iv) The contractor shall construct suitable godown at the site of work for storing the materials safe against damage by rain, dampness, fire, theft etc. He shall also employ necessary watch and ward establishment for the purpose.
- v) It shall be duty of the contractor to inspect the material supplied to him at the time of taking delivery and satisfy himself that they are in good condition. After the materials have been delivered by the Owner, it shall be the responsibility of the contractor to keep them in good condition and if the materials are damaged or lost, at any time, they shall be repaired and/ or replaced by him at his own cost, according to the directions of the Engineer-in-Charge.
- vi) The Owner shall not be liable for delay in supply or non-supply of any materials which the Owner has undertaken to supply where such failure or delay is due to natural calamities, act of enemies, transport and procurement difficulties and any circumstances beyond the control of the Owner. In no case, the contractor shall be entitled to claim any compensation or loss suffered by him on this account.
- vii) It shall be the responsibility of the contractor to arrange in time all materials required for the works other than those to be supplied by the Owner. If, however, in the opinion of the Engineer-in-Charge the execution of the work is likely to be delayed due to the contractor's inability to make arrangements for supply of materials which normally he has to arrange for, the Engineer-in-Charge shall have the right, at his own discretion, to Issue such materials If available with the Owner or procure the materials from the market or elsewhere and the contractor will be bound to take such materials at the rates decided by the Engineer-in-Charge. This, however, does not in any way absolve the contractor from responsibility of making arrangements for the supply of such materials in part or in full, should such a situation occur, nor shall this, constitute a reason for the delay in the execution of the work.
- viii) None of the materials supplied to the contractor will be utilized by the contractor for manufacturing item, which can be obtained from standard manufacturer in finished form.
- ix) The contractor shall, if desired by the Engineer-in-Charge, be required to execute an indemnity bond for safe custody and accounting of all materials issued by the Owner.
- x) The contractor shall furnish to the Engineer-in-Charge sufficiently in advance a statement showing his requirements of the quantities of the materials to be supplied by the Owner and the time when the same will be required by him for the works, so as to enable the Engineer-in-Charge to make necessary arrangement for procurement and supply of the material.

- xi) A daily account of the materials issued by the Owner shall be maintained by the contractor indicating the daily receipt, consumption and balance in hand. This account shall be maintained in a manner prescribed by the Engineer-in-Charge along with all connected papers viz. requisition, issues etc. and shall be always available for inspection in the contractor's office at site.
- xii) The contractor should see that only the required quantities of materials are got issued. The contractor shall not be entitled to cartage and incidental charges for returning the surplus materials, if any, to the stores/location where from they were issued or to the place as directed by the Engineer-in-Charge.
- xiii) Materials/ Equipment supplied by Owner shall not be utilized for any other purpose(s) than issued for.

57 MATERIALS PROCURED WITH ASSISTANCE OF OWNER:

Notwithstanding anything contained to the contrary in any or all the clause of this document where any materials for the execution of the contract are procured with the assistance of Owner either by issue from Owner's stock or purchase made under orders or permits or licences issued by Government, the contractor shall hold the said materials as trustee for the Owner and use such materials economically and solely for the purpose of the contract and not dispose them off without the permission of the owner and return, if required by the Engineer-in-Charge, all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason, whatsoever on his being paid or credited such prices as the Engineer in-Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however, shall not exceed the amount charged to him excluding the storage charges if any. The decision of the Engineer-in-Charge shall be final and conclusive in such matters. In the event of breach of the aforesaid condition, the contractor shall in terms of the licenses or permits, and/or for criminal breach of trust, be liable to compensate the Owner a double rate or high rate, in the event of those materials at that time having higher rate or not being available in the market, then any other rate to be determined by the Engineer-in-Charge and his decision shall be final and conclusive.

58 MATERIALS OBTAINED FROM DISMANTLING:

If the contractor in the course of execution of the work is called upon to dismantle any part for reasons other than those stipulated in clauses 64 & 68 hereunder, the materials obtained in the work of dismantling etc. will be considered as the Owner's property and will be disposed off to the best advantage of the Owner.

59. **ARTICLES OF VALUE FOUND:**

All gold, silver and other materials, of any description and all precious stones, coins, treasure relies, antiquities and other similar things which shall be found in, under or upon the site, shall be property of the Owner and the contractor shall duly preserve the same to the satisfaction of the Engineer-in-Charge and shall from time to time deliver the same to such person or person indicated by the Owner.

60 **DISCREPANCIES BETWEEN INSTRUCTIONS:**

Should any discrepancy occur between the various instructions furnished to the contractor, his agents or staff or any doubt, arise as to the meaning of any such instructions or should there be any misunderstanding between the contractor's staff and the Engineer-in-Charge's staff, the contractor shall refer the matter immediately in writing to the Engineer-in-Charge whose decision thereon shall be final and conclusive and no claim for losses alleged to have been caused by such discrepancies between instructions, or doubts, or misunderstanding shall in any event be admissible.

61 ALTERATIONS IN SPECIFICATIONS AND DESIGNS AND EXTRA WORK:

- A) The Engineer-in-Charge shall have power to make any alterations in, omissions from, additions to of substitutions for, the schedule of rates, the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out such altered / extra / new items of work in accordance with any instructions which may be given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall not invalidate the contract and any altered additional or substituted work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respect on which he agree to do the main work. The time for completion of work may be extended for the part of the particular job at the discretions of the Engineer-in-Charge, for only such alteration, additions or substitutions of the work, as he may consider as just and reasonable. The rates for such additional, altered or substituted work under this clause shall be worked out in accordance with the following provisions:
- a) If the rates for the additional, altered or substituted work are specified in the contract for the work, the contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the contract.
- b) If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for similar class of works as specified in the contract for the

work. The opinion of the Engineer-in-Charge as to whether the rates can be reasonably so derived from items in the contracts will be final and binding on the contractor.

- c) If the rates for the altered, additional or substituted work cannot be determined in the manner specified in sub-clause (a) and (b) above, then the contractor shall inform the Engineer-in-Charge of the rate which is his intension to charge for such class of work supported by analysis of the rate or rates claimed, and the Engineer-in-Charge shall determine the rates on the basis of the prevailing market rates of materials, labour cost at schedule of labour plus 10% to cover contractor's supervision, overheads and profit and pay the contractor accordingly. The opinion of the Engineer-in-Charge as to the current market rates of materials and the quantum of labour involved per unit of measurement will be final and binding on the contractor.
- d) Provisions, contained in sub-clause (a) to (c) above shall not, however, apply:
 - Where the value of alterations / additions / deletions or substitutions exceeds beyond plus or minus 25% of the estimated contract value (i.e. quoted item rates of contractor shall hold good for variations etc. within plus or minus 25% of estimated contract value)
- B) In the event and as a result of such alternatives / additions / substitutions / deletion, the scope of contract work exceed the value stipulated in the contract by more than the limits given in clause (d) above, the Contractor shall claim revision of the rates supported by the proper analysis in respect of such items for quantities in excess of the above limits, notwithstanding the fact that the rates for such items exist in the tender for the main work or can be derived in accordance with the provision of sub-clause (b) of Clause 61 A, and the Engineer-in-Charge may revise their rates having regard to the prevailing market rates, and the contractor shall be paid in accordance with the rates so fixed. But, under no circumstances the contractor shall suspend / stop / slowdown the work on the plea of non-settlement of rates of items falling under this clause.

62. ACTION WHERE NO SPECIFICATIONS ISSUED:

In case of any class of work for which there is no such specification given by the Owner in the tender documents, such work shall be carried out in accordance with Indian Standard Specifications and if the Indian Standard Specifications do not cover the same the work should be carried out as per standard Engineering Practice subject to the approval of the Engineer-in-Charge.

63. **ABNORMAL RATES:**

The contractor is expected to quote rate for each item after analysis of cost involved for the completion of item/work, considering all specifications and conditions of contract. This will avoid loss of profit or gain, in case of curtailment or change of specification for any item. In case it is noticed that the rates for any item, quoted by the tenderer unusually are high or unusually low it wilt be sufficient cause for the rejection of the tender unless the Owner is convinced about the reasonableness of the rates on scrutiny of the analysis for such rate to be furnished by the tenderer on demand.

64 INSPECTION OF WORK:

- The Engineer-in-Charge will have full power and authority to inspect the works at any time wherever in progress either on the Site or at the contractor's premises / workshop where situated premises /workshops of any person, firm or corporation where work in connect with the contract may be in hand or where materials are being or are to be supplied, and the contractor shall afford or procure for the Engineer-in-Charge every facility and assistance to carry out such Inspection. The contractor shall at all time during the usual working hours and at all other time for which reasonable notice of the intention of the Engineer in-Charge or his representative to visit the works have been given to the contractor, either himself be present to receive order and instructions or post a responsible agent duly accredited in writing for the purpose. Orders given to the contractor's agent shall be considered to have the same force as if they had been given to the contractor himself. The contractor shall give not less than seven days, notice in writing to the Engineer-in-Charge before covering up or placing any work beyond reach of inspection and measurement any work in order that the same may be inspected and measured. In the event of breach of above the same shall be uncovered at contractor's expense carrying out such measurement or inspection.
- No materials shall be dispatched by the contractor before obtaining the approval of Engineer-in-Charge in writing. The contractor is to provide at all times during the progress of the work and the maintenance period, proper means of access with ladders, gangways, etc. and the necessary attendance to move and adopt as directed for inspection or measurement of the works by the Engine in-Charge.

65 **ASSISTANCE TO THE ENGINEERS:**

The contractor shall make available to the Engineer-in-Charge, free of cost necessary instruments and assistance in checking of setting out of works and taking measurement of work.

66. TESTS FOR QUALITY OF WORKS:

- All workmanship shall be of the respective kinds described in the contract documents and in accordance with the instructions of the Engineer-in-Charge and shall be subjected from time to time to such test at contractor's cost as the Engineer-in-Charge may direct at place of manufacture or fabrication or on the site or at all or any such places. The contractor shall provide assistance, instruments, labour and materials as are normally required for examining, measuring and testing any workmanship as may be selected and required the Engineer-in-Charge.
- All the tests necessary in connection with the execution of the work as decided by Engineer-in-Charge shall be carried out at the field testing laboratory of the Owner by paying the charges as decided by the Owner from time to time. In case of non-availability of test facility with the Owner, the required test shall be carried out at the cost of contractor at government or any other testing laboratory as directed by Engineer-in-Charge.
- If any tests are required to be carried out in connection with the work or materials workmanship not supplied by the contractor, such tests shall be carried out by the contractor as per the instructions of Engineer-in-Charge and cost of such tests shall be reimbursed by the Owner.

67. **SAMPLES:**

The contractor shall furnish to the Engineer-in-Charge for approval when requested or if required by the specifications, adequate samples of all materials and finishes to be used in the work. Such samples shall be submitted before the work is commenced and in ample time to permit tests and examinations thereof. All materials furnished and finishing applied in actual work shall be fully identical to the approval samples.

68. ACTION AND COMPENSATION IN CASE OF BAD WORK:

If it shall appear to the Engineer-in-Charge that any work has been executed with unsound, imperfect or unskilled workmanship or with materials of any inferior description, or that any materials or articles provided by the contractor for the execution of the work are unsound or of a quality inferior to that contracted for, or otherwise not in accordance with the contract, the contractor shall on demand in writing from the Engineer-in-Charge or his authorised representative, specifying the work, materials or articles complained of, notwithstanding that the same have been inadvertently passed, certified and paid for forthwith shall rectify or remove and reconstruct the works specified and provide other proper and suitable materials or articles at his own charge and cost, and in the event of failure to do so within a period to be specified by the Engineer-in-Charge in his demand aforesaid, the contractor shall be liable to pay compensation at the rate of one percentage of the estimated cost of the whole work, for every week limited to a maximum of 10 per cent of the estimated cost of the whole work, while his failure to do so shall continue and in the case of any such failure the Engineer-in-Charge may on expiry of notice period rectify or remove and re-execute the work or remove and replace with others, the materials or articles complained of as the case may be at the risk and expenses of the contractors in all respects. The decision of the Engineer-in-Charge as to any question arising under this clause shall be final and conclusive.

69. SUSPENSION OF WORKS:

The contractor shall, if ordered in writing by the Engineer-in-Charge or his representative, temporarily suspend the works or any part thereof for such period and such time as so ordered and shall not, after receiving such written order, proceed with the work therein ordered to be suspended, until he shall have received a written order to proceed therewith. The contractor shall not be entitled to claim/ compensation for any loss or damage sustained by him by reason of temporary suspension of the works aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of the works as aforesaid will be granted to the contractor, should he apply for the same, provided that suspension was not consequent to any default or failure on the part of the contractor.

70. OWNER MAY DO PART OF WORK:

Upon failure of the contractor to comply with any instructions given in accordance with the provisions of the contract, the owner has the alternative right, instead of assuming charge for entire work to place additional labour force, tools, equipments and materials on such parts of the work, as the owner may designate or also engage another contractor to carry out the work. In such cases, the owner shall deduct from the amount which otherwise might become due to the contractor, the cost of such work and materials with ten percent added to cover all departmental charges and should the total amount thereof exceed the amount due to the contractor, the contractor shall pay the difference to the owner.

71. **POSSESSION PRIOR TO COMPLETION:**

The Engineer-in-Charge shall have the right to take possession of or use any completed or partially completed work or part of the work. Such possessions or use shall not be deemed to be an acceptance of any work completed in accordance with the contract agreement. If such prior possession or use by the Engineer-in-Charge delays the progress of work, suitable adjustment in the time of completion will made and contract agreement shall be deemed to be modified accordingly.

72. PERIOD OF LIABILITY FROM THE DATE OF COMPLETION OF WORK:

- 72.1 The contractor shall guarantee the installation/site work for a period of 06 (six) Months from the date of completion of work, unless otherwise specified. Any damage that may lie undiscovered at the time of issue of completion certificate, connected in any way with the equipment or materials supplied by him or in the workmanship shall be rectified or replaced by the contractor at his own expense as deemed necessary by the Engineer-in-Charge or in default, the Engineer-in-Charge may cause the same made good by other workmen and deduct expenses (for which the certificate of Engineer-in-Charge shall be final) from any sums that may be then or at any time thereafter, become due to the contractor or from his security deposit.
- 72.2 If the contractor feels that any variation in work or in quality of materials or proportions would be beneficial or necessary to fulfill the guarantee called for, he shall bring this to the notice of the Engineer-in-Charge in writing. The work will not be considered as complete and taken over by the Owner until all the temporary works etc., constructed by the contractor is removed and work site cleaned to the satisfaction of Engineer-in-Charge.

72.3 Care of Works:

From the commencement to completion of works, the contractor shall take full responsibility for the care of all works including all temporary works, and in case any damage, loss or injury happens to the works or to any part thereof or to any temporary work, from any cause whatsoever, he shall at own cost repair and make good the same, so that at completion, the work shall be in good order and in conformity in every respect with the requirements of the contract and the Engineer-in-Charge's instructions.

72.4 Effects prior to taking over:

If at any time, before the work is taken over, the Engineer-in-Charge shall

- a) Decide that any work done or materials used by the contractor or any sub-contractor is defective or not in accordance with the contract or that the works or any portion thereof are defective or do not fulfill the requirements of contract (all such matters being herein after called 'Defects' in this clause) and
- b) As soon as reasonably practicable, notice given to the contractor in writing of the said decisions specifying particulars of the defects alleged to exist or to have occurred, then the contractor shall at his own expenses and with all speed make good the defects so specified.

In the case contractor shall fail to do so, the Owner may take, at the cost of the contractor, such steps as may in all circumstances, be reasonable to make good such defects. The expenditure, so incurred by the Owner shall be recovered from the amount due to the contractor. The decision of the Engineer-in-Charge with regard to the amount be recovered from the contractor will be final and binding on the contractor. As soon as the works have been completed in accordance with the contract (except in minor respects that do not affect their use for the purpose for which they are intended and except for maintenance thereof provided in clause 72.1) and have passed the tests on completion, the Engineer-in-Charge shall issue a certificate (hereinafter called completion certificate) in which he shall certify the date on which the work have been so completed and have passed the said tests and the Owner shall be deemed to have taken over the works on the date so certified. If the works have been divided into various groups in the contract, the Owner shall be entitled to take over any group or groups before the other or others and thereupon the Engineer-in-Charge shall issue a completion certificate which will however, be for such group or groups as taken over only.

72.5 <u>Defects after taking over:</u>

In order that the contractor could obtain a completion certificate, he shall make good with all possible speed, any defect arising from the defective materials supplied by the Contractor or workmanship or any act of omission of the contract that may have been noticed or developed after the works or group of the works has been taken over. The period allowed for carrying out such work will be normally one month. If any defect be not remedied within a reasonable time, the Owner may proceed to do the work at the contractor's risk and expense and deduct from the final bill such amount as may be decided by the Owner. If by reason of any default on the part of the contractor a completion certificate has not been issued in respect of every portion of the work within one month after the date fixed by the contract for the completion of the works, the Owner shall be at his liberty to use the works or any portion thereof in respect of which a completion certificate has been issued provided that the works or the portion thereof so used as aforesaid shall be afforded reasonable opportunity for completing these works for the issue of completion certificate.

- 72.6 The Security Deposit/retention money deducted / furnished as per clause 18 of GCC shall be retained for the period of liability as given in clause 72.1 above. This Retention amount or Bank Guarantee furnished against Security Deposit/retention money shall be released only on expiry of the period of liability and also based on the certification of the Engineer-in-charge that no defect/damage has been reported / observed during the stipulated period of liability for the contract.
- 72.7 Performance of contractor shall be evaluated on each job by Engineer-in-Charge and recorded. Review of performance will be carried out at appropriate intervals by BPCL.

SECTION VI

BILLS / MEASUREMENT / PAYMENT

73. SCHEDULE OF RATES AND PAYMENTS:

i) Contractor's Remuneration

The price to be paid by the Owner to contractor for the whole of the work to be done and the performance of all the obligations undertaken by the contractor under the contract documents shall be ascertained by the application of the respective item rates (the inclusive nature of which is more particularly defined by way of application but not of limitation, with the succeeding sub-clause of this clause) and payment to be made accordingly for the work actually executed and approved by the Engineer-in-Charge. The sum so ascertained shall (excepting only as and to the extent expressly provided herein) constitute the sole and inclusive remuneration of the contractor under the contract and no further payment whatsoever shall be or become due or payable to the contractor under the contract.

ii) Schedule of rates to be inclusive:

The prices/rates quoted by the contractor shall remain firm till the issue of final completion certificate and shall not be subject to escalation. Schedule of rates shall be deemed to include and cover all costs, expense and liabilities of every description and all risk of every kind to be taken in executing, completing and handing over the work to the Owner by the Contractor. The Contractor shall be deemed to have known the nature, scope, magnitude and the extent of the works and materials required, though the contract document may not fully and precisely furnish them. He shall make such provision in the item rates as he may consider necessary to cover the cost of such items of work and materials as may be reasonable and necessary to complete the works. The opinion of the Engineer-in-Charge as to the items of work which are necessary and reasonable for completion of work shall be final and binding on the contractor, although the same may not be shown on or described specially in contract documents.

Generality of this present provision shall not be deemed to cut down or limit in any way because in certain cases it may and in other cases it may not be expressly stated that the contractor shall do or perform a work or supply articles or perform services at his own cost or without addition of payment or without extra charges or words to the same effect or that it may be stated or not stated that the same are included in and covered by the schedule of rates.

iii) Schedule of Rates to Cover Constructional Equipments, Materials, Labour etc.

Without in any way limiting the provisions of the preceding sub-clause the schedule of rates shall be deemed to include and cover the cost of all constructional equipment, temporary work (except as provided for herein), pumps, materials, labour, the insurance, fuel, stores and appliances to be supplied by the contractor and other matters in connection with each item in the schedule of rates and the execution of the works or any portion thereof, finished, complete in every respect and maintained as shown or described in the contract documents or may be ordered in writing during the continuance of this contract.

iv) Schedule of Rates to cover Royalties, Rents and Claims:

The Schedule of Rates shall be deemed to include and cover the cost of all royalties and fees for the articles and processes, protected by letters, or otherwise incorporated in or used in connection with the works, also all royalties, rents and other payments in connection with obtaining materials of whatsoever kind for the works and shall include an indemnity to the Owner which the contractor hereby gives against all actions, proceedings, claims damages, costs and expenses arising from the incorporation in or use on the works of a such articles, processes or materials, Octroi or other municipal or local Board charges levied on materials, equipment or machineries to be brought to site for use on work shall be borne by the contractor.

v) Schedule of Rates to Cover Taxes and Duties:

No claim or exemption or reduction of customs duties, excise duties, sales tax, quarry or any port dues, transport charges, stamp duties or Central or States Government or Local Body or Municipal Taxes or duties, taxes or charges (from or of any other body), whatsoever, will be granted or obtained, all of which expenses shall be deemed to be included in and covered by the Schedule of Rates. Contractor shall also obtain and pay for all permits, or other privileges necessary to complete work.

vi) Schedule of Rates to cover Risk of Delay:

The schedule of Rates shall be deemed to include and cover the risk of all possibilities of delay and interference with the contractors conduct of work which occur from any cause including orders of owner in the exercises of his powers and on account of extension of time granted due to various reasons and for all other possible or probable cause of delay.

vii) Schedule of Rates cannot be altered:

For work under unit rate basis, no alteration will be allowed in the schedule of Rates by reason of work or any part of them being modified, altered, extended, diminished or omitted. The schedule of Rates are fully Inclusive rates which have been fixed by the contractor and agreed to the Owner and cannot be altered.

For lumpsum contract, the payment will be made according to the work actually carried out for which purpose an item wise or workwise, Schedule of rates shall be furnished, suitable for evaluating the value of work done and preparing running account bills.

74. PROCEDURE FOR MEASUREMENT / BILLING OF WORK IN PROGRESS:

i) Measurements:

All measurements shall be in metric system. All the works in progress will be jointly measured by the representative of the Engineer-in-Charge and the Contractor's authorise agent progressively. Such measurement will be got recorded in the measurement book by the Engineer-in-Charge or his authorised representative and signed in token of accepted by the contractor or his authorised representative.

For the purpose of taking joint measurement the contractor's representative shall be bound to be present whenever required by the Engineer-in-Charge. If, however, he absents for any reason whatsoever the measurement will be taken by the Engineer-in-Charge or his representative and this will be deemed to be correct and binding on the contractor.

ii) Billing:

The contractor will submit a bill to the Engineer-in-Charge of the work giving abstract and detailed measurements for the various items executed during a month, before the expiry of the 1st week of the succeeding month. The Engineer-in-Charge shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted, if possible, before the expiry of 10 days from presentation of the bill.

iii) Dispute in Mode of Measurements:

In case of any dispute as to the mode of measurement not covered by the contract to be adopted for any item of work, mode of measurement as per latest Indian Standard Specifications shall be followed.

75. LUMPSUMS IN TENDER:

For the items in tender where it includes lumpsum in respect of parts of work, the contractor shall be entitled to payment in respect of the items at the same rates as are payable under this contract for such items, or if part of the work in question is not In the opinion of the Engineer-in-Charge capable of measurement of determination, the owner may at his discretion pay the lumpsum amount entered In the tender or a percentage thereof and the certificate In writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regards to any sum or sums payable to him under the provisions of the clause.

76. RUNNING ACCOUNT PAYMENTS TO BE REGARDED AS ADVANCES:

All running account payments shall be regarded as payment by way of advance against the final payment only and not as payments for work actually done and completed and shall not preclude the requiring of bad, unsound and imperfect, or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in this respect, or of the accruing of any claim by the contractor, nor shall it conclude, determine or affect in any way the powers of the Owner under these conditions or any of them as to the final settlement and the adjustments of the accounts or otherwise, or in any other way vary or affect the contract.

The final bill shall be submitted by the contractor within one month of the date of physical completion of the work, and settled immediately but not later than 60 days otherwise the Engineer-in charge's certificate of the measurement and of total amount payable for the work accordingly shall be final and binding on all parties. The final bill shall be presented by the contractor along with 'No claim certificate' in a format acceptable to the owner or such other documents as directed by the owner.

77. **EXTRA WORK:**

Should the contractor consider that he is entitled to any extra payment for extra job carried out whatsoever in respect of the works, he shall forthwith give notice in writing to the Engineer-in-Charge that he claims extra payment for the extra work. Such notice shall be given to the Engineer-in-Charge within one week from the ordering of any extra work or happening of any event, upon which the contractor bases such claims, and such notice shall contain full particulars of the nature of such claim with full details and amount claimed. Failure on part of the contractor to put forward any claim with the necessary particulars as above within the time above specified

shall be an absolute waiver thereof. No omission by the owner to reject any such claim and no delay in dealing therewith shall be waiver by the owner of any rights in respect thereof.

78. PAYMENT OF CONTRACTOR'S BILL:

Generally no payment shall be made for works estimated to cost less than Rs. 50,000/- till the whole of the work shall have been completed. But in case of works estimate to cost more than Rs. 50,000/- the contractor on submitting the bill thereof be entitled to receive a monthly payment proportion to the part thereof approved and passed by the Engineer-in-Charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. This payment will be made after making necessary deductions as stipulated elsewhere in the contract document for materials, security deposit or any moneys due to the Owner etc.

79. **MODE OF PAYMENT:**

Payment will be made to the contractor normally through NEFT mode.

80. **COMPLETION CERTIFICATE:**

80.1 Application for Completion Certificate:

When the contractor fulfills his obligation under clause 72.4, he shall be eligible to apply for completion certificate. The contractor may apply for separate completion certificate respect of each such portion of the work by submitting the completion documents along with such application for completion certificate.

The Engineer-in-Charge shall normally issue to the contractor the completion certificate within one month after receiving an application therefore from the contractor after verifying from the completion documents and satisfying himself that the work has been completed in accordance with and as set out in the construction and erection drawings and the contract documents.

The contractor, after obtaining the completion certificate is eligible to present the final bill for the work executed by him under the terms of contract.

80.2 <u>Completion Certificate:</u>

The contractor shall be furnished with a certificate by the Engineer-in-Charge of such completion, but no certificate shall be given nor shall the work be deemed to have been executed until all scaffolding surplus materials and rubbish is cleared off the site completely or until the work shall have been measured by the Engineer-in-Charge whose measurement shall be binding and conclusive. The work will not be considered complete and taken over by the Owner, until all the temporary works, labour and staff colonies etc. constructed are removed and the work site cleaned of all debris etc., as described in clause in 80.3 below and to the satisfaction of the Engineer-in-Charge.

If the contractor shall fail to comply with the requirements of this clause on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expenses of the contractor remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

80.3 <u>Clearing the site:</u>

Cart away all debris generated from the work and dispose it off without giving rise to any complaints from local, municipal or government authorities. Metal scraps or any other scrap including wooden packing materials shall be disposed as instructed by the Engineer-in-Charge or as follows:

- a) All unused scrap steel bar/ structural steel sections/pipe materials etc., (Free issue by owner) shall be the property of the owner and the same shall be returned by the contractor category-wise at their own cost to Owner's store. The weighment slip issued by the Warehouse (in original) is required to be attached along with the final bill/ material reconciliation statement. In case, the material is supplied by the contractor, as per their scope of work, the scrap material generated out of the same should be taken out at their own cost before the settlement of the final bill.
- b) Insulation material (either issued by owner to the contractor or supplied by contractor) shall be kept in the area allocated by owner. During the insulation activities, the contractor should keep the work area clean on day-to-day basis. On completion of insulation job, all debris/packing should be taken out to the designated location or as directed by the Engineer in charge for disposal at their own cost before the settlement of the final bill.
- 80.4. The financial implication of above, if any, should be taken care of in the quoted rates; and no separate claim shall be entertained on this account. The final bill of the contractor shall be linked with the area cleaning in all respects, including removal of shuttering material, disposal of debris/scrap etc. to the entire satisfaction of Engineer-in-Charge.

81. FINAL DECISION AND FINAL CERTIFICATE:

Upon Expiry of the period of liability and subject to the Engineer-in-Charge being satisfied that the works have been duly maintained by the contractor during monsoon or such period as herein before provided in clause 72 and that the contractor has in all respect duly made up any subsidence and performed all his obligations under the contract, the Engineer-in-Charge shall (without prejudice to the rights of the Owner to retain the provisions of relevant clause hereof) give a certificate herein referred to as the final certificate to that effect. The contractor shall not be considered to have fulfilled the whole of his obligations under the contract until Final Certificate have been given by the Engineer-in-Charge notwithstanding any previous entry upon the work and taking possession, working or using of the same or any part thereof by the owner.

82. CERTIFICATE FOR PAYMENTS AND EVIDENCE OF COMPLETION:

Except the final certificate, no other certificate or payments against a certificate or on general account shall be taken to be an admission by the Owner of the due performance of the contract or any part thereof or occupancy or validity of any claim by the contractor.

SECTION VII

TAXES/DUTIES/INSURANCE

83. TAXES, DUTIES, OCTROI ETC.:

The contractor agrees to and does hereby accept full and exclusive liability for the payment of any and all taxes, duties, octroi etc. now in force or hereafter Imposed, increased or modified, from time to time in respect of work and materials and all contributions and taxes for unemployment compensation, insurance and old age pensions or annuities now or hereafter imposed by any Central or State Government authorities which are imposed with respect to or covered by the wages, salaries, or other compensations paid to the persons employed by the contractor and the contractor shall be responsible for the compliance with all obligations and restrictions imposed by the Labour Law or any other law affecting employer - employee relationship and the contractor further agrees to comply and secure the compliance by all sub-contractors, with all applicable Central, State, Municipal and local laws and regulations and requirements of any Central, State or Local Government agency or authority. Contractor further agrees to defend, indemnify and hold harmless from any liability or penalty which may be Imposed by the Central, State of Local Authority by reason of any violation by contractor or sub-contractor of such laws, regulations or requirements and also from all claims, suits or proceeding that may be brought against the Owner arising under, growing out of, or by reason of the work provided for by this contract by third parties, or by Central or State Government authority or any administrative sub-division thereof.

84. **INSURANCE:**

Contractor shall at his own expenses carry and maintain insurance with reputable insurance companies to the satisfaction of the Owner as follows:

i) Employees State Insurance Act:

The Contractor agrees to and does hereby accept full and exclusive liability for the compliance with all obligations imposed by the Employees State Insurance Act, 1948, and the contractor further agrees to defend, indemnify and hold Owner harmless from any liability or penalty which may be imposed by the Central, State or Local Authority by reason of any asserted violation by contractor or sub-contractor, of the Employee State Act, 1948 and also from all claims suits or proceedings that may be brought against the Owner arising under, growing out of or by reason of the work provided for by this contract whether brought by employees of the contractor, by third parties or by Central or State Government authority or any political sub-division thereof.

The contractor agrees to filing, with the Employees State Insurance Corporation, the Declaration Forms and all forms which may be required in respect of the contractor's or sub-contractor's employees whose aggregate remuneration as fixed by the concerned authorities and who are employed in the work provided for or those covered by ESI Act under any amendment to the Act from time to time. The contractor shall deduct and secure the agreement of the sub-contractor to deduct the employee's contribution as per the first schedule of the Employee State Insurance Act from wages and affix the Employee's contribution Cards at Wages payment intervals. The contractor shall remit and secure the agreement of the sub-contractor to remit to the authorized bank, Employee's State Insurance Corporation Account, the Employee's contribution as required by the Act. The contractor agrees to maintain all Cards and records as required under the Act in respect of employees and the payments and the contractor shall secure the agreement of the subcontractor to maintain such records. Any expenses incurred for the contribution, making contribution or maintaining records shall be to the contractor's or sub-contractor's account.

The Owner shall retain such sum as may necessary, from the total contract value until contractor shall furnish satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948, have been paid.

- ii) Workman's Compensation and Employee's Liability Insurance:
 Insurance shall be effected for all the Contractor's employees engaged in the performs of this contract, if any of the work is sublet, the contractor shall require the sub-contractor to provide workman's compensation and employer's liability Insurance for the latter's employees if such employees are not covered under the contractors insurance.
- iii) Any other Insurance Required Under Law or Regulations or by Owner:
 Owner shall cover Project Material and Equipments under and over all Marine-cum-Erection Insurance
 Policy. Contractor shall carry and maintain any and all other insurance which be required under any law
 or regulation from time to time. He shall also carry and main any other insurance which may be required
 by the Owner.
- iv) Automobile Liability Insurance:

 Contractor shall take out an Automobile Liability Insurance to cover all risks to Owner for each of his vehicles plying on works of this contract and these insurance shall be valid for the total contract period. No extra payments will be made for this insurance. Owner shall not be liable for any damage or loss not

made good by the insurance company, should such damage or toss result from unauthorised use of the vehicle.

85. **DAMAGE TO PROPERTY:**

- i) Contractor shall be responsible for making good, to the satisfaction of the Owner any loss of and any damage to all structures and properties belonging to the Owner or being executed or procured or being procured by the Owner or of other agencies within the premise all the work of the Owner, if such loss or damage is due to fault and/or the negligence willful acts or omission of contractor, his employees, agents, representative or \ sub-contractor.
- ii) The contractor shall indemnify and keep the Owner harmless of all claims for damage to property other than Owner's property arising under or by reason of this agreement if such claims results from the fault and/or negligence or willful acts or omission of contractor, his employees, agents, representatives or subcontractors.

SECTION VIII

LABOUR LAWS AND OTHER REGULATIONS

86. **LABOUR LAWS:**

- i) No labour below the age of eighteen years shall be employed on the work.
- ii) The contractor shall not pay less than what is provided under the Minimum Wages Act for the applicable trade or category of workman to the worker engaged by him on the work and also ensure that any subcontractors engaged by him also pay not below the applicable minimum wages under the Act and hold the company, indemnified in respect of any claims that may arise in respect or non-compliance with this requirements.
- The contractor shall observe all the formalities required under the provisions of the contract labour (Regulation and abolition) Act 1970 and the rules made thereunder and as may be amended from time to time. He shall pay the required deposit under the Act Appropriate to the number of workmen to be employed by him or through sub-contractor and get him self registered under the Act. He shall produce the certificate of registration granted by the Govt. authority under the Act to the company before commencement of work. The company recognises only the contractor and not his sub-contractors under the provisions of the Act. The contractor will have to submit daily a list of his employees, who will be entering the Company's premises for the work awarded. He will also keep his wage register available at all times as close to the work site as possible and produce the same for inspection whenever required by designated Company officials. If the company so desires, a deposit may be taken from the Contractor to be refunded only after the Company is satisfied that all the workmen employed by the contractor have been fully paid for the period of work in Company's premises at least at rates equal to or better than wages provided for under the Minimum Wages Act.
- iv) The Contractor will comply with the provisions of the employee's Provident Fund Act and the Family Pension Fund Act as may be applicable and as amended from time to time. Contractor shall obtain their own provident fund account number. Offer of the contractor who does not have provident fund account will be liable for rejection.
- v) The Contractor will comply with the provisions of the Payment of Gratuity Act 1972 as may be applicable and as amended from time to time.

87. **IMPLEMENTATION OF APPRENTICES ACT 1961:**

The Contractor shall comply with provisions of the Apprentices Act 1961 and the Rules/orders issued thereunder from time to time. If he fails to do so, his failure will be breach of the contract and the Engineer-in-Charge may, at his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of the act.

88. **CONTRACTOR TO INDEMNIFY THE OWNER:**

i) The contractor shall indemnity the owner and every member, officer and employee of the Owner, also the Engineer-in-Charge and his staff against all actions, proceedings, claims, demands, costs, and expenses whatsoever arising out of or in connection with the matters referred to in clause 84 and all actions/ proceedings, claims, demands, costs and expenses which may be made against the Owner for or in respect of or arising out of any failure by the contractor in the performance of his obligations under the contract documents. The Owner shall not be liable for or in respect of any demand or compensation payable by law in respect of or in consequence of any accident or injury to any workmen or other person in the employment of the contractor or his sub-contractor and contractor shall indemnify and keep indemnified the Owner against all such damages and compensations and against all claims, damage, proceedings, costs, charges and expenses whatsoever, thereof or in relation thereto.

ii) Payment of Claims and Damages:

Should the Owner have to pay any money in respect of such claims or demands as aforesaid the amount so paid and the costs incurred by the Owner shall be charged to and paid the Contractor and the contractor shall not be at liberty to dispute or question the rig of the Owner to make such payments notwithstanding the same may have been made without his consent or authority or in law or otherwise to the country.

In every case to which by virtue of the provisions of Section 12, sub-section (I) of workmen's compensation Act 1923 or other applicable provisions of workmen's Compensation Act any other Act, the Owner is obliged to pay compensation to a workmen employed by contractor in execution of the works, the Owner will recover from the contractor the amount of compensation so paid and without prejudice to

the rights of Owner under Section 12 sub-section (2) of the said Act. Owner shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due to the contractor whether under the contract or otherwise. The Owner shall not be bound to contest any clime made under Section 12, sub-section (I) of the said Act except on the written request of contractor and upon his giving to the Owner full security for all costs for which the Owner might become liable on consequence of contesting such claims.

iii) Employment Liability:

- a) The contractor shall be solely and exclusively responsible for engaging or employing persons for the execution of work. All employees engaged by the contractor shall be on his/ their payroll and paid by him/ them. All disputes or differences between the contractor and his/ their employees shall be settled by him/ them. Owner has absolutely no liability whatsoever concerning the employees of the contractor. The contractor shall indemnify owner against all loss or damage or liability arising out of or in the course of his/ their employees. The contractor shall make regular and full payment of wages without giving any complaint by any employee of the contractor or his sub-contractor regarding non-payment of wages/ salaries or other dues. Owner reserves the right to make such payments directly, to such employee or sub-contractor of the contractor and recover the amount in full from the bills of Contractor, and the contractor shall not claim any compensation or reimbursement thereof. The Contractor shall comply with the Minimum Wages Act applicable to the area with regard to payment of wages of his employees and also of employees of his sub-contractor.
- b) The Contractor shall advise in writing to all of his employees and the employees of his subcontractor as follows:

It is fully understood that your appointment and/ or deployment is only in connection with the owner and it does not give you any right of claim for employment by owner.

89. HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS:

In respect of all labour directly employed in the works for performance of the contractor's par this agreement, the contractor shall comply with or cause to be complied with all the rules and regulations of the local sanitary and other authorities or as framed by the Owner from time to time for the protection of health and sanitary arrangements for all workers.

90. **SAFETY REGULATIONS:**

- i) In respect of all labour, directly or indirectly employed In the work for the performance of contractor's part of this agreement, the contractor shall at his own expenses arrange for all safety provisions as per safety codes of C.P.W.D. Indian Standard Institution, the Electricity Act, The Mines Act and any such other acts as applicable.
- ii) The Contractor shall ensure that he, his sub-contractor and his, or their personnel or representatives shall comply with all Fire / Safety regulations issued from time to time by the Company or otherwise howsoever and should any injury resulting in death or not or loss / or damage due to Fire to any property or a portion thereof, occurred as a result of failure to comply with such regulations, the contractor shall be held responsible for the consequences thereof and shall keep the company harmless and indemnified.

91. **ARBITRATION:**

a) Any dispute or difference of any nature whatsoever, any claim, cross-claim, counter-claim or set off of BPCL against the Contractor or regarding any right, liability, act, omission on account of any of the parties hereto arising out of or in relation to this agreement shall be referred to the sole Arbitration of the concerned Director (herein after named as Director) of the BPCL or of some officer of the BPCL who may be nominated by the concerned Director. The Contractor will not be entitled to raise any objection to any such arbitrator on the ground that the arbitrator is an Officer of the BPCL or that he has dealt with the matters to which the contract relates or that in the course of his duties as an Officer of the BPCL he had expressed views on all or any other matters in dispute or difference. In the event of the arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, the Director as aforesaid at the time of such transfer, vacation of office Or inability to act may in the discretion of the Director designate another person to act as arbitrator in accordance with the terms of the agreement to the end and intent that the original Arbitrator shall be entitled to continue the arbitration proceedings not withstanding his transfer or vacation or office as an Officer of the BPCL if the Director does not designate another person to act as arbitrator on such transfer, vacation of office or inability of original arbitrator. Such persons shall be entitled to proceed with the reference from the point at which it was left by his predecessor. It is also a term of this contract that no person other than the Director or a person nominated by such Director of the BPCL as aforesaid shall act as arbitrator, hereunder. The award of the arbitrator so appointed shall be final conclusive and binding on all parties to the agreement subject to the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made thereunder for the time being in force shall apply to the arbitration proceedings under this clause.

- b) The arbitrator shall have power to order and direct either of the parties to abide by, observe and perform all such directions as the arbitrator may think fit having regard to the matters in difference i.e. dispute before him. The arbitrator shall have all summary powers and may take such evidence oral and/ or documentary, as the arbitrator in his absolute discretion thinks fit and shall be entitled to exercise all powers under the Arbitration and Conciliation Act, 1996 including admission of any affidavit as evidence concerning the matter in difference i.e. dispute before him.
- c) The parties against whom the arbitration proceedings have been initiated, that is to say the Respondents in the proceedings, shall be entitled to prefer a cross-claim, counter-claim or set off before the Arbitrator in respect of any matter an issue arising out of or in relation to the Agreement, without seeking a formal reference of arbitration to the Director for such counter-claim, cross or set off and the Arbitrator shall be entitled to consider and deal with the same as if the matters arising therefrom has been referred to him originally, and deemed to form part of the reference made by the Director.
- d) The arbitrator shall be at liberty to appoint, if necessary, any accountant or engineering or other technical person to assist him and to act by the opinion so taken.
- e) The arbitrator shall have power to make one or more awards whether interim or otherwise, in respect of the dispute and difference and in particular will be entitled to make separate awards in respect of claims or cross-claims of the parties.
- f) The arbitrator shall be entitled to direct any one of the parties to pay the costs of the other party in such manner and to such extent as the arbitrator may in his discretion determine and shall also be entitled to require one or both the parties to deposit funds in such proportion to meet the arbitrators' expenses whenever called upon to do so.
- g) The parties hereby agree that the courts in the city of Mumbai/(Ernakulam-in the case of Kochi Refinery), alone shall have jurisdiction to entertain any application or other proceedings in respect of anything arising under this agreement and any award or awards made by the Sole Arbitrator hereunder shall be filed in the concerned courts in the city of Mumbai/(Ernakulam-in the case of Kochi Refinery), only.

92. **JURISDICTION:**

The contractor shall be governed by the Laws in force in INDIA. The contractor hereby submits to the jurisdiction of the Courts situated at Mumbai/(Ernakulam-in the case of Kochi Refinery), for the purpose of actions and proceedings arising out of the contract and the courts at Mumbai/(Ernakulam-in the case of Kochi Refinery), only will have jurisdiction to hear and decide such actions and proceedings.

SECTION - IX

MEMORANDUM OF AGREEMENT

An agreement made this	day	of	20	_ between BHA	RAT PETRO	LEUM
CORPORATION LIMITED a Compar	y Incorpora	ated in India a	nd having its reg	istered office	at Ballard E	state,
Mumbai, (herein after referred	to as 'the	Company' wh	hich expression	shall include	its heirs,	legal
representatives, successors	and pe	rmitted ass	ignees) of	the one	part,	and
(herein after referred to as "The (Contractor"	which evpressi	on chall include	ite hoire loga	l represent	ativoc
successors and permitted assignees		•		its rieirs, iego	i represent	auves,

- 1. The Contractor shall carry out and complete the work as mentioned in the Purchase order/Contract No._____ dated ______, (hereinafter referred to as "the work") for the Company at its specified site to its complete satisfaction in accordance with the specifications, schedule of rates and plans attached as per Purchase order/Contract and with the instructions given from time to time, by the Company's authorized engineer under whose supervision the work shall be-executed. The parties hereto agree that this agreement shall be effective from the date of the aforesaid Purchase Order/Contract.
- **2. Inspection of site:** The Contractor has been given an opportunity before or at the time of the entrusting of the work to him of making an inspection of the site to set at rest any doubt he may have had about the difficulties attending his offer, and any difficulties which may be met with by him in the course of the execution of the work shall neither relieve him from fulfilling the terms of this Agreement, nor entitled him to claim extra payment or an extension of the period stipulated for the completion of the work, except where it will be agreed by the Company's authorized Engineer that such difficulties could not have been foreseen.
- **3. Supply of Labour and Materials:** The Contractor shall furnish all labour, materials, equipment or tools necessary for the construction of the work, except such materials, equipment or tools as will be supplied by the Company and are detailed in Purchase order/Contract. The contractor will assume full responsibility for the protection and safety of the work during its construction. The details and dimensions shown on the said plans referred to in the Purchase order/Contract shall be strictly adhered to by the contractor and no alterations shall be made therein unless previous sanction thereto has been given in writing by the Company.
 - (a) The Contractor shall prepare detailed and shop drawings and any other data required.
 - (b) All materials supplied by the Contractor shall be of the best quality. The Contractor shall at his own cost arrange for and/or carry out any test of materials, which the Company's authorized Engineer may require.
 - (c) The Contractor shall at the request of the Company's authorized Engineer immediately dismiss from the work any person employed thereon who, in the opinion of the Company's authorized Engineer, is unsuitable or incompetent or who, has been guilty of misconduct, and such person shall not again be employed or allowed on the works without the permission of the Company, in writing.
- **4. E. & O. E.** No advantage is to be taken either by the Company or the Contractor of any clerical error or mistake, which may occur in the specification, schedule of rates, plans, tender or any other papers supplied to or by the contractor in connection with the work.
- 5. Damage on account of Incomplete work: The Contractor shall commence the work and shall complete the work as mentioned in Purchase order/Contract failing which the Contractor shall pay or allow to the Company to recover as liquidated damages, at the rate of minimum 0.5% per week of delay or part there of up to a maximum of 5% of the total contract value, if Liquidated damages clause is made applicable in the contract. Such damages may be deducted by the Company from any amount due to the contractor; otherwise they shall be recoverable by lawful means.
- **a) Determination of the Agreement:** The company shall, at any time, be entitled to determine and terminate the contract, if in the opinion of the company, the cessation of the work becomes necessary owing to paucity of funds or for any other cause whatsoever. On such determination / termination, the cost of approved materials, brought by the contractor and lying at the site, at current market rates as verified and approved by company's engineer and of the value of the work done to date by the contractor shall be paid for in full at the rate specified in the contract. A notice in writing from the company to the contractor of such determination and termination and reasons therefore shall be the conclusive proof of the fact that the contract has been so determined and terminated by the company.

Should the contract be determined as above and the contractor claims payment to compensate expenditure incurred by him in the expectation of completing the work, the company shall consider and admit such claim as are deemed fair and reasonable and are supported by the vouchers to satisfaction of the engineer-in-charge. The company's decision on the necessity and propriety of such expenditure shall be final and conclusive and binding on the contractor.

The contractor shall not be entitled to get any possible loss of profit that he could have earned had the contract been not determined / terminated under the above clauses of this article.

b) Termination/Offloading: The contractor fully understands that timely completion of the work as per the schedule is of paramount necessity as otherwise it would lead to adversely affecting the schedules of other works/project with resultant financial and other losses to the Company. In view of this, the contractor unconditionally agrees and binds himself to be liable for all the consequences for non-completion of the work within the stipulated time.

In case a situation is brought about by the contractor warranting termination/off-loading of the whole or any part of the work for any reason whatsoever, the Company shall have the liberty and right to entrust/engage/award the work so terminated off loaded at the risk and cost of the contractor to any other agency/contractor by adopting any mode of inviting tenders, i.e. open/limited/single party/negotiation basis etc. in order to ensure completion of the work as per the schedule or at the quickest possible time.

- 7. **Defective Work / Materials:** If the work done by the Contractor or any part there of shall be found defective in workmanship or by reason of bad or inferior materials used, then in such case he shall at his own risk and cost without delay, demolish all such defective work and rebuild or replace the same in a satisfactory manner. The Company may, if necessary, at the cost and risk of the Contractor, temporarily stop all other activities by the Contractor in connection with the work until such time as the defective work has been rebuilt or replaced at the Contractor's cost. In case of default on the part of the contractor to remove defectives work and rebuild or replace the same without delay and in a manner satisfactory to the Company, the Company shall be entitled to employ another Contractor or its own workman to carry out the removal and rebuilding or replacing at the risk and cost of the contractor.
- **8. Substitution of Contractor :** If the Company finds it necessary to employ a person or persons for the purposes provided in clauses 6 (b) and 7 above, then the Company may deduct and retain from out of the sums due to the contractor all such amounts as they may require to pay or to reimburse themselves there from in respect of the costs and expenses which they have incurred in completing the work and or in removing defective work and rebuilding or replacing the same in a manner satisfactory to the Company and if such amounts be more than the sums due or thereafter becoming due to the Contractor, than the balance, shall be a debt recoverable from the Contractor by the Company. The Contractor shall not in any manner do or cause to be done any act, matter or things whatsoever to prevent the person or persons so employed by the Company from removing defective work and re-building or replacing the same in a manner satisfactory to the Company and/or from, completing the work in the manner aforesaid.
- **9. Removal of Material:** On the Determination of the Agreement as referred to in Clause 6, the Contractor shall at his own risk and cost remove from site within Seven days all his materials, equipment and tools. It is agreed that in case of such determination the company shall be entitled to purchase from the Contractor such materials as will be approved by the Authorized Engineer of the Company at the prices then current. If the Contractor does not remove the other materials, equipment and tools which he has been asked to remove within the time prescribed as aforesaid, the Company may remove and sell the same holding the proceeds less the cost of storage, removal and sale to the credit of the Contractor. Should Company incur any loss in respect of the sale, it shall be entitled to recover same from the Contractor.
- **10. Inspection of work:** Inspection will be made periodically during the progress of the work by the authorized Engineer of the Company and all work performed must be of acceptable quality of which the said Engineer-in-Charge will be the sole judge.
- **Supervision:** The Contractor shall during the whole time the work is in progress, employ one or more competent and technical English speaking Supervisors acceptable to the Company's authorized Engineer, one of whom at least shall be in constant attendance at the site while persons are at work there. Any directions, explanations, instructions, or notices in connection with the work given by the Company's authorized Engineer to these Supervisors shall be deemed to have been given to the Contractor.
- **Payment:** The Company, in consideration of the contractor carrying out and completing the said work at the Company's said site, to the satisfaction of the Company, shall pay the contractor as per the said schedule of Rates, subject to deductions, retentions and abatements, if any to be made therefrom in accordance with the provisions of this Agreement. During the progress of the work and provided the work is progressing according to the time-table laid down to the contractor, the contractor shall be entitled once a month to receive advance payment on the above mentioned sum proportionate to such part of the work as shall have been executed during the preceding month but only after such part of the work as has been executed has been inspected and approved by the Company's authorized Engineer. From such interim payments each time 10% will be withheld as Security deposit and this 10% will be paid to the Contractor after the defect liability period, provided that any defects appearing during that period are corrected by him. OR

100% payment will be made on the basis of actual executed quantities after satisfactory completion and due certification by BPCL Engineer-in-charge. In lieu of 10% Retention money towards Security deposit, contractor shall submit bank guarantee of equivalent amount of retention money (10% of contract value) before submission of 1st Running Account (RA) bill valid for defects liability period specified. Further, the Bank Guarantee shall have a claim period of six months beyond the date of expiry, and the same shall be mentioned clearly in the Bank Guarantee.

- 13. Defects after Completion: Any defects which may appear within the defect liability period specified shall, upon the directions in writing of the Company and within such reasonable time as shall be specified therein be amended and made good by the Contractor, at his own cost unless the Company shall decide that the Contractor will be paid for such amending and making good, and in case of default on the Contractor's part, the Company may amend and make good or have amended and made good such defects and all damages, losses and expenses consequent thereon, incidental to those shall be borne by the Contractor and such damages, losses and expenses shall be recoverable from him by the Company or may be deducted by the Company from any moneys due to or thereafter becoming due to the Contractor. Alternatively, the Company may, in lieu of such amending and making good by the Contractor elect to deduct from any moneys due or thereafter becoming due to the Contractor a sum to be determined by the Company sufficient to cover the cost of amending and making good such defects, and in the event of the amount withheld in accordance with Clause 12 being insufficient, recover the balance from the Contractor together with any expenses the Company may have incurred in connection with such recovery. Should any defective work have been done or bad inferior materials supplied by any Sub-Contractor employed on the work, has been approved by the Company as provided in Clause 15, the Contractor shall be liable to amend and make good in the same manner as if such work or materials had been done or supplied by the Contractor. The Contractor shall remain liable under this Clause notwithstanding the signing by the Company's authorized Engineer of any certificate or the passing of any account.
- **14. Alterations:** The Company reserves the right at any time to alter any quantities of any item indicated in the Purchase order/Contract, in which case the total amount payable to the Contractor shall be less or higher, proportionate with the reduction or increase in quantity of such item, allowance for which will be made at the Contractor's agreed rates.
- **15. Subletting Agreement:** The Contractor shall not sublet or assign the work or any part thereof to another party without the written consent of the company and no such subletting or assignment shall relieve the contractor from the full and entire responsibility of his obligation under this Agreement.
- 16. Cancellation: The Company shall at any and all times during the period stipulated for the work, has the right forthwith to cancel this agreement by giving written notice thereof to the Contractor and in such case the Contractor shall be paid for such part of the work as has been executed by him up to the date of cancellation, on the basis of schedule of rates as per Purchase order/Contract and shall be reimbursed by the Company for the cost and expenses incurred by him but which would now be wasted as a direct consequence of the cancellation of the Agreement.
- **17.** Workmen's Compensation Liability: The Contractor shall hold the Company harmless and indemnified from and against all claims, costs and charges for which the Company shall be liable under the Workmen's Compensation Act, 1923 and any amendments thereof and the expenses to which it shall be put thereunder, both in respect of personal injuries (within the meaning of the said Act) to the employees and servants of the Contractor or Sub-Contractors, (if any), arising out of, or occasioned during the currency of this agreement through the acts or omissions, whether due to negligence or not of the Contractor, Sub-Contractor and/or Company and/or their respective servants and employees and also in respect of the personal injuries (within the meaning of the said Act) to the servants and employees of the Company arising out of, or occasioned through the acts and omissions whether due to negligence or not of the Contractor, Sub-Contractor and or their servants and employees in carrying out any of the provisions of this Agreement. This indemnity shall be in addition to and not in lieu of any indemnity to which the Company shall be entitled in law. The Contractor shall at his own expense effect and maintain, until the completion of the work, with an approved office a Policy of Insurance in the joint names of the Company and the Contractor, against such risks and deposit such Policy or policies with the Company from time to time during the currency of this Agreement. The Contractor shall be responsible for anything not included in the Insurance Policies above referred to and also for all other damage to person or property arising out of or incidental to the negligent or defective carrying out of this agreement and shall keep the Company harmless and indemnified. He shall also indemnify the Company in respect of any costs, charges or expenses arising out of any claim or proceedings and also in respect of any award of compensation or damages arising therefrom. The Company shall be entitled to deduct the amount of any

damages compensation costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sum or sums due or thereafter becoming due to the Contractor.

18. Safety Regulation: The Contractor shall ensure that he/his Sub-Contractor and his, or their personnel or representatives shall comply with all safety regulations issued from time to time by the Company or otherwise howsoever and should any injury resulting in death or not or damage to any property occur as result of failure to comply with such regulations the Contractor shall be held responsible for the consequences thereof, shall keep the Company harmless and indemnified.

19. Arbitration

- a) Any dispute or difference of any nature whatsoever, any claim, cross-claim, counter-claim or set off of BPCL against the Contractor or regarding any right, liability, act, omission on account of any of the parties hereto arising out of or in relation to this agreement shall be referred to the sole Arbitration of the concerned Director (herein after named as Director) of the BPCL or of some officer of the BPCL who may be nominated by the concerned Director. The Contractor will not be entitled to raise any objection to any such arbitrator on the ground that the arbitrator is an Officer of the BPCL or that he has dealt with the matters to which the contract relates or that in the course of his duties as an Officer of the BPCL he had expressed views on all or any other matters in dispute or difference. In the event of the arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, the Director as aforesaid at the time of such transfer, vacation of office Or inability to act may in the discretion of the Director designate another person to act as arbitrator in accordance with the terms of the agreement to the end and intent that the original Arbitrator shall be entitled to continue the arbitration proceedings not withstanding his transfer or vacation or office as an Officer of the BPCL if the Director does not designate another person to act as arbitrator on such transfer, vacation of office or inability of original arbitrator. Such persons shall be entitled to proceed with the reference from the point at which it was left by his predecessor. It is also a term of this contract that no person other than the Director or a person nominated by such Director of the BPCL as aforesaid shall act as arbitrator, hereunder. The award of the arbitrator so appointed shall be final conclusive and binding on all parties to the agreement subject to the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made thereunder for the time being in force shall apply to the arbitration proceedings under this clause.
- b) The arbitrator shall have power to order and direct either of the parties to abide by, observe and perform all such directions as the arbitrator may think fit having regard to the matters in difference i.e. dispute before him. The arbitrator shall have all summary powers and may take such evidence oral and/ or documentary, as the arbitrator in his absolute discretion thinks fit and shall be entitled to exercise all powers under the Arbitration and Conciliation Act, 1996 including admission of any affidavit as evidence concerning the matter in difference i.e. dispute before him.
- c) The parties against whom the arbitration proceedings have been initiated, that is to say the Respondents in the proceedings, shall be entitled to prefer a cross-claim, counter-claim or set off before the Arbitrator in respect of any matter an issue arising out of or in relation to the Agreement, without seeking a formal reference of arbitration to the Director for such counter-claim, cross or set off and the Arbitrator shall be entitled to consider and deal with the same as if the matters arising therefrom has been referred to him originally, and deemed to form part of the reference made by the Director.
- d) The arbitrator shall be at liberty to appoint, if necessary, any accountant or engineering or other technical person to assist him and to act by the opinion so taken.
- e) The arbitrator shall have power to make one or more awards whether interim or otherwise, in respect of the dispute and difference and in particular will be entitled to make separate awards in respect of claims or cross-claims of the parties.
- f) The arbitrator shall be entitled to direct any one of the parties to pay the costs of the other party in such manner and to such extent as the arbitrator may in his discretion determine and shall also be entitled to require one or both the parties to deposit funds in such proportion to meet the arbitrators' expenses whenever called upon to do so.

g) The parties hereby agree that the courts in the city of Mumbai/(Ernakulam-in the case of Kochi Refinery), alone shall have jurisdiction to entertain any application or other proceedings in respect of anything arising under this agreement and any award or awards made by the Sole Arbitrator hereunder shall be filed in the concerned courts in the city of Mumbai/(Ernakulam-in the case of Kochi Refinery), only.

20. Jurisdiction:

The contractor shall be governed by the Laws in force in INDIA. The contractor hereby submits to the jurisdiction of the Courts situated at Mumbai/(Ernakulam-in the case of Kochi Refinery), for the purpose of actions and proceedings arising out of the contract and the courts at Mumbai/(Ernakulam-in the case of Kochi Refinery), only will have jurisdiction to hear and decide such actions and proceedings.

21 Minimum Wages:

The Contractor, his executors and administrators (and in the case of a Limited Company, its successors and assigns) shall hold the Company harmless and indemnified from and against all claims, costs and charges, for which the Company shall be liable under the Minimum Wages Act, 1948, the Contract Labour (Regulation and Abolition) Act, 1970 and any amendments or modifications thereof, and all expenses it shall be put thereunder through the acts or omissions whether willful or not on the part of the Contractor. This indemnity shall be in addition to and not in lieu of, any indemnity to which the Company shall be entitled in law.

22. Employees State Insurance: This Contractor hereby admits that he is fully aware of his responsibilities under the Employees State Insurance Act, 1948, as an immediate employer of the employees engaged by him for the execution of this contract which he agrees to discharge. The Contractor acknowledge the statutory right of the company (as a Principle Employer) to recover the amount of the contributions, paid by it in the first instance in respect of the employees employed by or through him (the Contractor), as well as the employee's contribution, if any, either by deduction from any amount payable to him by the Company under any contract or as debt payable by him to the Company.

In witne	ss where of the said contracting parties have set their han	ds.
Witness	For Bharat Petroleum Corporation Ltd.	For Bharat Petroleum Corporation Ltd.
Witness	Contractor's witness - Signature Name & Address:-	Contractor's Signature Name & Address:-

PROFQRMA OF BANK GUARANTEE

(On non-judicial paper of appropriate value)

FOR EARNEST MONEY / SECURITY DEPOSIT TOWARDS PERFORMANCE

To Bharat Petroleum Corporation Ltd.

Dear S	Sirs,
M/s	
	No
	for Bharat Petroleum Corporation Ltd.
(Rupe	tender Conditions of Contract provide that the Contractor shall pay a sum of Rs
The s	aid have approached us and at their request and in consideration of the
	aid have approached us and at their request and in consideration of the ses wehaving our office athave agreed to
give sı	uch guarantee as hereinafter mentioned.
1.	We
2.	You will have the full liberty without reference to us and without effecting this guarantee postpones for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the saidand to enforce or to for bear from endorsing any power of rights or by reason of time being given to the said which under law relating to the sureties would but for provision have the effect of releasing us.
3.	Your right to recover the said sum of Rs(Rupees
4.	The guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or change of constitution or insolvency of the said
5.	Our liability under this guarantee is restricted to Rupees Our guarantees shall remain in force until unless a suit or action to enforce a claim under Guarantee is filed against us within six months from (which is date of expiry of guarantee) all our rights under the said guarantee shall be forfeited and shall be relieved and discharged from all liabilities thereunder.
6.	We have power to issue this guarantee in your favour under Memorandum and Articles of Association and the undersigned has full power to do under the Power of Attorney datedgranted to him by the Bank.
Yours	faithfully
	Bank by its Constituted Attorney Signature of a person duly authorized to sign on behalf of the
bank.	

BHARAT PETROLEUM CORPORATION LTD

ACKNOWLEDGEMENT

We, M/s	having office at	receive
the copy of GENERAL CONDITIONS OF CO	ONTRACT and confirm our acceptance to all and we are hereby returning this copy of Acknowled	the terms and conditions as mentione
Fay 0 an habalf of M/a		
ror & on benair or M/S		_
Signature : Name :		
Designation :		
	(Seal / Stamp)	
Place:		
Date:		



BHARAT PETROLEUM CORPORATION LIMITED (BPCL), REFINERY

GENERAL TERMS & CONDITIONS

ALL THE CONTRACTORS ARE REQUIRED TO:

- Enter into an agreement with BPCL as per the 'Memorandum of Agreement' attached with the tender document, in case of the award of the contract.
- 2. Abide by the Safety Regulations of our Refinery and in particular as mentioned in the booklet, General Fire and Safety Regulations Part II (Latest Revision) as well as to ensure that safety equipment as stipulated in the Factories Act (Latest Revision) are used by their employees during the execution of the work. Failure to use safety equipment as required by our site supervisor will be a sufficient reason for cancellation of the contract. Also all site work may be suspended if it is found that the workmen are employing unsafe working practice and all the costs / losses incurred due to suspension of work shall be borne by the contractor.
- Hold BPCL harmless and indemnified from and against all claims, cost and charges under Workmen's Compensation Act, 1923 and 1933 and any amendment thereof and the contractor shall be solely responsible for the same.
- 4. Take at all times due and proper precautions against accident and injury to any of the workers or to any person or persons or property whether arising from or occasioned by your operations or otherwise and shall forthwith repair, make good and defray any damage, loss, cost or charge which may have be occasioned to the works or to the Company or to any person or persons or property injuriously affected thereby and shall be indemnified and save harmless and keep indemnified the company from and against all actions, suits, proceedings, claim and demands whatsoever by reason or on account thereof.
- Abide by the 'Procedure governing entry / exit of contractor's personnel within Refinery premises. All the contractors employees shall be permitted to enter only on displaying of authorised photopasses issued by BPCL against requests made by the contractor.
- Observe the timings of work as advised by BPCL Engineer-In-Charge for carrying out the contract work.
- 7. Remove grass / shrubs wherever required to carry out the work in a safe manner.
- Clear the site on daily basis and cart away all debris / rubbish generated from the work, outside the
 Refinery and dispose it off without giving any impact to environment & rise to any complaints from local,
 Municipa' or Government Authorities. The final bill will be passed for payment only after submission of
 Gate Pass for debris removed outside the Refinery for disposal.
- Submit material incoming challans duly stamped by BPCL Security Staff at Main Gate to the concerned Dept. for material procured and brought inside by the contractors.
- 10. Prepare a sign board giving the following information and display it near the work site:
 - a. Name of Contractor
 - b. Job Description in short
 - c. Date of start of job
 - d. Date of expected completion
 - e. Name of BPCL Supervisor
- Return all the fire i safety and any other equipment taken on loan for executing the work to respective department, immediately, on completion of work.

- 12. Note that the entire contract work must be completed within the stipulated completion period as specified in the tender / contract documents. In case of failure, the liquidated damages clause as per the Memorandum of Agreement shall be applicable as specified in the contract documents.
- 13. Not to engage sub-contractor or sublet any part of the contract work without specific approval from BPCL.
- 14. Note that in case of failure of the contractor to carry out the work as per the terms and conditions of the contract, BPCL reserves the right to terminate the contract and / or get the work completed by engaging another agency at the risk and cost of the original contractor.
- 15. Vacate the space / shed allotted for the purpose of carrying out work as per the contract, immediately after completion of work and hand over the same to BPCL Engineer-In-Charge in clean condition.
- 16. Remove all the construction equipment / materials brought inside Refinery for carrying out the contract work imm adiately after completion of the work, outside Refinery premises as no storage of such item is allowed inside the Refinery.
- 17. Note that all the rates / prices as agreed at the time of award of contract shall remain firm during the entire period of contract and till all the contract work, is completed and no escalation in prices shall be granted on account of any reason. Also the quoted item rates shall be inclusive of all applicable taxes and duties at prevailing rates.
- Confirm the rates of recovery for all the materials issued from BPCL Warehouse on chargeable basis before submitting Material Issue Voucher, specially if the same is not indicated in the contract document.
- Note that BPCL reserves the right to split the contract between two or more parties fully or partly in the interest of the job.
- 20. Supply the material as per the tender / contract documents and keep account of all the materials issued by BPCL as per contract to carry out final material reconciliation after completion of work. Any shortages / losses / wastages shall be charged to the contractor if they fail to reconcile all the material issued by BPCL.
- 21. Note that bills will be paid on the basis of actual executed quantities of work items after due certification of BPCL Engineer-In-Charge. The quantities indicated in the tender / contract documents are only estimated and shall not form basis for payment.
- Obtain advance permission from the Engineer-In-Charge in writing for carrying out work on Sundays, holidays cr working late hours beyond normal working time.
- Be fully responsible for the indentity, conduct and integrity of the personnel / workers engaged by you for carrying out the contract work and ensure that none of them are ever engaged in any anti-national activity.
- 24. Understand the job fully by visiting the site, if necessary, and discussing with the concerned BPCL Engineer regarding details of the job, before submitting the offers.
- Abide by the rules and regulations existing during the contract period as applicable for the contractors at BPCL Refinery.
- Have valid PUC Certificate for all vehicles used inside the refinery premises by the Contractor for execution
 of the contract work.

Bharat Petroleum Corporation Limited

General Purchase Conditions

The following conditions shall be applicable for all procurement unless specifically mentioned in the Special Purchase Conditions.

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Bharat Petroleum Corporation Limited

General Purchase Conditions

1. **DEFINITIONS**:

The following expressions used in these terms and conditions and in the purchase order shall have the meaning indicated against each of these:

- 1.1. **OWNER:** Owner means Bharat Petroleum Corporation Limited (a Government of India enterprise), a Company incorporated in India having its registered office at Bharat Bhavan, 4 & 6 Currimbhoy Road, Ballard Estate, Mumbai 400038 and shall include its successors and assigns (hereafter called BPCL as a short form).
- 1.2. **VENDOR:** Vendor means the person, firm or the Company / Corporation to whom this Request for quotation (RFQ)/purchase order is issued and shall include its successors and assigns.
- 1.3. **INSPECTOR:** Person/agency deputed by BPCL for carrying out inspection, checking/testing of items ordered and for certifying the items conforming to the purchase order specifications..
- 1.4. **GOODS / MATERIALS:** means any of the articles, materials, machinery, equipments, supplies, drawing, data and other property and all services including but not limited to design, delivery, installation, inspection, testing and commissioning specified or required to complete the order.
- 1.5. **SITE / LOCATION:** means any Site where BHARAT PETROLEUM CORPORATION LTD. desires to receive materials any where in India as mentioned in RFQ.
- 1.6. **"RATE CONTRACT"** means the agreement for supply of goods/ materials between Owner and Vendor, for a fixed period of time (i.e till validity of Rate Contract, with no commitment of contractual quantity) on mutually agreed terms and conditions. The actual supply of goods/ materials shall take place only on issue of separate purchase orders for required quantity as and when required by Owner.
- 1.7. **"FIRM PROCUREMENT"** means the agreement between the parties for mutually agreed terms and conditions with commitment of Quantity Ordered.

2. REFERENCE FOR DOCUMENTATION:

- 2.1. The number and date of Collective Request for Quotation (CRFQ) must appear on all correspondence before finalization of Rate Contract / Purchase Order.
- 2.2. After finalization of Contract / Purchase Order: The number and date of Rate Contract /

Purchase Order must appear on all correspondence, drawings, invoices, dispatch advices, (including shipping documents if applicable) packing list and on any documents or papers connected with this order.

2.3. In the case of imports, the relevant particulars of the import Licence shall be duly indicated in the invoice and shipping documents as well as on the packages or consignments.

3. RIGHT OF OWNER TO ACCEPT OR REJECT TENDER:

The right to accept the tender will rest with the Owner.

4. LANGUAGE:

The Bid and all supporting documentation and all correspondence whatsoever exchanged by Vendor and Owner, shall be in English language only.

5. Price:

Unless otherwise agreed to the terms of the RFQ, price shall be:

Firm and no escalation will be entertained on any ground, except on the ground of statutory levies applicable on the tendered items.

6. TAXES AND DUTIES:

All vendors shall have VAT / CST/GST/Service tax registration in the concerned State and vendor shall quote their TIN number in the quotation.

6.1. EXCISE DUTY:

- 6.1.1. Excise duty extra as applicable at the time of delivery within scheduled delivery period will be payable by BPCL against documentary evidence. Vendor shall mention in their offer, the percentage of excise duty applicable at present. Any upward variation in excise duty rates, beyond the contractual delivery period, shall be to vendor's account.
- 6.1.2. In case Excise Duty is not applicable at present: Excise duty due to change in turn over is not payable. If applicable in future, the same will be borne by vendor.
- 6.1.3. Owner shall take CENVAT Credit on the material supplied for both excise duty and cess component and accordingly Excise duty / Cess should be quoted separately wherever applicable.

Vendor shall ask the transporter of the goods to hand over the copy of excise invoice (transporter's copy) at the time of delivery of goods at owner's site.

6.2. SALES TAX / VAT/GST:

6.2.1. Sales Tax as applicable at the time of delivery within scheduled delivery period will be

payable by BPCL. Vendor shall give details of local sales tax and/oror central sales tax currently applicable in their offer. The rates applicable for "CST without form C", "CST with form C" and "VAT" shall be clearly indicated.

6.2.2. Input VAT Credit may be claimed by BPCL, wherever applicable. Vendor shall submit the TAX invoice.

6.3 Service tax:

All vendors shall have service tax registration wherever applicable. BPCL may also claim CENVAT Credit on service tax. The vendor should quote service tax separately, if applicable. Vendor shall submit the TAX invoice. Vendor is required to furnish serially numbered and signed invoice / bill / challan containing the following details:

- a) Name, address and registration number of the service provider
- b) Name and address of person receiving taxable service
- c) Description, classification and value of taxable service provided
- d) Service Tax Payable

6.4 FREIGHT AND OCTROI:

- 6.4.1 Freight: Firm freight charges to be quoted as indicated in the Tender documents. Freight shall be payable after receipt of the Material(s) at the site, unless otherwise specified.
- 6.4.2. Octroi and entry taxes, if any, shall be invoiced separately and shall be re-imbursed by BPCL at actuals after receipt of the Material(s) at the Site against the submission of original documentary evidence for proof of payment of the related octroi and entry taxes, as the case may be.

6.5. NEW STATUTORY LEVIES:

All new statutory levies leviable on sale of finished goods to owner , if applicable are payable extra by BPCL against documentary proof, within the contractual delivery period.

6.6 Variation in Taxes/Duties

Any increase/decrease in all the above mentioned statutory levies on the date of delivery during the scheduled delivery period on finished materials will be on BPCL's account. Any upward variation in statutory levies after contractual delivery date shall be to vendor's account.

7. INSPECTION:

7.1. Materials shall be inspected by BPCL approved third party inspection agency if applicable before dispatch of materials. However, arranging and providing inspection

facilities is entirely vendor's responsibility and in no way shall affect the delivery schedule.

- 7.2. Scope of Inspection shall be as per RFQ. Our registered third party inspection agencies are SGS/GLISPL/IRS/DNV/LRIS/EIL/TATA Projects/PDIL/ULIPL/RITES LTD/ITSIPL as amended time to time unless otherwise specified in the Special Purchase Conditions.
- 7.3. Unless otherwise specified, the inspection shall be carried out as per the relevant standards/scope of inspection provided alongwith the Tender Enquiry/Purchase Order.
- 7.4. BPCL may, at its own expense, have its representative(s) witness any test or inspection. In order to enable BPCL's representative(s) to witness the tests/inspections. BPCL will advise the Vendor in advance whether it intends to have its representative(s) be present at any of the inspections.
- 7.5. Even if the inspection and tests are fully carried out, the Vendor shall not be absolved from its responsibilities to ensure that the Material(s), raw materials, components and other inputs are supplied strictly to conform and comply with all the requirements of the Contract at all stages, whether during manufacture and fabrication, or at the time of Delivery as on arrival at site and after its erection or start up or consumption, and during the defect liability period. The inspections and tests are merely intended to prima-facie satisfy BPCL that the Material(s) and the parts and components comply with the requirements of the Contract. The Vendor's responsibility shall also not be anywise reduced or discharged because BPCL or BPCL's representative(s) or Inspector(s) shall have examined, commented on the Vendor's drawings or specifications or shall have witnessed the tests or required any chemical or physical or other tests or shall have stamped or approved or certified any Material(s).
- 7.6. Although material approved by the Inspector(s), if on testing and inspection after receipt of the Material(s) at the location, any Material(s) are found not to be in strict conformity with the contractual requirements or specifications, BPCL shall have the right to reject the same and hold the Vendor liable for non-performance of the Contract.

8. SHIPPING:

8.1 SEA SHIPMENT:

All shipment of materials shall be made by first class direct vessels, through the chartering wing, Ministry of Surface Transport as per procedure detailed hereunder. The Foreign Supplier shall arrange with Vessels Owners or Forwarding Agents for proper storage of the entire Cargo intended for the project in a specific manner so as to faciliate and to avoid any over carriage at the port of discharge. All shipment shall be under deck unless carriage on deck is unavoidable.

The bills of lading should be made out in favour of `Bharat Petroleum Corporation Ltd., or order'.

All columns in the body of the Bill of Lading namely marks and nos., material description, weight particulars etc., should be uniform and accurate and such statements should be uniform in all the shipping documents. The freight particulars should mention the basis of freight tonnage, heavy lift charges, if any, surcharge, discount etc. clearly and separately. The net total freight payable shall be shown at the bottom.

SHIPPING DOCUMENTS:

All documents viz. Bill of Lading, invoices, packing list, freight memos, country of origin certificates, test certificate, drawings and catalogues should be in English language.

In addition of the bill of lading which should be obtained in three stamped original plus as many copies as required, invoices, packing list, freight memos,(if the freight particulars are not shown in the bills of lading), country of origin certificate, test / composition certificate, shall be made out against each shipment in as many number of copies as shown below.

The bill of lading, invoice and packing list specifically shall show uniformly the mark and numbers, contents case wise, country of origin, consignees name, port of destination and all other particulars as indicated under clause 2. The invoice shall show the unit rates and net total F.O.B. prices. Items packed separately should also be invoiced and the value shown accordingly. Packing list must show apart from other particulars actual contents in each case, net and gross weights and dimensions, and the total number of packages. All documents should be duly signed by the Vendor's authorised representatives.

In the case of FOB orders, Shipping arrangements shall be made by the Chartering Wing

Of the Ministry of Surface Transport, New Delhi through their respective forwarding agents. The names and addresses of forwarding agents shall be as per Special Purchase Conditions. Supplier shall furnish to the respective agents the full details of consignments such as outside dimension, weights (both gross and net) No of packages, technical description and drawings, name of supplier, ports of loading, etc. 6 weeks notice shall be given by the supplier to enable the concerned agency to arrange shipping space.

The bill of lading shall indicate the following:

Shipper: Government of India

Consignee: Bharat Petroleum Corporation Ltd.

In case of supplies from USA, Export Licences, if any required from the American Authorities shall be Obtained by the U.S. Suppliers. If need be assistance for obtaining such export licences would be available from India Supply Mission at Washington.

8.2 AIRSHIPMENT:

In case of Airshipment, the materials shall be shipped through freight consolidator (approved by us). The airway bill shall be made out in favour of BHARAT PETROLEUM CORPORATION LTD.

TRANSMISSION OF SHIPPING DOCUMENTS:

Foreign Supplier shall obtain the shipping documents in seven complete sets including three original stamped copies of the Bill of Lading as quickly as possible after the shipment is made, and airmail as shown below so that they are received at least three weeks before the Vessels arrival. Foreign Supplier shall be fully responsible or any delay and / or demurrage in clearance of the consignment at the port due to delay in transmittal of the shipping documents.

If in terms of letter or otherwise, the complete original set of documents are required to be sent to BPCL through Bank the distribution indicated below will confine to copies of

documents only minus originals.

Documents BPCL (Mumbai)

Bill of Lading 4 (including 1 original)

Invoice 4

Packing List 4

Freight Memo 4
Country of Origin Certificate 4

Third party inspection certificate 4

Drawing 4

Catalogue 4

Invoice of Third Party 4

for inspection charges whenever applicable.

9. INDIAN AGENT COMMISSION

Any offer through Indian agents will be considered only after authorization mentioning them as Indian agents, is received from Vendor. Indian agents commission if applicable will be payable only in Indian currency. Indian agents should be registered with Directorate General of Supplies and Disposals, Government of India and agency commission will be payable only after registration with DGS&D, New Delhi.

10. ORDER AWARD / EVALUATION CRITERIA:

Unless otherwise specified, Order award criteria will be on lowest quote landed price basis. Landed price will be summation of Basic Price, Packing & Forwarding Charges, Excise Duty, Sales Tax, Freight, Inspection, Octroi, Supervision of Installation & Commissioning and other taxes & levies, loading etc, if any, reduced by cenvat/vat credit as applicable.

11. CONFIRMATION OF ORDER:

The vendor shall acknowledge the receipt of the purchase order within 10 days of mailing the same. The vendor shall sign, stamp the acknowledgement copy of the purchase order and return the same to BPCL.

12. PAYMENT TERMS:

- 12.1. Unless otherwise specified, 100% payment shall be made within 30 days from date of receipt and acceptance of materials at Site against submission of Peformance Bank Guarantee (PBG) for 10% of basic order value if PBG is applicable for the tender.
- 12.2. In the case of imports, payment will be made on submission of original documents directly to Owner (Telegraphic Transfer-TT) or through Bank (Cash against documents-CAD) or through irrevocable Letter of Credit.
- 12.3. Unless otherwise mentioned, the specified documents (All documents listed below (one

original and two copies)) should be submitted to originator of P.O. (the name and contact details of whom are given in PO) and payments for despatches will be made by the originator of Purchase Order:

- a) Invoice
- b) Excise invoice
- c) The Lorry Receipt of the consignment
- d) Packing list for the consignment
- e) Third Party Inspector's Certificate covering the invoiced Material(s)/ Release Note, wherever applicable
- f) Manufacturers Test/Composition Certificate, wherever applicable
- g) Drawing(s)/Catalogue(s) covering the Material(s) , wherever applicable
- h) Guarantee/Warranty Certificate(s), wherever applicable.
- i) Original Receipt for Octroi/other statutory levies as applicable.
- j) Performance Bank Guarantee as applicable.

13. **GUARANTEE/WARRANTY**:

- 13.1. Materials shall be guaranteed against manufacturing defects, materials, workmanship and design for a period of 12 months from the date of commissioning or 18 months from the date of dispatch whichever is earlier. Warranty for replacement of material / accessories should be provided free of charges at our premises. The above guarantee/warranty will be without prejudice to the certificate of inspection or material receipt note issued by us in respect of the materials.
- 13.2. All the materials including components and sub contracted items should be guaranteed by the vendor within the warranty period mentioned above. In the event of any defect in the material, the vendor will replace / repair the material at BPCL's concerned location at vendor's risk and cost on due notice.

- 13.3. In case, vendor does not replace / repair the material on due notice, rejected material will be sent to the vendor on "Freight to pay" basis for free replacement. Material after rectification of defects shall be dispatched by the vendor on "Freight Paid" basis. Alternatively, BPCL reserves the right to have the material repaired / replaced at the locations concerned, at the vendor's risk, cost and responsibility.
- 13.4. The Vendor shall provide similar warrantee on the parts, components, fittings, accessories etc. so repaired and / or replaced.

14. PERFORMANCE BANK GUARANTEE:

14.1. Vendor will have to provide Performance Bank Guarantee for 10% of the basic value of purchase order unless otherwise specified. This bank guarantee shall be valid (shall remain in force) for guarantee period (as mentioned in the guarantee clause), with an invocation period of six months thereafter. In the case of Indigenous vendors, the Performance Bank Guarantee shall be given on a non-judicial stamp paper of appropriate value (currently Rs 100). PBG format is as per Annexure I.

In case, PBG is not provided by the Vendor, 10% of the basic value shall be retained in lieu of PBG, till the expiry of guarantee and claim period.

In the case of imports, the Supplier shall furnish the Performance Bank Guarantee (as per Annexure I) through the following:

- a) Branches of Indian scheduled banks operating in their Country.
- b) Foreign bank operating in their Country which is counter guaranteed by branches of Indian scheduled banks operating in their Country/India.
- c) Indian branches of foreign banks.
- d) Foreign bank operating in their Country counter guaranteed by their Indian branch

However, in respect of c) and d) above, the Indian branch of foreign banks should be recognized as scheduled bank by Reserve Bank of India.

- 14.2. If Vendor wants to submit the PBG at Contract level to avoid multiple number of PBG (i.e. PBG issued against every purchase/call off order) then the validity of PBG will be calculated as mentioned below:
- 14.2.1. Validity of PBG = Rate Contract Issue Date (Start Date of Rate Contract) + Rate Contract Period (validity of Rate Contract) + Contractual Delivery Period of material + Contractual Guarantee period + 6 month (for invocation / Claim).

15. PACKING & MARKING:

15.1 PACKING:

15.1.1 Packing shall withstand the hazards normally encountered with the means of transport

for the goods of this purchase order including loading and unloading operation both by crane and by pushing off.

In the case of imports, all equipments / materials shall be suitably packed in weather proof, seaworthy packing for ocean transport under tropical conditions and for rail or road or other appropriate transport in India. The packing shall be strong and efficient enough to ensure safe preservance upto the final point of destination.

Raw/Solid wood packaging material of imported items has to be appropriately treated & marked as per International Standard of Phytosanitary Measures (ISPM-15") for material originating from the contracting countries to the International Plant Protection Convention or the members of Food & Agriculture Organization. Material from non-contracting parties would have to be accompanied by a phytosanitary certificate of the treatment endorsed. The Custom Officer at Indian Port shall not release the material without appropriate compliance of the above provisions w.e.f. 01.11.2004.

- 15.1.2 The packing specification incorporated herein are supplementary to the internal and external packing methods and standards as per current general rules of J.R.A. Good Tariff Part-I. All packaging shall be done in such a manner as to reduce volume as much as possible.
- 15.1.3 Fragile articles should be packed with special packing materials depending on the type of Materials and the packing shall bear the words "HANDLE WITH CARE GLASS FRAGILE, DON'T ROLL THIS END UP. THIS END DOWN," to be indicated by arrow.
- 15.1.4 Chemicals in powder form, catalyst, refractories and like materials etc. shall be packed in drums, cans and tins only. However, Catalyst may be supplied in Jumbo bags.
- 15.1.5 The hazardous materials shall be packed in accordance with the applicable rules, regulations and tariff of all cognizant Government Authorities and other Governing bodies. It shall be the responsibility of the seller of hazardous materials to designate the material as hazardous and to identify each material by its proper commodity name and its hazardous material class code.
- 15.1.6 All package requiring handling by crane should have sufficient space at appropriate place to put sling of suitable dia (strength). Iron/Steel angle should be provided at the place where sling marking are made to avoid damage to package/ equipment while lifting.
- 15.1.7 Item shipped in bundles must be securely tied with steel wire or strapping. Steel reinforcing rods, bars, pipes, structural members etc. shall be bundled in uniform lengths and the weight shall be within the breaking strength of the securing wire or strapping.
 - In the case of imports, for bundles the shipping marks shall be embossed on metal or similar tag and wired securely on each end.
- 15.1.8 All delicate surface on equipment/materials should be carefully protected and printed with protective paint/compound and wrapped to prevent rusting and damage.

- 15.1.9 All mechanical and electrical equipment and other heavy articles shall be securely fastened to the case bottom and shall be blocked and braced to avoid any displacement/shifting during transit.
- 15.1.10 Attachments and spare parts of equipment and all small pieces shall be packed separately in wooden cases with adequate protection inside the case and wherever possible should be sent along with the main equipment. Each item shall be suitably tagged with identification of main equipment, item denomination and reference number of respective assembly drawing. Each item of steel structure and furnaces shall be identified with two erection markings with minimum lettering height of 15mm. Such markings will be followed by the collection numbers in indelible ink/paint. A copy of the packing list shall accompany the materials in each package.
- 15.1.11 All protrusions shall be suitably protected by providing a cover comprising of tightly bolted wooden disc on the flanges. All nozzles, holes and openings and also all delicate surfaces shall be carefully protected against damage and bad weather. All manufactured surfaces shall be painted with rust proof paint.

In the case of imports, for bulk uniform material when packed in several cases, progressive serial numbers shall be indicated on each case.

- 15.1.12 Wherever required, equipment/materials instruments shall be enveloped in polythene bags containing silicagel or similar dehydrating compound.
- 15.1.13 Pipes shall be packed as under:
 - a. Upto 50mm NB in wooden cases/crates.
 - b. Above 50mm NB and upto 100mm NB in bundles and should be strapped at minimum three places.
 - c. Above 100mm NB in loose.
- 15.1.14 Pipes and tubes of stainless steel, copper etc. shall be packed in wooden cases irrespective of their sizes.
- 15.1.15 Pipes with threaded or flanged ends shall be protected with suitable caps covers, before packing.

In the case of imports, all pipes and sheets shall be marked with strips bearing progressive no.

- 15.1.16 Detailed packing list in waterproof envelope shall be inserted in the package together with equipment/materials. One copy of the detailed packing list shall be fastened outside of the package in waterproof envelope and covered by metal cover.
- 15.1.17 The supplier shall be held liable for all damages or breakages to the goods due to the defective or insufficient packing as well as for corrosion due to insufficient protection.

15.1.18 Packaged equipment or materials showing damage defects or shortages resulting from

improper packaging materials or packing procedures or having concealed damages or

shortages, at the time of unpacking shall be to the supplier's account.

All packages which require special handling and transport should have their Centres of Gravity and the points at which they may be slung or gripped clearly indicated and marked "ATTENTION SPECIAL LOAD HANDLE WITH CARE" both in English/Hindi Languages.

In the case of imports, a distinct colour splash in say red black around each package crate / bundle shall be given for identification.

15.1.19 Along with the packed material, supplier should attach material list, manuals/instructions and also the Inspection certificate/release note, wherever applicable.

15.2. MARKING:

The following details to be written on the side face of packing:

- a) Purchase Order Number
- b) Vendor Name
- c) Batch no with Manufacturing date
- d) Procedure (in brief) for handling
- e) Date of dispatch etc.

15.3 Imported items:

On three sides of the packages, the following marks shall appear, clearly visible, with indelible paint and on Vendor's care and expenses.

BHARAT PETROLEUM CORPORATION LIMITED (With detailed address as given in Special Purchase Conditions)

From:

To: Bharat Petroleum Corpn.Ltd.

(With detailed address as given in Special Purchase Conditions)

Order no. Rev. no.

Item:

Equipment Nomenclature :

Net weight: Kgs. Gross weight: Kgs.

Case No. of Total cases:

Dimensions : Import Licence No.

NOTE:

Marking shall be bold - minimum letter height 5 cm. For every order and every shipment, packages must be marked with serial progressive numbering.

Top heavy containers shall be so marked either Top Heavy or Heavy Ends.

When packing material is clean and light coloured, a dark black stencil paint shall be acceptable. However, where packaging material is soiled or dark, a coat of flat zinc white paint shall be applied and allowed to dry before applying the specific markings.

In case of large equipments like vessels, heat exchangers, etc. the envelope containing the documents shall be fastened inside a shell connection, with an identifying arrow sign "documents" using indelible paint.

16. DELIVERY:

16.1. Unless otherwise mentioned, Vendor is requested to quote their best delivery schedule

from the date of receipt of Purchase order.

- 16.2. Time being the essence of this contract, the delivery mentioned in the purchase order shall be strictly adhered to and no variation shall be permitted except with prior authorization in writing from the Owner. Goods should be delivered, securely packed and in good order and condition, at the place of delivery and within the time specified in the purchase order for their delivery.
- 16.3. The contractual delivery period is inclusive of all the lead time for engineering / procurement of raw material, the manufacturing, inspection / testing, packing, transportation or any other activity whatsoever required to be accomplished for effecting the delivery at the required delivery point.

- 16.4. Unless otherwise specified, Material(s) shall not be despatched without prior inspection and/or testing and Release Order/Material(s) Acceptance Certificate issued by the Inspector(s).
- 16.5. BPCL shall have the right to advise any change in despatch point or destination in respect of any Material(s). Any extra expenditure incurred by the Vendor on this account supported by satisfactory documentary evidence, will be reimbursed to the Vendor by BPCL.

17. UNLOADING AND STACKING:

Unloading and stacking will be arranged by BPCL. The Vendor shall send BPCL information of the proposed consignment well in advance by telegram/fax/e-mail/courier to enable BPCL to take necessary action.

18. TRANSIT INSURANCE:

Unless otherwise mentioned,

- 18.1. Transit Insurance shall be covered by BPCL against its Mega Package Policy.
- In the case of imports, insurance against all marine and transit risk shall be covered under the Owner's marine policy. However, the Vendor shall ensure that in effecting shipments clear bill of lading are obtained and the carrier's responsibility is fully retained on the Carriers so that the consignee's interests are fully secured and are in no way jeopardized.
- 18.2. The Vendor shall send BPCL information of the proposed consignment well in advance by telegram/fax/e-mail/courier to enable BPCL to take necessary action for the transit insurance of the consignment. Any failure by the Vendor to do so shall place the consignment at the Vendor's risk.
- 18.3. In the case of imports, as soon as any shipment is made, the Foreign Supplier shall send advance information by way of Telex message to Bharat Petroleum Corporation Ltd., (with detailed address as given in Special Purchase Conditions) giving particulars of the shipments, vessels name, port of shipment, bill of lading number and date, total FOB and freight value.

19 VALIDITY OF OFFER:

The rates quoted against this tender shall be valid for a period of 90 Days from the date of opening of the tender unless otherwise specified in the Special Purchase Conditions.

20. DELIVERY DATES AND PRICE REDUCTION SCHEDULE:

20.1. The time and date of Delivery of Material(s) as stipulated in the Contract shall be adhered to on the clear understanding that the Price(s) of the Material(s) has/have been fixed with reference to the said Delivery date(s).

- 20.2. If any delay is anticipated by the Vendor in the delivery of the Material(s) or any of them beyond the stipulated date(s) of Delivery, the Vendor shall forthwith inform BPCL in writing of such anticipated delay and of the steps being taken by the Vendor to remove or reduce the anticipated delay, and shall promptly keep BPCL informed of all subsequent developments.
- 20.3. The delivery period quoted must be realistic & specific. The inability of successful Vendors to execute orders in accordance with the agreed delivery schedule will entitle BPCL, at its options, to:
- 20.3.1. Accept delayed delivery at prices reduced by a sum equivalent to half percent (0.5%) of the basic value of any goods not delivered for every week of delay or part thereof, limited to a maximum of 5% of the total basic order value. LR date will be considered as delivery completion date for calculation of price reduction in the case of ex works contract. Date of receipt of materials at owners premises shall be considered for calculation of price reduction for F.O.R destination contract.

In the case of imports, the contractual delivery date shall be considered from the date of Letter of Credit (L/C) or the date of L/C amendment because of Buyer's fault plus one week (to take care of transit time for receipt of L/c) plus the delivery schedule as indicated by the vendors.

In case of the shipment taking place on "Cash against documents", the contractual delivery shall be taken from the date of purchase order plus one week (to take care of transit time for receipt of order) plus delivery period.

Further the date of B/L or House airway bill shall be considered to find out the delay with respect to contractual delivery date. In case of FOB shipments if the vessel is not available then the intimation by vendors regarding readiness of the goods for the shipment shall be considered for calculating the delay if any. So vendor shall inform the readiness of material for shipment on FOB (Free on Board)basis / FCA (Free on Carrier) basis.

20.3.2. Cancel the order in part or full and purchase such cancelled quantities from elsewhere on account at the risk and cost of the vendor, without prejudice to its right under 20.3.1 above in respect of goods delivered.

21. RISK PURCHASE CLAUSE:

BPCL reserves the right to curtail or cancel the order either in full or part thereof if the vendor fails to comply with the delivery schedule and other terms & conditions of the order. BPCL also reserves the right to procure the same or similar materials/equipment through other sources at vendor's entire risk, cost and consequences. Further, the vendor agrees that in case of procurement by the owner from other sources the differential amount paid by the owner shall be on account of the vendor together with any interest and other costs accrued thereon for such procurement.

22. FORCE MAJEURE CLAUSE:

- (A) <u>Definition</u>: The term "Force Majeure" means any event or circumstance or combination of events or circumstances that affects the performance by the vendor of its obligations pursuant to the terms of this Agreement (including by preventing, hindering or delaying such performance), but only if and to the extent that such events and circumstances are not within the vendor's reasonable control and were not reasonably foreseeable and the effects of which the vendor could not have prevented or overcome by acting as a Reasonable and Prudent person or, by the exercise of reasonable skill and care. Force Majeure events and circumstances shall in any event include the following events and circumstances to the extent they or their consequences satisfy the requirements set forth above in this Clause:
 - the effect of any element or other act of God, including any storm, flood, drought, lightning, earthquake, tidal wave, tsunami, cyclone or other natural disaster;
 - (ii) fire, accident, loss or breakage of facilities or equipment, structural collapse or explosion;
 - (iii) epidemic, plague or quarantine;
 - (iv) air crash, shipwreck, or train wreck;
 - (v) acts of war (whether declared or undeclared), sabotage, terrorism or act of public enemy (including the acts of any independent unit or individual engaged in activities in furtherance of a programme of irregular warfare), acts of belligerence of foreign enemies (whether declared or undeclared), blockades, embargoes, civil disturbance, revolution, rebellion or insurrection, exercise of military or usurped power, or any attempt at usurpation of power;
 - (vi) radioactive contamination or ionizing radiation;

(B) Notice and Reporting:

- (i) The Vendor shall as soon as reasonably practicable after the date of commencement of the event of Force Majeure, but in any event no later than two (7) days after such commencement date, notify the BPCL in writing of such event of Force Majeure and provide the following information:
 - reasonably full particulars of the event or circumstance of Force Majeure and the extent to which any obligation will be prevented or delayed;
 - such date of commencement and an estimate of the period of time required to enable the vendor to resume full performance of its obligations; and

- (c) all relevant information relating to the Force Majeure and full details of the measures the vendor is taking to overcome or circumvent such Force Majeure.
- (ii) The Vendor shall, throughout the period during which it is prevented from performing, or delayed in the performance of, its obligations under this Agreement, upon request, give or procure access to examine the scene of the Force Majeure including such information, facilities and sites as the other Party may reasonably request in connection with such event. Access to any facilities or sites shall be at the risk and cost of the Party requesting such information and access.

(C) Mitigation Responsibility:

- (i) The Vendor shall use all reasonable endeavours, acting as a Reasonable and Prudent Person, to circumvent or overcome any event or circumstance of Force Majeure as expeditiously as possible, and relief under this Clause shall cease to be available to the Vendor claiming Force Majeure if it fails to use such reasonable endeavours during or following any such event of Force Majeure.
- (ii) The Vendor shall have the burden of proving that the circumstances constitute valid grounds of Force Majeure under this Clause and that it has exercised reasonable diligence efforts to remedy the cause of any alleged Force Majeure.
- (iii) The Vendor shall notify BPCL when the Force Majeure has terminated or abated to an extent which permits resumption of performance to occur and shall resume performance as expeditiously as possible after such termination or abatement.
- **(D)** Consequences of Force Majeure. Provided that the Vendor has complied and continues to comply with the obligations of this Clause and subject to the further provisions:
 - (i) the obligations of the Parties under this Agreement to the extent performance thereof is prevented or impeded by the event of Force Majeure shall be suspended and the Parties shall not be liable for the non-performance thereof for the duration of the period of Force Majeure; and
 - (ii) the time period(s) for the performance of the obligations of the Parties under this Agreement to the extent performance thereof is prevented or impeded by the event of Force Majeure shall be extended for the duration of the relevant period of Force Majeure except as provided herein.

(E) Force Majeure Events Exceeding 60 Days

(i) If an event or series of events (alone or in combination) of Force

Majeure occur, and continue for a period in excess of 60 consecutive days, then BPCL shall have the right to terminate this agreement, whereupon the Parties shall meet to mitigate the impediments caused by the Force Majeure event.

23. ARBITRATION CLAUSE:

- 23.1 Any dispute or difference of any nature whatsoever, any claim, cross-claim, counter-claim or set off of BPCL/Vendor against omission or on account of any of the parties hereto arising out of or in relation to this Contract shall be referred to the Sole Arbitration of Director(Marketing) / Director (HR) / Director (R) of BPCL as the case may be or to some officer of BPCL who may be nominated by them.
- 23.2. In the event the Arbitrator being unable or refusing to act for any reason whatsoever, the said Directors of BPCL shall designate another person to act as an Arbitrator in accordance with the terms of the said Contract/Agreement. The Arbitrator newly appointed shall be entitled to proceed with the reference from the point at which it was left by his predecessor.
- 23.3. It is known to the parties herein that the Arbitrator appointed hereunder is an employee of the Corporation and may be Share holder of the Corporation.
- 23.4. The award of the Arbitrator so appointed shall be final, conclusive and binding on all the parties to the contract and the law applicable to arbitration proceedings will be the Arbitration and Conciliation Act, 1996 or any other enactment in replacement thereof.
- 23.5. The language of the proceedings will be in English and the place of proceedings will be Mumbai.
- 23.6. The parties hereby agree that the Courts in the city of Mumbai alone shall have jurisdiction to entertain any application or other proceedings in respect of anything arising under this Agreement and any Award or Awards made by the Sole Arbitrator hereunder shall be filed, if required, in the concerned Courts in the City of Mumbai alone. (legal)

24. INTEGRITY PACT (IP):

Vendors are requested to sign & return our pre-signed IP document, if applicable. This document is essential & binding. Vendor's failure to return the IP document duly signed along with Bid Document may result in the bid not being considered for further evaluation.

25. RECOVERY OF SUMS DUE:

Whenever, any claim against vendor for payment of a sum of money arises out of or under the contract, the owner shall be entitled to recover such sums from any sum then due or when at any time thereafter may become due from the vendor under this or any other contract with the owner and should this sum be not sufficient to cover the recoverable amount of claim(s), the vendor shall pay to BPCL on demand the balance remaining due.

26. CONFIDENTIALITY OF TECHNICAL INFORMATION:

Drawing, specifications and details shall be the property of the BPCL and shall be returned by the Vendor on demand. The Vendor shall not make use of drawing and specifications for any purpose at any time save and except for the purpose of BPCL. The Vendor shall not disclose the technical information furnished to or organized by the Vendor under or by virtue of or as a result of the implementation of the Purchase Order to any person, firm or body or corporate authority and shall make all endeavors to ensure that the technical information is kept CONFIDENTIAL. The technical information imparted and supplied to the vendor by BPCL shall at all time remain the absolute property of BPCL. Imparting of any confidential information by the Vendor will be breach of contract.

27. PATENTS & ROYALTIES:

The vendor shall fully indemnify BPCL and users of materials specified herein/supplied at all times, against any action, claim or demand, costs and expenses, arising from or incurred by reasons of any infringement or alleged infringement of any patent, registered design, trademark or name, copy right or any other protected rights in respect of any materials supplied or any arrangement, system or method of using, fixing or working used by the vendor. In the event of any claim or demand being made or action sought against BPCL in respect of any of the aforesaid matter, the vendor shall be notified thereof immediately and the vendor shall at his/its own expense with (if necessary) the assistance of BPCL (whose all expense shall be reimbursed by the vendor) conduct all negotiations for the settlement of the same and/or litigation which may arise thereof.

28. LIABILITY CLAUSE:

In case where it is necessary for employees or representatives of the Vendor to go upon the premises of owner, vendor agrees to assume the responsibility for the proper conduct of such employees/representatives while on said premises and to comply with all applicable Workmen's Compensation Law and other applicable Government Regulations and Ordinances and all plant rules and regulations particularly in regard to safety precautions and fire hazards. If this order requires vendor to furnish labour at site, such vendor's workmen or employees shall under no circumstances be deemed to be in owner's employment and vendor shall hold himself responsible for any claim or claims which they or their heirs, dependent or personal representatives, may have or make, for damages or compensation for anything done or committed to be done, in the course of carrying out the work covered by the purchase order, whether arising at owner's premises or elsewhere and agrees to indemnify the owner against any such claims, if made against the

owner and all costs of proceedings, suit or actions which owner may incur or sustain in respect of the same.

29. COMPLIANCE OF REGULATIONS:

Vendor warrants that all goods/Materials covered by this order have been produced, sold, dispatched, delivered and furnished in strict compliance with all applicable laws, regulations, labour agreement, working condition and technical codes and statutory requirements as applicable from time to time. The vendor shall ensure compliance with the above and shall indemnify owner against any actions, damages, costs and expenses of any failure to comply as aforesaid.

30. REJECTION, REMOVAL OF REJECTED GOODS AND REPLACEMENT:

In case the testing and inspection at any stage by inspectors reveal that the equipment, materials and workmanship do not comply with specification and requirements, the same shall be removed by the vendor at his/its own expense and risk, within the time allowed by the owner. The owner shall be at liberty to dispose off such rejected goods in such manner as he may think appropriate. In the event the vendor fails to remove the rejected goods within the period as aforesaid, all expenses incurred by the owner for such disposal shall be to the account of the vendor. The freight paid by the owner, if any, on the inward journey of the rejected materials shall be reimbursed by the vendor to the owner before the rejected materials are removed by the vendor. The vendor will have to proceed with the replacement of the equipment or part of equipment without claiming any extra payment if so required by the owner. The time taken for replacement in such event will not be added to the contractual delivery period.

31. NON-WAIVER:

Failure of the Owner to insist upon any of the terms or conditions incorporated in the Purchase Order or failure or delay to exercise any rights or remedies herein, or by law or failure to properly notify Vendor in the event of breach, or the acceptance of or payment of any goods hereunder or approval of design shall not release the Vendor and shall not be deemed a waiver of any right of the Owner to insist upon the strict performance thereof or of any of its or their rights or remedies as to any such goods regardless of when such goods are shipped, received or accepted nor shall any purported oral modification or revision of the order by BPCL act as waiver of the terms hereof. Any waiver to be effective must be in writing. Any lone incident of waiver of any condition of this agreement by BPCL shall not be considered as a continuous waiver or waiver for other condition by BPCL.

32. NEW & UNUSED MATERIAL:

All the material supplied by the vendor shall be branded new, unused and of recent manufacture.

33. PURCHASE PREFERENCE CLAUSE:

Owner reserves its right to allow Public Sector Enterprises (Central/State), purchase preference as admissible/applicable from time to time under the existing Govt.

policy. Purchase preference to a PSE shall be decided based on the price quoted by PSE as compared to L1 Vendor at the time of evaluation of the price bid.

Owner reserves its right to allow Micro and Small Enterprises (MSEs) and MSEs owned by Scheduled Caste (SC) or the Scheduled tribe (ST) entrepreneurs, purchase preference as admissible/applicable from time to time under the existing Govt. policy. Purchase preference to a MSE and a MSE owned by SC/ST entrepreneurs shall be decided based on the price quoted by the said MSEs as compared to L1 Vendor at the time of evaluation of the price bid.

34. CANCELLATION:

- 34.1. BPCL reserves the right to cancel the contract/purchase order or any part thereof through a written notice to the vendor if.
- 34.1.1. The vendor fails to comply with the terms of this purchase order/contract.
- 34.1.2. The vendor becomes bankrupt or goes into liquidation.
- 34.1.3. The vendor fails to deliver the goods on time and/or replace the rejected goods promptly.
- 34.1.4. The vendor makes a general assignment for the benefit of creditors.
- 34.1.5. A receiver is appointed for any of the property owned by the vendor.
- 34.2. Upon receipt of the said cancellation notice, the vendor shall discontinue all work on the purchase order matters connected with it. BPCL in that event will be entitled to procure the requirement in the open market and recover excess payment over the vendor's agreed price if any, from the vendor and also reserving to itself the right to forfeit the security deposit if any, made by the vendor against the contract. The vendor is aware that the said goods are required by BPCL for the ultimate purpose of materials production and that non-delivery may cause lossof production and consequently loss of profit to the BPCL. In this-event of BPCL exercising the option to claim damages for non delivery other than by way of difference between the market price and the contract price, the vendor shall pay to BPCL, fair compensation to be agreed upon between BPCL and the vendor. The provision of this clause shall not prejudice the right of BPCL from invoking the provisions of price reduction clause mentioned in 20.3.1 as aforesaid.

35. ANTI -COMPETITIVE AGREEMENTS/ABUSE OF DOMINANT POSITION:

The Competition Act, 2002 as amended by the Competition (Amendment) Act, 2007 (the Act), prohibits anti- competitive practices and aims at fostering competition and at protecting Indian markets against anti- competitive practices by enterprises. The Act prohibits anti- competitive agreements, abuse of dominant position by enterprises, and regulates combinations (consisting of acquisition, acquiring of control and M&A) wherever such agreements, abuse or combination causes, or is

likely to cause, appreciable adverse effect on competition in markets in India. BPCL reserves the right to approach the Competition Commission established under the Act of Parliament and file information relating to anti-competitive agreements and abuse of dominant position. If such a situation arises, then Vendors are bound by the decision of the Competitive Commission and also subject to penalty and other provisions of the Competition Act.

36. ASSIGNMENT

The Vendor can / does not have any right to assign his rights and obligations under these general purchase conditions without the prior written approval of BPCL.

37. GOVERNING LAW

These General Purchase Conditions shall be governed by the Laws of India.

38. AMENDMENT

Any amendment to these General Purchase Conditions can be made only in writing and with the mutual consent of the parties to these conditions.

39. SPECIAL PURCHASE CONDITIONS

In case of a conflict between the clauses, terms and conditions of General Purchase Conditions and Special Purchase condition, the clauses, terms and conditions of Special Purchase Condition will have an overriding effect over General Purchase Conditions and the same shall be applicable.

40. NOTICES

Any notices to be given hereunder by a Party to the other shall be in English and delivered by hand or sent by courier or facsimile to the other Party at the address or facsimile number stated below or such other address or number as may be notified by the relevant Party from time to time:

BPCL		
Vendor		

Please sign & return all the pages of GPC as a token of your acceptance of all the terms & conditions as mentioned above.

Annexure I

PERFORMANCE BANK GUARANTEE (On Non-judicial paper for appropriate value)

Bharat Petroleum Corporation Limited			
Dear Sir,			
In consideration of the Bharat Petroleum Corporation Limited, (hereinafter called 'the Company' which expression shall include its successors and assigns) having awarded to M/s. (Name)			
We, (Name)(constitution)(hereinafter called "the Bank" which expression shall include its successors and assigns) hereby jointly and severally undertake and guarantee to pay to the Company in(Currency) forthwith on demand in writing and without protest or demur of any and all moneys any wise payable by the Vendor to the Company under in respect of or in connection with the said supply contract inclusive of all the Company's losses and expenses and other moneys anywise payable in respect to the above as specified in any notice of demand made by the Company to the Bank with reference to this Guarantee upto an aggregate limit of Rs(in figures)Rs(in words)			

AND the Bank hereby agrees with the Company that

Tο

i. This Guarantee/undertaking shall be a continuing guarantee and shall remain valid and irrevocable for all claims of the Company and liabilities of the vendor arising upto and until midnight of

This date shall be 6 months from the last date of guarantee period.

ii This Guarantee / Undertaking shall be in addition to any other guarantee or security of whatsoever that the Company may now or at any time otherwise have in relation to the vendor's obligation/liabilities under and /or connection with the said supply contract, and the Company shall have full authority to take recourse to or reinforce this security in preference to the other security(ies) at its sole discretion, and no failure on the part of the Company in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its liability hereunder.

- ii. The Company shall be at liability without reference to the Bank and without effecting the full liability of the Bank hereunder to take any other security in respect of the vendor's obligations and /or liabilities under or in connection with the said supply contract and to vary the terms vis a vis the vendor of the said supply contract or to grant time and / or indulgence to the vendor or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forbear from enforcement all or any of the obligations of the vendor under the said supply contract and / or the remedies of the Company under any other security(ies) now or hereafter held by the Company and no such dealing(s), variation(s), reduction(s), increase(s) or the indulgence(s) or arrangement(s) with the vendor or release or forbearance whatsoever shall have the effect of releasing the Bank from its full liability to the Company hereunder or of prejudicing rights of the Company against the Bank.
- iv. This Guarantee /Undertaking shall not be determined by the liquidation or winding up ordissolution or change of constitution or insolvency of the vendor but shall in all respects and for all purposes be binding and operative until payment of all moneys payable to the Company in terms hereof.
- v. The Bank hereby waives all rights at any time inconsistent with the terms of the Guarantee /

Undertaking and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by the vendor (whether or not pending before any Arbitrator, officer, Tribunal or Court) or any denial of liability by the vendor or any other order of communication whatsoever by the vendor stopping or preventing or purporting to stop or prevent any payment by the Bank to the Company in terms hereof.

vi. The amount stated in any notice of demand addressed by the Company to the Guarantor as liable to be paid to the Company by the vendor or as suffered or incurred by the Company on account of any losses or damages of costs, charges and or expenses shall as between the Bank and the Company be conclusive of the amount so liable to be paid to the Company or suffered or incurred by the Company, as the case may be and payable by the Guarantor to Company in terms hereof.

Yours faithfully, (Signature) NAME & DESIGNATION NAME OF THE BANK NOTES:

DISCONTINUATION OF HYDRA CRANES WITHIN MUMBAI REFINERY PREMISES W.E.F 01.10.2014

For enhancing Safety within the Refinery, it has been decided that with effect from 01.10.2014, usage of Hydra Cranes shall be prohibited within Mumbai Refinery premises.

The present Hydra Cranes can be substituted with suitable/equivalent hydraulically operated cranes that are equipped with rear mounted boom and out rigger supports. Some of the models having these features are mentioned below for your easy reference:

SI No	Manufacturer	Models	
1	Escort Construction Eqpt.Ltd. (ECEL)	TRX Series - K10, F15, TRX 1651, TRX 2319, MAC 1214	
2	Action Construction Eqpt. Ltd. (ACE)	FX 120, FX 150, 15XWE, 15XWF, Rhino 110 FC	

All the contractors are requested to take cognizance of the above, and arrange for alternate equipment with effect from 01.10.2014, to carry out various jobs inside Mumbai Refinery.

Please ensure strict compliance failing which suitable action shall be taken as deemed fit.



BHARAT PETROLEUM CORPORATION LTD.

(INCORPORATED IN INDIA)
MUMBAI REFINERY

MEMORANDUM OF AGREEMENT

An Agreement made this	day of	20			
between BHARAT PETROLEUM CORPORATION LIMITED, a company incorporated in India and having its registered office at Ballard Estate, Mumbai (hereinafter refe red to as the "Company" which expression shall mean the said BHARAT PETROLEUM CORPORATION LIMITED its successors and assigns) of the one part and					
of					
(hereinafter referred to as " The Cont	ractor" which expression	on shall mean the said			
and its heirs, legal representatives succit is agreed :-	cessors and assigns of	the other part, whereby			

- 1. The Contractor shall carry out and complete the work as mentioned in Purchase order (hereinafter referred to as "the work") for the Company at its Mumbai Refinery site to its complete satisfaction in accordance with the specifications, Schedule of rates and plans attached as per Purchase Order and with the instructions given, from time to time by the company's authorised Engineer, under whose supervision the work shall be executed.
- 2. Inspection of Site. The Contractor has been given an opportunity before or at the time of entrusting of the work to him of making an inspection of the site to set at rest any doubts he may have had about the difficulties attending his offer, and any difficulties which may be met with by him in the course of the execution of the work, shall neither relieve him from fulfilling the terms of this Agreement nor entitle him to claim extra payment or an extension of the period stipulated for the completion of the work, except where it will be agreed by the Company's authorised Engineer that such difficulties could not have been foreseen.
- 3. Supply of Labour and Materials. The Contractor shall furnish all labour, materials, equipment or tools necessary for the construction of the work, except such materials equipment & tools as will be supplied by the Company and are detailed in Purchase Order. The contractor will assume full responsibility for the protection and safety of the work during its construction. The details and dimensions shown on the said plans attached hereto shall be strictly adhered to by the Contractor and no alterations shall be made therein unless previous sanction thereto has been given in writing by the Company.
 - The contractor shall prepare detailed and shop drawings and any other data required.
 - b) All material supplied by the contractor shall be of the best quality. The Contractor shall at his own cost arrange for and / or carry out any test of materials which the Company's authorised Engineer may require.
 - c) The Contractor at the request of the Company's authorised Engineer immediately dismiss from the work any person employed thereon who in the opinion of the company's authorised Engineer, is unsuitable or incore petent or who had been guilty of misconduct, and such person shall not again be employed or allowed on the works without the permission of the Company in writing.

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- 4. E.& O.E. No advantage is to be taken either by the Company or the Contractor of any clerical error or mistake which may occur in the specification, schedule of rates, plans, tender or any other papers supplied to or by the contractor in connection with the work.
- 5. Damages on account of incomplete work. The Contractor shall commence the work and shall complete the work as mentioned in Purchase Order failing which the Contractor shall pay or allow to the Company to recover as liquidated damages at the rate of ½% per week of delay or part thereof up to a maximum 5% of the total contract value. Such damages may be deducted by the Company from any moneys due to contractor, otherwise they shall be recoverable by lawful means.
- 6. Determination of the Agreement. In the event of the Contractor failing to complete the work within the time stipulated for completion, the Company may determine this Agreement forthwith and employ another Contractor or its own workmen to complete the work, but in that event the stipulation Clause 5 regarding payment of damages, shall not apply. The determination of this Agreement shall not in other respects prejudice any rights, duties or obligations which may have accrued hereunder to the parties before such determination or which may accrue in respect of anything done or omitted to be done hereunder before such determination or / and remedies in respect of such rights, duties or obligations.
- part thereof shall be found defective in workmanship or by reason of bad or inferior materials used, then in such case he shall at his own risk and cost without delay, demolish all such defective work and rebuild or replace the same in a satisfactory manner. The Company may, if necessary, at the cost and risk of the Contractor, temporarily stop all other activities by the Contractor in connection with the work until such time as the defective work has been rebuilt or replaced at the Contractor's cost in case of default on the part of the Contractor to remove defective work and rebuild or replace the same without delay and in manner satisfactory to the Company, the Company shall be entitled to employ another Contractor or its own workman to carry out the removal and rebuilding or replacing.
- 8. Substitution of Contractor. If the Company finds it necessary to employ a person or persons for the purposes provided in Clauses 6 and 7 above, then the Company may deduct and retain from out of the sums due to the Contractor all such amounts as they may require to pay or to reimburse themselves therefrom in respect of the costs and expenses which they have incurred in completing the work and / or in removing defective work and rebuilding or replacing the same in a manner satisfactory to the Company and if such amounts be more than the sums due or thereafter becoming due to the Contractor, than the balance, shall be debt recoverable from the Contractor by the Company. The Contractor shall not in any manner do or cause to be done any act matter or thing whatsoever to prevent the person placing the same in a manner satisfactory to the Company and / or from completing the work in the manner aforesaid.
- 9. Removal of Material. On the Determination of the Agreement as referred to in Clause 6, the Contractor shall at his own risk and cost remove from site within seven days all his materials, equipment and tools. It is agreed that in case of such determination, the Company shall be entitled to purchase from the Contractor such materials as will be approved by the Authorised Engineer of the Company at the prices then current. If the Contractor does not remove the other materials, equipment and tools which he has been asked to remove within the time prescribed as aforesaid, the Company may remove and sell the same holding the proceeds less the cost of storage, removal and sale to the credit of the Contractor. Should Company incur any loss in respect of the sale, it shall be entitled to recover same from the Contractor.

- 10. Inspection of work. Inspection will be made periodically during the progress of the work by the authorised Engineer of the Company and all work performed must be of acceptable quality of which the said Engineer will be the sole judge.
- 11. Supervision. The Contractor shall during the whole time the work is in progress, employ one or more competent and technical English speaking Supervisors acceptable to the Company's authorised Engineer, one of whom at least shall be in constant attendance at the site while persons are at work there. Any directions, explanations, instructions or notices in connection with the work given by the Company's authorised Engineer to these Supervisors shall be deemed to have been given to the Contractor.
- 12. Payment. The Company in consideration of the Contractor carrying out and completing the said work at the Company's said refinery site, to the satisfaction of the Company, shall pay the contractor as per the said Schedule of Rates, subject to deductions, retentions and abatements, if any, to be made therefrom in accordance with the provisions of the Agreement. During the progress of the work and provided the work is progressing according to the time-table laid down to the contractor, the contractor shall be entitled once a month to receive advance payment on the above mentioned sum proportionate to such part of the work as shall have been executed during the preceding month but only after such part of the work as shall have been executed has been inspected and approved by the Company's authorised Engineer. From such interim payment each time 10 percent will be withheld and this 10 percent will be paid to the Contractor Six Months / Twelve Months after the date of Virtual completion in accordance with Clause 13. "Virtual completion" shall mean that the subject matter of the work is in the opinion of the Company's authorised Engineer, fit to be used for the purpose for which it was meant.

OR

100% payment will be made on the basis of actual executed quantities after satisfactory completion and due certification by BPCL Engineer - in - charge.

In lieu of 10% Retention Money, contractor shall submit bank guarantee of equivalent amount of retention money (10% of contract value) before submission of 1st R.A. bill valid for defects liability period of six months / twelve months. Further, the Bank Guarantee shall have a claim period of 3 months beyond the date of expiry & the same shall be mentioned clearly in the Bank Guarantee.

Defects after completion. Any defects which may appear within the period of Six months / Twelve months mentioned in Clause 12 shall, upon the directions in writing of the Company and within such reasonable time as shall be specified therein be amended and made good by the Contractor, at his own cost unless the Company shall decide that the Contractor will be paid for such amending and making good, and in case of default on the Contractor's part, the Company may amend and make good or have amended and made good such defects and all damages, losses and expenses consequent thereon, incidental to those shall be borne by the Contractor and such damages, losses and expenses shall be recoverable from him by the company or may be deducted by the Company from any moneys due to or thereafter becoming due to the Contractor. Alternatively, the Company may, in lieu of such amending and making good by the Contractor elect to deduct from any money's due or thereafter becoming due to the Contractor a sum to be determined by the Company sufficient to cover the cost of amending and making good such defects, and in the event of the amount withheld in accordance with Clause 12 being insufficient, recover the balance from the Contractor together with any expenses the Company may have incurred in connection with such recovery should any defective work have been done or bad inferior materials supplied by any Sub-contractor employed on the work, has been approved by the Company as provided in Clause 15, the contractor shall be liable to amend and make good in the same manner as if such liable under the Clause notwithstanding the signing by the Company's authorised Engineer of any certificate or passing of any account.

- 14. Alterations. The Company reserves the right at any time to alter any quantities of any item indicated in the schedule of rates attached to this agreement, in which case the total amount payable to the Contractor shall be less or higher, proportionate with the reduction or increase in quantity of such item, allowance for which will be made at the contractor's quoted rates.
- 15. Subletting Agreement. The Contractor shall not sublet or assign the work or any part thereof to another party without the written consent of the Company and no such subletting or assignment shall relieve the Contractor from the full and entire responsibility of his obligation under this Agreement.
- 16. Cancellation. The Company shall at any and at all times during the period stipulated for the work, has the right forthwith to cancel this agreement by giving written notice thereof to the Contractor and in such case the Contractor shall be paid for such part of the work as has been executed by him upto the date of cancellation, on the basis of the schedule of rates attached, and shall be reimbursed by the Company for the costs and expenses incurred by him but which would not be wasted as a direct consequence of the cancellation of the Agreement.
- Workmen's Compensation Liability. The Contractor shall hold the company harmless and indemnified from and against all claims, costs and charges for which the Company shall be liable under the Workmen's Compensation Act, 1923 & 1933 & any amendments thereof and the expenses to which it shall be put thereunder, both in respect of personal injuries (within the meaning of the said Act) to the employees during the currency of this agreement through the acts or omissions, whether due to negligence or not of the Contractor, Sub-contractors and/or the Company and / or their meaning of the said Act) to the servants and employees of the Company arising out of or occasioned through the acts and omissions whether due to negligence or not of the Contractor, Sub-Contractor and / or their servants and employees in carrying out any of the provisions of this Agreement. This indemnity shall be in addition to and not in lieu of any indemnity to which the Company shall be entitled in law. The Contractor shall at his own expense effect and maintain, until the completion of the work, with an approved office a Policy of insurance in the joint names of the Company and the contractor, against such risks and deposit such policy or policies with the Company from time to time during the currency of this Agreement. The contractor shall be responsible for anything not included in the Insurance Policies above referred to and also for all other damages to person or property arising out of or incidental to the negligent or defective carrying out of this Agreement and shall keep the Company harmless and indemnified.
- 18. Safety Regulations. The Contractor shall ensure that he / his Sub-Contractor and his, or their personnel or representative shall comply with all safety regulations issued from time to time by the Company or otherwise howsoever and should any injury resulting in death or not or damage to any property occur as a result of failure to comply with such regulations, the Contractor shall be held responsible for the consequences thereof, shall keep the Company harmless and indemnified.

19. Arbitration.

a) Any dispute or difference of any nature whatsoever, any claim, cross-claim, counter-claim or set off of the Corporation against the Contractor or regarding any right, liability, act, omission or account of any of the parties hereto arising out of or in relation to this agreement shall be referred to the Sole Arbitration of the Director (Refineries) of the Corporation or of some officer of the Corporation who may be nominated by the Director (Refineries). The Contractor will not be entitled to raise any objection to any such arbitrator on the ground that the arbitrator is an Officer of the Corporation ...e had

expressed views on all or any other matters in dispute or difference. In the event of the arbitrator to whom the matter is originally referred being transferred or vacating hic office or being unable to act for any reason, the Director (Refineries) as aforesaid at the time of such transfer, vacation of office or inability to act may in the discretion of the Director (Refinerles) designate another person to act as arbitrator in accordance with the terms of the agreement to the end and intent that the original Arbitrator shall be entitled to continue the arbitration proceedings notwithstanding his transfer or vacation or office as an Officer of the Corporation if the Director (Refineries) does not designate another person to act as arbitrator on such transfer, vacation of office or inability of original arbitrator. Such persons shall be entitled to proceed with the reference from the point at which it was left by his predecessor. It is also a term of this contract that no person other than the Director (Refineries) or a person nominated by such Director (Refineries) of the Corporation as aforesaid, shall act as arbitrator hereunder. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to the agreement subject to the provisions of the Arbitration Act 1996 or any statutory modification or re-enactment thereof and the rules made thereunder for the time being in force, shall apply to the arbitration proceedings under this clause.

- b) The arbitrator shall have power to order and direct either of the parties to abide by, observe and perform all such directions as the arbitrator may think fit, having regard to the matters in difference i.e. dispute before him. The arbitrator shall have all summary powers and may take such evidence oral and /or documentary, as the arbitrator in his absolute discretion thinks fit and shall be entitled to exercise all powers under the Arbitration Act, 1996 including admission of any affidavit as evidence concerning the matter in difference i.e. dispute before him.
- c) The parties against whom the arbitration proceedings have been initiated that is to say, the Respondents in the proceedings, shall be entitled to prefer a cross-claim, counter-claim or set off before the Arbitrator, in respect of any matter, an issue arising out of or in relation to the Agreement without seeking a formal reference of arbitration to the Director (Refineries) for such counter-claim, cross-claim or set off and the Arbitrator shall be entitled to consider and deal with the same as if the matters arising therefrom has been referred to him originally and deemed to form part of the reference made by the Director (Refineries).
- d) The arbitrator shall be at liberty to appoint, if necessary, any accountant or engineer or other technical person, to assist him and to act by the opinion so taken.
- e) The arbitrator shall have power to make one or more awards whether interim or otherwise, in respect of the dispute and difference and in particular will be entitled to make separate awards in respect of claims or cross-claim of the parties.
- f) The arbitrator shall be entitled to direct any one of the parties to pay the costs of the other party in such manner and to such extent as the arbitrator may in his discretion determine and shall also be entitled to, require one or both the parties to deposit funds in such proportion to meet the arbitrator's expenses whenever called upon to do so.
- g) The parties hereby agree that the courts in the city of Mumbai alone shall have jurisdiction to entertain any application or other proceedings in respect of anything arising under this agreement and any award or awards made by the Sole Arbitrator hereunder shall be filed in the concerned courts in the city of Mumbai only.

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- 20. Jurisdiction. This Agreement shall be deemed to have been made in Mumbai and shall be construed according to the laws of India and the performance by the Contractor of any contract on his part herein contained, shall be considered due in Mumbai for the purpose of jurisdiction.
- 21. Minimum Wages. The Contractor, his executors and administrators (and in the case of a Limited Company, its successors and assigns) shall hold the Company harmless and indemnified from and against all claims, costs and charges, for which the Company shall be liable under the Minimum Wages Act, 1948, the Contract Labour (Regulation & Abolition) Act, 1970, and any amendments or modifications thereof, and all expenses it shall be put thereunder through the acts or omissions whether wilful or not on the part of the Contractor. This indemnity shall be in addition to and not in lieu of, any indemnity to which the Company shall be entitled in law.
- 22. Employees State Insurance. The Contractor hereby admits that he is fully aware of his responsibilities under the Employees State Insurance Act, 1948, as an immediate employer of the employees engaged by him for the execution of this contract which he agrees to discharge. The contractor acknowledges the statutory right of the Company (as a Principal Employer) to recover the amount of contributions paid by it in the first instance in respect of the employees employed by or through him (the Contractor), as well as the employees' contribution, if any, either by deduction from any amount payable to him by the Company under any contract or as debt payable by him to the Company.

In witness whereof the said contracting	ng parties have set their hands.		
Witness	For Bharat Petroleum Corporation Ltd.		
Witness	Contractor's Signature		
Date			

Code: 63019



SPECIAL SAFETY CONDITIONS

(ESSENTIAL REQUIREMENT)

SAFETY CONDITIONS APPLICABLE TO ALL WORKS CARRIED OUT IN THE REFINERY BY CONSULTANTS, CONTRACTORS OR OTHER THIRD PARTIES

1. COMPLIANCE WITH STATUTORY REQUIREMENT

Consultants, contractors or other third parties working in the refinery shall abide by :-

- The safety regulations of the Refinery as mentioned in the 'Fire and Safety Regulations' (Latest Revision)
- b) All requirements under The Factories Act 1948 and the rules framed thereunder in the Maharashtra Factories Rules 1963 including all amendments thereto.
- c) Applicable Environment Regulations in force and also the systems and procedures in the refinery related to environment.

2. QUALIFICATION AND EXPERIENCE OF MANPOWER TO BE DEPLOYED

Contractors shall deploy only experienced and qualified supervisors and workmen, who are well conversant with the safety & environment regulations in the refinery.

The minimum qualification requirements of supervisors for field jobs (other than office jobs, grass cutting, housekeeping, general cleaning jobs etc.) shall be:

- Diploma in relevant branch of engineering with 3 years experience or
- SSC + ITI in the relevant field with 10 years experience.

Also supervisors shall have sufficient knowledge of English language to understand Safety Permit System, work instructions, drawings and they should be able to assimilate the safety training Inputs provided by the refinery and successfully qualify in the tests.

Past experience must be for same type of job for which the supervisors would be engaged.

Contractors' skilled workmen like riggers, scaffolders, welders, fitters, crane operators, other specialized equipment operators like welding machine, power generators etc. must have sufficient past experience and skills on relevant jobs. The Electricians to be deployed on the job must have valid Wireman Licence.

All workmen must be capable of following instructions and training.

3. HEALTH ASSURANCE

Contractors will ensure that workers including Supervisors before deployment on the job, are medically examined by a certified surgeon / Occupational Health Physician having qualification of MBBS + AFIH as per Rule 73 V of Maharashtra Factories Rule 1963. Only medically sound persons as certified by the above medical practitioner would be allowed on the job. Workmen deployed on high risk jobs like working in confined space, working at height, working under water, etc. must also be certified as medically fit for such jobs.

The medical certificates older by more than six months will not be accepted. Health Assurance certificates submitted by the contractors would be periodically checked at random by the refinery doctors.

4. RESTRICTIONS IN USE OF MAN POWER AND NORMAL TIMINGS FOR WORK

Contractor shall put all efforts to deploy minimum manpower to execute the work awarded to him in stipulated time by using modern techniques & mechanization. Contractors deploying minimum manpower will be given due weight while renewing their registration.

No contractor's employees shall normally work for more than 8 hours a day and not more than 48 hours in a week of seven days. After every 48 hours of working, all employees must get one full day's rest. The normal duty timings for contractor's employees shall be between 8.00 AM and 4.15 PM.

Contractor employees would not be allowed to work on Sundays and refinery holidays.

Any deviation from above shall be with express permission from the Engineer-in-charge.

5.0 TRAINING

5.1 Mandatory

Training in Fire and Safety is mandatory for all contractors' employees before start of any work in the refinery.

5.2 Training of Contractors, Proprietors, Partners, Directors and Managers

- a) The proprietors, partners, directors or managers in-charge of the contractors who have ultimate responsibility for their work in the refinery must undergo a one day comprehensive safety familiarization programme.
- b) This programme would be conducted once in a quarter by fire and safety department at fire station auditorium and the schedule shall be notified well in advance.
- c) On completion of the programme a certificate of attendance will be issued to each participant which will be required for issue of refinery entry pass.

5.3 Supervisors' Training

- a) Contractors' supervisors will have to undergo two days training on "Health, Safety and environment (HSE) in Refinery" followed by one day training on "Work Permit System".
- b) At the end of each of the above two training modules, there will be a written test.
- c) Passing certificates would be issued on the last day of the month to the supervisors who successfully pass these tests.
- d) The Passing Certificate issued to a supervisor would remain valid for one year.
- e) Refinery Entry Pass will not be issued to any supervisor without a valid Passing Certificate.

5.4 Workers' Training

- a) Contractors workmen will have to undergo one day's class room training on "Safety in Refinery" before commencement of the job.
- b) On completion of this training, "Certificate of Attendance" would be Issued by safety section.
- c) This "Certificate of Attendance" would remain valid for a period of one year.
- d) Refinery Entry Pass would be issued only on production of this certificate.

5.5 Refresher Training

- Supervisors workmen will be required to undergo refresher training from time to time as required by the safety section.
- b) The coverage and methodology of the refresher training would be same as the initial training.

5.6 Administration of Training

- a) The Refinery Fire and Safety Department shall conduct these mandatory training programmes at the Fire Station auditorium or any other venue as decided by BPCL, free of cost.
- b) One three-day training programme around the middle of every month for supervisors and three one-day training programmes for workmen at an interval of 10 days will be conducted.
- c) Notice giving schedule of exact dates of training for the current month would be issued to Maintenance Planning, Office Engineering & Construction, Contracts and Purchase and the Estates (P&A) by 25th of the previous month for notification to the contractors.

5.7 Contractors Responsibility for Training his employees

- a) Contractor must ensure that all his supervisors have undergone safety training and keep documents of such training. He shall also ensure that each of his employees has received and understood from his supervisors necessary training on safety for working in the refinery.
- b) Contractor must maintain records of training provided by him to his employees. Such records must clearly mention a) what training has been provided, b) date, time and duration of such training, c) who has provided the training, d) names of workers who attended such training etc.
- c) The records maintained in the form of a register must be available for examination by the Engineer-in-charge or his representative who will sign on the register as a token of his approval.
- d) The training provided by the contractor must be as frequent as possible but there should not be more than 15 days gap in between two training programmes.
- e) The training provided by the contractor is expected to be on the job training and must not be less than at least one hour duration. During such training, contractor must make himself present and facilitate the process of the training.

6. ISSUE OF REFINERY ENTRY PASS

On award of a contract and prior to commencement of work the Contractor must

- a) Fill in the Form as per annexure-I attaching all necessary documents (viz. Bio-data as per Annexure II, medical certificate, etc.) of each employee as mentioned in the form.
- b) Submit the form to the engineer-in-charge and obtain his recommendation.
- c) Thereafter, submit the form to IR department for Form V for obtaining labour licence.
- d) Obtain labour licence and complete ESIC and PF related formalities.
- Submit ESIC, PF and Labour Licence details to IR and obtain clearance from IR officer.
- f) Submit the form duly cleared by the Engineer-In-charge and IR officer, to the Safety Officer.
- g) Ensure completion of safety training by all supervisors and workmen, as per requirement as spelt out in Clause nos. 5.3 & 5.4 of these Conditions of Contract
- h) Obtain clearance of the Safety Officer regarding completion of safety training.
- I) Submit the form to CISF (at Refinery Main Gate) and obtain Refinery Entry Pass for those supervisors and workers who have been cleared by all agencies.

7. OBLIGATION TO FOLLOW WORK PERMIT SYSTEM

- a) Do not carry out any work without a valid work permit issued by authorized persons in the refinery, as per Work Permit System.
- b) After obtaining a valid work permit and before the actual commencement of the work, also obtain a clearance certificate from the officer of the unit/plant where the work is to be carried out.
- c) Register permit and clearance at refinery fire station as required under the Work Permit System.
- d) Comply with all the Fire/Safety/ Excavation/Radiography permit conditions specified in the permit and the clearance.
- e) Prepare a safety action plan specific to the work before starting the work. Also ensure that all supervisors and workers involved in the work, properly understand and follow the safety action plan.
- f) Display permit / clearance at site for checking, by refinery officials whenever required.

8. REQUIREMENT OF SUPERVISION

- a) Contractor will not carry out any work without having a supervisor present at site. If it is required to work simultaneously in more than one location under the same contract, one supervisor must be put in each of the locations. If a supervisor has to leave his site for any reason, he must stop his site activities for that period of time.
- b) Contractor must provide at least one full time onsite safety supervisor when the contractor has engaged a manpower in excess of 50 in contract activities in the Refinery. If the manpower is less than 50, the on-site safety co-ordination responsibilities shall be assumed by any one of the contractor's other supervisory staff. In both the cases, the contractor must specify in writing the name of such persons to the Engineer-in-Charge and Manager Safety.
- c) Contractor's safety co-ordinator or his supervisor responsible for safety as the case may be, shall conduct at his work-site and document formal safety inspections and audits at least once in a week. Such documents are to be submitted to Engineerin-Charge for his review and record.
- d) Contractor's safety supervisor or the supervisor responsible for safety, shall maintain separate safety register which will include 1) List of activities being carried out at site; 2) Safety Training details of all supervisors and workmen; 3) Records of all accidents, first aid cases and near misses; 4) Records of all PPE's being used at site; 5) Records of lifting tools and tackles including slings of all types; 6) Records of pressure vessels if any at his site; 7) Records of all welding machines, gas cutting sets, compressors, generators, pressure regulators, portable power tools, hand tools etc. 8) Copies of safety inspection reports made by the Contractor safety supervisor as well as by the BPCL refinery.
- e) The contractors whose safety records are not satisfactory will be viewed seriously and necessary action (viz. cancellation of Registration/Contracts) shall be taken against him.

9. USE OF PERSONAL PROTECTIVE EQUIPMENT

Contractor's all supervisors and workmen must use following Personal Protective Equipment (PPE's) without which, permission to work will be denied.

a) Hard Hat b) Safety Shoes c) Boiler Suits d) Hand Gloves as per job requirement e) safety belt as applicable f) Eye protection goggles etc.

The PPE's shall be of standard quality and ISI approved.

Only Special Protective Equipment like "Breathing Apparatus Set" and Fire Extinguishers shall be provided by BPCL to the contractor, on loan basis. If the same is not returned after completion of the contract or damaged beyond repair, recovery as appropriate will be made from his dues, from the company.

10. HAZARD COMMUNICATION

- a) Contractor must familiarize himself from BPCL Engineer-in-Charge about all known potential fire, explosion or toxic release hazards related to his contract. He in turn will ensure that same information has been passed to his supervisors and workmen. Proper record of such dissemination of information must be made by the contractor and submit to the Engineer-in-Charge on demand, failing which further continuation of work may be withheld.
- b) In the event of any contractor's employee spotting a fire or any serious hazards in refinery premises, he shall dial Ext. No-3333, identify himself and report location of fire when Fire Station Operator is on the line. He shall wait until the fire message is repeated by the Fire Operator and location confirmed.
- c) The contractor must ensure that each one of his employees clearly understands this Fire Communication Requirement. This may be ensured by the contractor while providing on the job training.

11. INJURY NOTIFICATION AND INVESTIGATION

Contractor must

- a) Report to BPCL supervisor on the job any injury sustained by any of his employees or any near miss or any hazardous / dangerous incident at his work site within the Refinery premises. Hiding of any accident or near miss would be viewed as serious misconduct.
- b) Arrange to provide FIRST AID immediately to the injured employee.
- c) Keep and maintain proper records of all such incidents in respect of his personnel/ worksite.
- d) Submit to the Engineer-In-Charge, a first information report as per prescribed Proforma within 4 hours of the incident.
- e) Arrange to immediately investigate the incident and furnish within 24 hours a written investigation report in prescribed Proforma to BPCL Engineer-In-Charge.

12. REQUIREMENT OF HOUSE KEEPING

Contractor must ensure highest standard of housekeeping in his area of work on a day-to-day basis. An unsatisfactory housekeeping will earn negative rating, which will attract penal actions like cancellation of registration / contract.

13. REQUIREMENT DURING SUBMISSION OF TENDER

Contractor must submit alongwith his tender :-

- a) Complete work injury records, per year, for the last three years.
- b) Total man-hours worked, per year, for the last three years.
- c) Safety assurance plan.

Quotation must clearly indicate the number of Supervisors and skilled or unskilled workers, which will be deployed for the job, from time to time during execution of the contract.

The above information will be taken into view during tender evaluation.

14. DISPLAY BOARDS AT SITE

Contractor must provide and maintain in his worksite :-

- Appropriate display board displaying information as per BPCL "Work Site Display Board" specification.
- b) Safety performance score board.

15. PARTICIPATION IN SAFETY ACTIVITIES

Contractor must attend all scheduled safety meetings as would be intimated to him by the Engineer-In-charge.

Contractor also must ensure that all his employees participate in safety promotional activities organized in the refinery.

16. NOTE

- Every person other than a BPCL employee or a casual visitor, entering in the refinery, would be governed by the above conditions.
- b) The term supervisor would mean any person who oversees the work of a group of workmen. All other persons would be considered as workmen.
- c) Violation of any of the above special conditions of safety would attract penal actions including termination of the contract/registration.
- d) Meticulous adherence to these requirements would be documented by the Engineer-In-Charge on conclusion of the work and placed in the dossier of the contractor. This performance would be given adequate weightage at the time of renewal of the registration.
- Any dispute arising out of these conditions shall be referred by the Engineer-In-Charge to the Head of the refinery Fire and Safety department.
- 17. All guidelines as mentioned in OISD Guidelines 207 shall be strictly complied with. Copy of the same is available with Fire & Safety Department.

ANNEXURE - I

MONTHLY GATE PASS RECOMMENDATION

(TEM	(TEMPORARY GATE PASS FOR CONTRACTOR'S EMPLOYEES)							
MON	TH :NAM	E OF CONTR	RACTO	۹ :				
WOR	K ORDER NO. :		co	NTRACT [DURATION	<u> </u>	DA	YMONTHS
NATU	IRE OF WORK :		,					
LABO	OUR LICENCE NO. / VALID	DITY PERIOD	KAM \	(. NO. OF	WORKER	S PERMIS	SIBLE :	****
WHE	THER USING OWN PF CO	DE / COMPA	NY PF	CODE?	OWN / C	OMPANY	IF OWN	CODE NO.
PROV	VIDENT FUND CHALLAN	S OF LAST	MONT	H ENCLO	SED : YE	S/NO		
WHE	THER USING OWN ESI C	ODE / COMP	ANY E	SI CODE?	OWNC	OMPANY	IF OWN	, CODE NO.
COP	Y OF ESIC CHALLANS	OF LAST MO	HTMC	ENCLOSE	:	YES	/NO	
SI. No.	Name	Designation (State the type of work	ESIC No.	PF No.		Certificate	Column to b	e signed by
	,	done viz. Supervisor/ fitter/rigger /unskilled helper etc.			8	(163,110)	Passed & Certificate issued (for Supervisors Only)	Certificate issued (for
					7 .			
	V 			·				
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,								
					**			
I CE	RTIFY THAT THE ABOV	E PARTICUL	ARS F	URNISHE	D BY ME	ARE TRI	JE.	
SIGN	IATURE & DATE OF CONT	RACTOR:			NAME	•		
ENG	INEER-IN-CHARGE							
(то	RECOMMEND THE NO.	OF CONTRA	CT LA	BOUR RE	QUIRED	FOR THE	WORK IS C	OK)
NAM	E :			SIGN	IATURE :_	**************************************		·····
IR D	EPARTMENT							
	CHECK QUALIFICATION O WHETHER MEDICAL ()-DATA A	RE AS REQ	UIRED AND
NAM	E:			SIGN	IATURE &	DATE		· · · · · · · · · · · · · · · · · · ·
CISF							_	
	(TO CHECK ALL CERTIFICATIONS AS ABOVE, HAVE BEEN MADE BEFORE ISSUE OF PASS. DOCUMENTS WILL BE FILED BY CISF)							
REF	REFINERY ENTRY PASS ISSUED FROM TO TO							
NIA FA	NAME . CICNATURE & DATE							

: 7:

ANNEXURE - II

CONTRACT NO. / DATE : DESCRIPTION OF JOB : CONTRACTOR :

BIO-DATA OF CONTRACTOR'S EMPLOYEES

NAME	:	
AGE	:	
TRADE	:	
RESIDENTIAL ADDRESS	:	24070
TEMPORARY	:	PHOTO
PERMANENT	:	
LANGUAGES KNOWN	:	

READ :

QUALIFICATION : TRAINING IN SAFETY :

HEALTH/ENVIRONMENT

QUALITY/TRADE

JOB EXPERIENCE :

DATE:

SPEAK

SIGNATURE:

WITNESS	NAME	SIGNATURE	ADDRESS
1			
2			

Enquiry No. -1000263024 E-tender-15821

PROFORMA OF BANK GUARANTEE

(On non-judicial paper of appropriate value)

FOR EARNEST MONEY

To Bharat Petroleum Corporation Ltd. P&CS Refineries Mumbai Refinery, Mahul MUMBAI 400074

MUMBAI 400074
Dear Sirs, M/s.
have taken tender for the supply of
for Bharat Petroleum Corporation Ltd.
The tender Conditions of Contract provide that the Bidder shall pay a sum of Rs(Rupees
)as earnest money / initial / full security deposit in the form therein mentioned. The form of payment of earnest money / security deposit includes guarantee executed by Schedule `A' Bank, undertaking full responsibility to indemnify Bharat Petroleum Corporation Ltd. in case of default.
The said have approached us and at their request and in consideration of the premises we having our office at have agreed to give such guarantee as hereinafter
mentioned. 1. We
hereby undertake and agree with you that if default shall be made by M/s
pay to you in such matter as to you may direct the said amount of Rupeesonly or
such portion thereof not exceeding the said sum as you may from time to time require. 2. You will have the full liberty without reference to us and without effecting this guarantee postpones for any time or from time to time the exercise of any of the powers and rights conferred on you under the
contract with the saidand to enforce or to for bear from endorsing any power of rights or by reason of time being given to

releasing us.	uid but for provision have the effect of
3. Your right to recover the said sum of	
)
Rs(Rupees from us in manner aforesaid will not be affected or s	suspended by reason of the fact that any
dispute or disputes have	,
been raised by the said M/s	and/or that any
dispute or disputes are pending	
before any officer, tribunal or court.	
4. The guarantee herein contained shall not be dete	rmined or affected by the liquidation or
winding up, dissolution or	, .
change of constitution or insolvency of the said	
but shall in all respects and	
all purposes be binding operative units payment of a	all money due to you in respect of such
liabilities is paid.	
5. Our liability under this guarantee is restricted to	
RupeesO	ır guarantees shall
remain in force until	unless a suit or
action to enforce a claim	
under	Guarantee is filed against us within
six months from	
	f expiry of guarantee) all our rights
under the said guarantee shall be	
forfeited and shall be relieved and discharged from a	
6. We have power to issue this guarantee in your far	vour under Memorandum and Articles of
Association and the	
undersigned has full power to do under the Power o	f Attorney dated
granted to him by the Bank.	
Yours faithfully	
	_ Bank by its Constituted Attorney
Signature of a person duly authorised to sign	
on habalf of the bank	
on behalf of the bank.	

The Declaration should be produced on Vendor's Letter Head.

Enquiry No. 1000263024 E-tender 15821

PROFORMA OF DECLARATION OF HOLIDAY LISTING

in the case of a Prophetary Conce	III.
submitting the accompanying Bid / partnership firm in which I am invol	e name of my Proprietary concern M/s which is Tender nor any other concern in which I am a proprietor nor in any lved as a Managing Partner have been placed on holiday list declared Limited or its Administrative Ministry or any other Indian Government as indicated below:
(Here given particulars of holiday li	isting and in absence thereof state "NIL").
In the case of a Partnership Firm	
nor any partner involved in the mar of any firm or concern have or has	, M/s submitting the accompanying Bid / Tende nagement of the said firm either in his individual capacity or as proprieto been placed on holiday list declared by Bharat Petroleum Corporation ry or any other Indian Government Public Sector Undertaking, except as
(Here given particulars of holiday li	isting and in absence thereof state "NIL").
In the case of Company	
	not been placed on any holiday list declared by Bharat Petroleum trative Ministry or any other Indian Government Public Sector below:
(Here given particulars of holiday li	isting and in absence thereof state "NIL").
	ion is found to be false in any particular, Bharat Petroleum Corporation ry, shall have the right to reject my / our bid, and, if the bid has resulted to be terminated.
Place:	Signature of the Bidder
Date:	Name of the Signatory

COMMERCIAL QUESTIONNAIRE

(To be uploaded within Techno-Commercial Bid)

Commercial Questionnaire

Project No.: CRFQ 1000263024 E-Tender 15821 Client: Bharat Petroleum Corporation Limited

Vendor Name: M/s		
Enquiry No		
Vendor's Offer Ref. No.:	 	
Tel No	 _	
Fax No		
Contact Person :		
E-Mail		

- 1. DULY SIGNED & STAMPED COPIES OF THIS "QUESTIONNAIRE", WITH ALL THE CLAUSES DULY CONFIRMED/ PRECISELY REPLIED TO BY THE VENDOR, SHALL BE ENCLOSED WITH EACH AND EVERY SET OF VENDOR'S UNPRICED QUOTATION.
 - 2. FAILURE ON THE PART OF VENDOR IN NOT RETURNING THIS DULY FILLED-UP "QUESTIONNAIRE WITH ALL THE SETS OF UNPRICED QUOTATION AND/OR SUBMITTING INCOMPLETE REPLIES MAY LEAD TO REJECTION OF VENDOR'S QUOTATION".

S.No	DESCRIPTION	VENDOR'S CONFIRMATION
1	Bid Validity: Bids shall remain valid for 120 days after the deadline for bid submission.	Confirmed / Not Confirmed refer deviation sheet
2	Delivery Period: Please confirm shortest delivery period from the date of Letter of Intent (LOI) or P.O. only.	Quoted delivery period: delivered at site from the date of LOI / FOI
3	Prices have been furnished as per "Format For Submitting Price" indicated in price schedule.	Furnished / Not furnished refer deviation sheet
4	All bidders must submit their price bids along with all the sheets in original. All sheets including any attachments etc. Must be signed and stamped on all the pages and the envelope must be sealed with adhesive on all the sides. Non compliance to this condition shall result in rejection of offer.	Noted & Confirmed

S.No	DESCRIPTION	VENDOR'S CONFIRMATION
5	Payment Terms: Supply portion: 100 % on receipt of the bundle & after due certification by the site in charge with 10 % PBG valid for full warranty period.	Noted & Confirmed
6	Specify Dispatch Point	Material shall be dispatched from : State:
7	Sales tax payable extra, Specify CST/ MVAT and the present rate applicable	CST:% against form C MVAT:%
8	Bidders to submit entire tender document duly signed & stamped on each page.	Submitted
9	Service tax: Bidders to quote service tax in terms of % as applicable current rate.	Applicable%
10	All deviations to Technical Specifications have been indicated on a separate deviation sheet. Any deviations indicated in bid elsewhere other than Deviation Sheet shall not be acceptable.	Confirmed
11	All deviations to Tender Commercial Conditions have been indicated on a separate deviation sheet.	Confirmed
12	Any additional terms and conditions not mentioned in deviations list shall not be acceptable.	Confirmed
13	Price bid and price implications (if any) shall indicate only prices. Any terms and conditions mentioned in price bid / price implications shall not be acceptable.	Confirmed
14	Whether any of the Directors of Vendor is a relative of any Director of BPCL or the vendor is a firm in which any Director of BPCL or his relative is a Partner or the vendor is a private company in which any director of BPCL is a member or Director.	YES / NO

S.No	DESCRIPTION	VENDOR'S CONFIRMATION
	Please confirm you have not been placed on black list or holiday list declared by Bharat Petroleum Corporation Limited.	Not black listed or put on holiday list.
15	Please confirm that you have filled in, signed and attached the enclosed "Proforma of Declaration of Black Listing / Holiday Listing" along with your unpriced offer.	Black listed or Put on holiday list as indicated in Declaration of Black Listing / Holiday Listing Furnished
16	Printed terms and conditions, if any, appearing in quotation, shall not be applicable in the event of order. In case of contradiction between the confirmations given above and terms & conditions mentioned elsewhere in the offer, the confirmation given herein above shall prevail.	Confirmed & Accepted

(Signature of Vendor with Company seal)

Name of the Authorised Signatory :

Designation:

DEVIATION FORM (TECHNICAL)

Enquiry /	CRFQ No.	: 1	L000263024 E-Tender 15821
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Name of vendor:

Stamp & Date

Schedule of Deviations in reference to BPCL SPECIFICATIONS

- 1. Vendor may give here a consolidated list of technical deviations for all sections of the SPECIFICATIONS, which for an appropriate offer is considered unavoidable by him.
- 2. Deviations mentioned elsewhere in the offer shall not be taken cognizance by the COMPANY and any such deviations if indicated elsewhere other than this form will render the offer non-responsive and shall liable to be rejected.
- Vendor shall state the reasons for the deviations in the `Remark' column. 3.
- All other clauses of the SPECIFICATIONS (not mentioned in this form) shall be 4. deemed to be fully complied by the vendor
- Only the deviations listed herein, in conjunction with the SPECIFICATIONS, shall 5. constitute the contract requirements for the award of job to the vendor.

Sr. No.	Page No.	Clause No.	Requirement of the BPCL SPECIFICATIONS	Deviations to the SPECIFICATIONS	Remarks
1	2	3	4	5	6

1	2	3	4	5	6

vendor

Signature of the authorized signatory	:
Name of the authorized signatory	:

DEVIATION FORM (COMMERCIAL)

Enquiry /	CRFQ No.	: 1000263024	E-Tender 15821
-----------	----------	--------------	-----------------------

Name of vendor:

Stamp & Date

Schedule of Deviations in reference to COMMERCIAL TERMS AND CONDITIONS

- 1. Vendor may give here a consolidated list of Commercial deviations for all sections of the tender document, which for an appropriate offer is considered unavoidable by him.
- 2. Deviations mentioned elsewhere in the offer shall not be taken cognizance by the COMPANY and any such deviations if indicated elsewhere other than this form will render the offer non-responsive and shall liable to be rejected.
- 3. Vendor shall state the reasons for the deviations in the `Remark' column.
- All other clauses of the COMMERCIAL TERMS AND CONDITIONS (not mentioned in this form) shall be deemed to be fully complied by the PCMS vendor
- Only the deviations listed herein, in conjunction with the COMMERCIAL TERMS
 AND CONDITIONS, shall constitute the contract requirements for the award of
 job to the vendor.

Sr. No.	Page No.	Clause No.	Commercial terms and conditions	Deviations	Remarks
1	2	3	4	5	6

		Vendor
Signature of the authorized signatory	:	
Name of the authorized signatory	:	



Energy Policy

We at BPCL Mumbai Refinery, are committed to continual improvement in Refinery Energy Performance and shall demonstrate Excellence in Energy Management System by:

- Complying with all applicable legal and other requirements.
- Ensuring availability of information & resources to achieve objectives and targets which will be reviewed periodically.
- Supporting purchase of Energy Efficient products and services, incorporating latest design for Energy Performance Improvement.

Induation 8/13

SS Sunderajan General Manager I/C Mumbai Refinery

June 9, 2016

Ref: TEC: POL: CON

Note to: SBU /Entity Heads

Subject: Clarification regarding award to MSE vendor in case tendered item is non-divisible

Currently as per the tender conditions, participating MSE vendors quoting price within the band of L1+15% are allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than an MSE. Such MSEs are placed order to supply at least 20% of total tendered value. In case of more than one such MSE who match the L1 price, the supply is shared proportionately (to tendered quantity).

In the case of tenders where the quantity is divisible, the above condition would hold good. However, in the case of tenders where the tendered quantity cannot be split due to non-divisive nature of job, the tender conditions need to be suitably modified before floating of the tender so that criteria for award is clearly brought out to avoid any disputes post evaluation and award of jobs.

It has been clarified by the office of the Development Commissioner (MSME), New Delhi, vide their letter reference F.No21 (6)/2015-MA dt. 21.04.2016 (Copy enclosed as annexure –I) that "in case of non-divisible tenders, an MSE quoting in the price band of L1+15% may be awarded for full/complete supply of tendered value, considering the spirit of policy for enhancing the government procurement from MSEs subject to bringing down of price to L1 by the concerned MSE".

We would like to further clarify that the word "may" should be treated as "shall" since the MSME department have clearly stated that the spirit of the policy is to be adhered to .

In case of more than one such MSEs are in the price band of L1 + 15%, then L1 MSE will be offered first and if matches the L1 price, MSE shall be allowed to supply and installation of total tendered quantity. If L1 MSE does not match L1 price, other MSEs falling in range of L1+15% band will be offered in order of L2 MSE, L3 MSE etc. until they match L1 price. No separate preference to be given to MSE owned by SC /ST entrepreneurs over MSE owned by general person.

5

In order to ensure compliance with the MSME order, the tender conditions should be suitably modified to incorporate the above clause in case of tenders involving non-divisible items due to such nature of job.

In other words price preference would be given to the MSE vendor over the Natural L1 who is a non-MSE vendor during the evaluation of the tender for award and TEC approval be obtained accordingly to ensure compliance of the MSME order.

K. SIVAKUMAR

ED (CORPORATE FINANCE)

CC: SBU / Entity Finance Heads



Quality, Environment, Health and Safety QEHS Policy

We at BPCL Mumbai Refinery, commit to consistently provide products & services that meet total customer satisfaction by demonstrating excellence in our Quality, Environment, Occupational Health & Safety (QEHS) performance surpassing our stakeholders' expectations.

To achieve the above, we do and will continue to:

- Recognize QEHS management as our core responsibility
- Comply with all applicable legislations and other requirements
- Drive continual improvement of all our processes

We shall communicate the QEHS Policy to public, our vendor community and all persons working for and on behalf of Mumbai Refinery to encourage their participation in this endeavour.

SS Sunderajan

General Manager I/C Mumbai Refinery To,

BPCL ESTIMATE

MUMBAI . India - 400038.

Ph:,Fax:.

Vendor Code:300648

REQUEST FOR QUOTATION

Collective RFQ Number/ Purchase Group

1000263024 / N10-INSTRUMENT ITEMS

Contact person/Telephone

SUBRAMANIAN K T/022-25533274

Fax : -

Email: subramaniankt@bharatpetroleum.in

Our ref.:

RFQ No/Date: 6000966342 / 17.08.2016

Quotation Due Date/Time: 27.09.2016/14:00:00

You are invited to quote online through BPCL E-Procurement website https://bpcleproc.in "On-Two-Bid-Basis" for above subject as per the enclosed Tender Documents.

VALIDITY: Your quotation shall be valid for period of 120 Days from the Quotation due date indicated above.

SUBMISSION OF TENDER ONLINE:

TWO BID BASIS :

1.UN-PRICED TECHNO COMMERCIAL BID.

Un-priced techno commercial bid shall comprise your technical details and confirmations to our tender specifications.

Commercial terms shall be clearly mentioned in this bid.

2.PRICED BID.

Priced bid shall contain price/s in the solicited format.

You shall submit / upload your Price bid along with all required documents, on or before the due date specified on BPCL E-Procurement website https://bpcleproc.in. maintained by M/s. E-Procurement Technologies Ltd.

For any assistance regarding online submission of bids on BPCL E-Procurement web site, between 1000 hrs to 1900 hrs. IST (Monday # friday) & 1000 hrs to 1530 hrs IST (Saturday), you may contact our following Helpdesk support nos. :

- A) MUMBAI REFINERY :
- 1. Mr. Nigam Mhatre on Tel : +91 22 2554 0717 Mobile 9768298601 or email : nigam@abcprocure.com
- 2. Mr. Mahendra Hole on Tel : +91 22 2554 0717 Mobile 9920038902 or email : mahendra@abcprocure.com
- B) ALL INDIA : +91 79 4001 6816/6848/6844

Page 1 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.

C) AHMEDABAD : +91 79 4001 6868

Hard copies of the bids shall not be submitted, unless specially asked for by BPCL.

DEVIATION :

You are requested to have all your queries clarified before bidding. Your offer shall be in line with tender requirements/ specifications. However, if you still have deviations from our RFQ and the attachments (specifications / scope of work / Drawings) etc. please indicate deviations in your offer in a separate attachment titled 'DEVIATIONS', appearing in Bid common forms, giving reference to RFQ clause no. Deviations appearing in separate attachment titled 'DEVIATIONS', appearing in Bid common forms, shall only be considered while evaluating the offer. In case there are no deviations, please submit "NIL DEVIATIONS".

Deviations mentioned elsewhere shall not be considered for evauation.

OPENING OF TENDERS:

Both unpriced techno-commercial and priced bid will be opened online which can be viewed by bidders online through our e-procurement website https://bpcl.eproc.in.

BPCL General Purchase Conditions, QEHS, Energy policy is enclosed.

BPCL reserves the right to cancel this tender without assigning any reasons.

 Item
 Material
 Qty
 Unit
 Unit Basic Rate

 Description
 Delivery date
 (in Figures)

 00010
 60.99.99.088.8
 1
 set.

 ER PROBE ASY.WITH PROBE ELEMNT API5LX65
 21.09.2016

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING FOR

PIPELINE INTERNAL CORROSION MONITORING

FOR 18 INCH DIAMETER PIPELINE

GRADE: API-5L- X-65

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION : 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE

Page 2 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 18 INCH PIPELINE: API 5L-X-65
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING: FLAR WELD, NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

Page 3 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.

To:M/s. BPCL ESTIMATE M	UMBAI - 400038 Ir	dia (300648	3)		
Item Material Description	Qt	,	it livery date	Unit Basic	
Description Delivery date (in Figures) D. TESTING AND APPLICABLE STANDARDS 1. TEST PRESSURE: 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE: ASME B 31.4 3. END CONNECTION: ASME B 16.25 4. DIMENSIONS: AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE: SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/QAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE					
Unit Basic Rate (In Words)	:				
Excise Duty %	: %	VAT% :	%	CST% :	%
Excise tariff no./Chapter	id :				
Packing & Forwarding Charg	ges : %	per unit OR		(INR)	per unit
Freight Charges	: %	per unit OR		(INR)	per unit
Third party Inspection cha	arges : %	per unit OR		(INR)	per unit
Octroi Charges(If applica	able) : %				
Other charges (if any)	: Please spec	ify separat	ely		
Page 4 of 74	Vendor Sign	& Stamp	For Bhara	at Petroleum Corpo	oration Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

Material / Services regd at :

M/s. BHARAT PETROLEUM CORPN. LTD

MUMBAI REFINERY

MAHUL,

MUMBAI - 400074

India

00020 60.99.99.088.8

1 set.

ER PROBE ASY.WITH PROBE ELEMNT API5LX65

21.09.2016

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING FOR

PIPELINE INTERNAL CORROSION MONITORING

FOR 18 INCH DIAMETER PIPELINE

GRADE: API-5L- X-65

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION: 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE
- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 18 INCH PIPELINE: API 5L-X-65
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT

Page 5 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.
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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

- D. TESTING AND APPLICABLE STANDARDS
- 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE
- 2. DESIGN CODE : ASME B 31.4
- 3. END CONNECTION : ASME B 16.25
- 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS
- E. PIPELINE DATA
- 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)
- 2. PRESSURE RATING: 3600 PSI
- 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING
- F. DOCUMENTATION
- 1. GA DRAWINGS
- 2. CATALOGUE/DATASHEETS OF ER PROBES
- 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL
- 4. MATERIAL TEST CERTIFICATES
- 5. TRANSMITTER CALIBRATION CERTIFICATE
- 6. WAKE FREQUENCY CALCULATIONS
- 7. WARRANTY CERTIFICATE FOR 2 YEARS
- 8. ITP/QAP

Page 6 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.	
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	Material Description		Qty	Unit Delivery da	Unit Basic Ra (in Figures)	
	9. FAT(FACTORY ACCE 10. TRANSMITTER ATE 11. AS BUILT DRAWIN	EX/CCOE CERTIF				
Unit B	asic Rate (In Words)	:				
Excise	Duty %	:	% VAT% :		% CST% :	%
Excise	tariff no./Chapter	id :				
Packing	g & Forwarding Charg	es :	% per un	it OR	(INR) pe	er unit
Freigh	t Charges	:	% per un	it OR	(INR) pe	er unit
Third ;	party Inspection cha	rges :	% per un	it OR	(INR) pe	er unit
Octroi	Charges(If applica	ble) :	%			
Other (charges (if any)	: Please	specify se	parately		
	M/s. BHARAT PETROLE MUMBAI REFINERY MAHUL, MUMBAI - 400074 India	JOH CORPIN. LIL				
00030	60.99.99.088.8 ER PROBE ASY.WITH I	PROBE ELEMNT A	1 .PI5LX65	set. 21.09.201	L6	
TRANSI PIPEL: FOR 18 GRADE	OBES ASSEMBLY WITH F MITTER AND ACCESS FI INE INTERNAL CORROSI 8 INCH DIAMETER PIPE : API-5L- X-65 LS AS PER SPECIFICAT ION: VARIOUS PUMPIN ER PROBES BASED ONI PROBE ELEMENT, PROF	TTING FOR ON MONITORING LINE TIONS ATTACHED G&PIGGING STN LINE CORROSION BE ASSEMBLY, T	S ALONGWITH	SYSTEM FOR	PIPELINES INCLUS	SIVE OF
	A. PROBE ELEMENT WI 1. PROBE TYPE : ELE 2. PROBE MOUNTING :	CTRICAL RESIS 2 INCH ACCE	SS SYSTEM		PE	
	1. PROBE TYPE : ELE	CTRICAL RESIS 2 INCH ACCE ON POSITION: POSITION: B PE: CYLINDRI	SS SYSTEM 12 O# CLOC OTTOM OF PI	CK POSITION PELINE TH VELOCITY	SHIELD	

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

MATERIAL GRADE

- A. 18 INCH PIPELINE: API 5L-X-65
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT: 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

Page 8 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.
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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit Unit Basic Rate Delivery date (in Figures) Description D. TESTING AND APPLICABLE STANDARDS 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE : ASME B 31.4 3. END CONNECTION : ASME B 16.25 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/QAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words) : _____ : _____ % VAT% : _____ % CST% : _____ Excise Duty % Excise tariff no./Chapter id : _____ Packing & Forwarding Charges : _____ % per unit OR _____ (INR) per unit Freight Charges _____ % per unit OR _____ (INR) per unit Third party Inspection charges : ______ % per unit OR _____ (INR) per unit Octroi Charges(If applicable): _____ % Other charges (if any) : Please specify separately Page 9 of 74 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

Material / Services regd at :

M/s. BHARAT PETROLEUM CORPN. LTD

MUMBAI REFINERY

MAHUL,

MUMBAI - 400074

India

00040 60.99.99.088.8

1 set.

ER PROBE ASY.WITH PROBE ELEMNT API5LX65

21.09.2016

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING FOR

PIPELINE INTERNAL CORROSION MONITORING

FOR 18 INCH DIAMETER PIPELINE

GRADE: API-5L- X-65

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION: 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE
- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 18 INCH PIPELINE: API 5L-X-65
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT

Page 10 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT: VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

- D. TESTING AND APPLICABLE STANDARDS
- 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE
- 2. DESIGN CODE : ASME B 31.4
- 3. END CONNECTION : ASME B 16.25
- 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS
- E. PIPELINE DATA
- 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)
- 2. PRESSURE RATING: 3600 PSI
- 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING
- F. DOCUMENTATION
- 1. GA DRAWINGS
- 2. CATALOGUE/DATASHEETS OF ER PROBES
- 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL
- 4. MATERIAL TEST CERTIFICATES
- 5. TRANSMITTER CALIBRATION CERTIFICATE
- 6. WAKE FREQUENCY CALCULATIONS
- 7. WARRANTY CERTIFICATE FOR 2 YEARS
- 8. ITP/QAP

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	Material Description		Qty	Unit Delivery da	Unit Basic Rate te (in Figures)	
	9. FAT(FACTORY ACCE 10. TRANSMITTER ATE 11. AS BUILT DRAWIN	X/CCOE CERTIF		RIED OUT LOCA	ATION WISE	
Unit Ba	asic Rate (In Words)	:				
Excise	Duty %	:	% VAT% :	%	CST% :	%
Excise	tariff no./Chapter	id :				
Packing	g & Forwarding Charg	es :	% per un	it OR	(INR) per u	nit
Freight	t Charges	:	% per un	it OR	(INR) per u	nit
Third ;	party Inspection cha	rges :	% per un	it OR	(INR) per u	nit
Octroi	Charges(If applica	ble) :	%			
Other (charges (if any)	: Please	specify se	parately		
	M/s. BHARAT PETROLE MUMBAI REFINERY MAHUL, MUMBAI - 400074 India	OM CORPN. LTD				
	60.99.99.089.8 ER PROBE ASY.WITH F	DODE ELEMIN A	1	set.	6	
TRANSI FOR P	OBES ASSEMBLY WITH P MITTER AND ACCESS FI IPELINE INTERNAL COR 6 INCH DIAMETER PIPE : API-5L- X-60	ROBE ELEMENT TTING ROSION MONITON LINE				
GRADE		G&PIGGING STNS INE CORROSION E ASSEMBLY, TO TH ASSEMBLY CTRICAL RESIST 2 INCH ACCE ON POSITION: POSITION: POSITION:	MONITORING RANSMITTER TANCE , RET SS SYSTEM 12 O# CLOC OTTOM OF PI CAL TYPE WI	SYSTEM FOR AND ACCESS IS TRIEVABLE TYPES TO SETTION TO SET THE SET OF THE SET	PIPELINES INCLUSIVE FITTING PE SHIELD	OF

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

MATERIAL GRADE

- A. 16 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT: 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE: 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

Page 13 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.
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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit Unit Basic Rate Delivery date (in Figures) Description D. TESTING AND APPLICABLE STANDARDS 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE : ASME B 31.4 3. END CONNECTION : ASME B 16.25 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/QAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words) : _____ : _____ % VAT% : _____ % CST% : _____ Excise Duty % Excise tariff no./Chapter id : _____ Packing & Forwarding Charges : _____ % per unit OR _____ (INR) per unit Freight Charges _____ % per unit OR _____ (INR) per unit Third party Inspection charges : ______ % per unit OR _____ (INR) per unit Octroi Charges(If applicable): _____ % Other charges (if any) : Please specify separately Page 14 of 74 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

Material / Services regd at :

M/s. BHARAT PETROLEUM CORPN. LTD

MUMBAI REFINERY

MAHUL,

MUMBAI - 400074

India

00060 60.99.99.089.8

set.

ER PROBE ASY.WITH PROBE ELEMNT API5L X60

21.09.2016

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING

FOR PIPELINE INTERNAL CORROSION MONITORING

FOR 16 INCH DIAMETER PIPELINE

GRADE: API-5L- X-60

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION: 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE
- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 16 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT: VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

- D. TESTING AND APPLICABLE STANDARDS
- 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE
- 2. DESIGN CODE : ASME B 31.4
- 3. END CONNECTION : ASME B 16.25
- 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS
- E. PIPELINE DATA
- 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)
- 2. PRESSURE RATING: 3600 PSI
- 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING
- F. DOCUMENTATION
- 1. GA DRAWINGS
- 2. CATALOGUE/DATASHEETS OF ER PROBES
- 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL
- 4. MATERIAL TEST CERTIFICATES
- 5. TRANSMITTER CALIBRATION CERTIFICATE
- 6. WAKE FREQUENCY CALCULATIONS
- 7. WARRANTY CERTIFICATE FOR 2 YEARS
- 8. ITP/QAP

Page 16 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.

Item	Material Description		Qty	Unit Deli		Unit Basic (in Figur	
	9. FAT(FACTORY ACCI 10. TRANSMITTER ATI 11. AS BUILT DRAWIN	EX/CCOE CERTIFI		RRIED OU	JT LOCATIO	ON WISE	
Unit Ba	asic Rate (In Words)	:					
Excise	Duty %	:	_ % VAT%	:	%	CST% :	%
Excise	tariff no./Chapter	id :					
Packing	g & Forwarding Charg	res :	_ % per u	nit OR		(INR)	per unit
Freight	t Charges	:	_ % per u	nit OR		(INR)	per unit
Third p	party Inspection cha	rges :	_ % per u	nit OR		(INR)	per unit
Octroi	Charges(If applica	ble) :	_ %				
Other o	charges (if any)	: Please	specify s	eparate	ly		
	M/s. BHARAT PETROLI MUMBAI REFINERY MAHUL, MUMBAI - 400074 India	JOH CORFN. LID					
	60.99.99.089.8 ER PROBE ASY.WITH 1	PROBE ELEMNT AP	1 I5L X60	set 21.			
TRANSM FOR PI FOR 16 GRADE:	DBES ASSEMBLY WITH EMITTER AND ACCESS FIFELINE INTERNAL CORES FOR INCH DIAMETER PIPE API-5L-X-60 LS AS PER SPECIFICATE ON: VARIOUS PUMPING PROBE ELEMENT, PROBE ELEMENT, PROBE TYPE: ELEMENT WITH PROBE TYPE: ELEMENT WITH PROBE INSTALLATION.	TTING ROSION MONITOR: LINE CIONS ATTACHED G&PIGGING STNS LINE CORROSION BE ASSEMBLY, TR LITH ASSEMBLY ECTRICAL RESIST 1 2 INCH ACCES ION POSITION : BE POSITION : BO	ALONGWIT MONITORIN ANSMITTEN ANCE , RI S SYSTEM 12 O# CLO	IG SYSTE R AND AC TRIEVAE OCK POSI PIPELINE	CM FOR PIP CCESS FITT BLE TYPE TION	ΓING	LUSIVE OF
	6. PROBE ELEMENT MA	ATERIAL : EQUIV	ALENT TO	THE APP	PLICABLE I	PIPELINE	
	Page 17 of 74	Vendo	or Sign & Stam	р	For Bhara	at Petroleum Corpo	oration Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

MATERIAL GRADE

- A. 16 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT: 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE: 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit Unit Basic Rate Delivery date (in Figures) Description D. TESTING AND APPLICABLE STANDARDS 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE : ASME B 31.4 3. END CONNECTION : ASME B 16.25 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/QAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words) : _____ : _____ % VAT% : _____ % CST% : _____ Excise Duty % Excise tariff no./Chapter id : _____ Packing & Forwarding Charges : _____ % per unit OR _____ (INR) per unit Freight Charges _____ % per unit OR _____ (INR) per unit Third party Inspection charges : ______ % per unit OR _____ (INR) per unit Octroi Charges(If applicable): _____ % Other charges (if any) : Please specify separately Page 19 of 74 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

Material / Services regd at :

M/s. BHARAT PETROLEUM CORPN. LTD

MUMBAI REFINERY

MAHUL,

MUMBAI - 400074

India

00080 60.99.99.089.8

l set.

ER PROBE ASY.WITH PROBE ELEMNT API5L X60 21.09.2016

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING

FOR PIPELINE INTERNAL CORROSION MONITORING

FOR 16 INCH DIAMETER PIPELINE

GRADE: API-5L- X-60

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION : 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE
- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 16 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

- D. TESTING AND APPLICABLE STANDARDS
- 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE
- 2. DESIGN CODE : ASME B 31.4
- 3. END CONNECTION : ASME B 16.25
- 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS
- E. PIPELINE DATA
- 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)
- 2. PRESSURE RATING: 3600 PSI
- 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING
- F. DOCUMENTATION
- 1. GA DRAWINGS
- 2. CATALOGUE/DATASHEETS OF ER PROBES
- 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL
- 4. MATERIAL TEST CERTIFICATES
- 5. TRANSMITTER CALIBRATION CERTIFICATE
- 6. WAKE FREQUENCY CALCULATIONS
- 7. WARRANTY CERTIFICATE FOR 2 YEARS
- 8. ITP/QAP

Page 21 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.

9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words): Excise Duty %: Excise Duty %: Excise tariff no./Chapter id: Excise Duty % Excise Turice Excise Duty % Excise Turice E	Item	Material Description		Qty	Uni Del		Unit Basic (in Figur	
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Packing & Forwarding Charges : % per unit OR (INR) per unit Freight Charges : % per unit OR (INR) per unit Third party Inspection charges : % per unit OR (INR) per unit Third party Inspection charges : % per unit OR (INR) per unit Octroi Charges(If applicable) : % Other charges (if any) : Please specify separately Material / Services regd at : M/s. BHARAT PETROLEUM CORPN. LTD MUMBAI REFINERY MAHUL, MUMBAI - 400074 India O0090 60.99.99.089.8	Unit Ba	asic Rate (In Words)	:		 			
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Other charges (if any) : Please specify separately Material / Services regd at :	Third p	party Inspection cha	arges :	_ % per	unit OR		(INR)	per unit
Material / Services regd at : M/s. BHARAT PETROLEUM CORPN. LTD MUMBAI REFINERY MAHUL, MUMBAI - 400074 India 00090 60.99.99.089.8 1 set. ER PROBE ASY.WITH PROBE ELEMNT API5L X60 21.09.2016 ER PROBES ASSEMBLY WITH PROBE ELEMENT TRANSMITTER AND ACCESS FITTING FOR PIPELINE INTERNAL CORROSION MONITORING FOR 16 INCH DIAMETER PIPELINE GRADE: API-5L- X-60 DETAILS AS PER SPECIFICATIONS ATTACHED LOCATION: VARIOUS PUMPINGAPIGGING STNS ALONGWITH BPCL PIPELINE ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING A. PROBE ELEMENT WITH ASSEMBLY 1. PROBE TYPE: ELECTRICAL RESISTANCE, RETRIEVABLE TYPE 2. PROBE MOUNTING: 2 INCH ACCESS SYSTEM 3. PROBE INSTALLATION POSITION: 12 0# CLOCK POSITION 4. PROBE MONITORING POSITION: BOTTOM OF PIPELINE 5. PROBE ELEMENT TYPE: CYLINDRICAL TYPE WITH VELOCITY SHIELD	Octroi	Charges(If applica	able) :	_ %				
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TRANSMITTER AND ACCESS FITTING FOR PIPELINE INTERNAL CORROSION MONITORING FOR 16 INCH DIAMETER PIPELINE GRADE: API-5L- X-60 DETAILS AS PER SPECIFICATIONS ATTACHED LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING A. PROBE ELEMENT WITH ASSEMBLY 1. PROBE TYPE: ELECTRICAL RESISTANCE, RETRIEVABLE TYPE 2. PROBE MOUNTING: 2 INCH ACCESS SYSTEM 3. PROBE INSTALLATION POSITION: 12 O# CLOCK POSITION 4. PROBE MONITORING POSITION: BOTTOM OF PIPELINE 5. PROBE ELEMENT TYPE: CYLINDRICAL TYPE WITH VELOCITY SHIELD		60.99.99.089.8	PROBE ELEMNT AP	_				
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Page 22 of 74 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.								oration Ltd

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

MATERIAL GRADE

- A. 16 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT: 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit Unit Basic Rate Delivery date (in Figures) Description D. TESTING AND APPLICABLE STANDARDS 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE : ASME B 31.4 3. END CONNECTION : ASME B 16.25 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/QAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words) : _____ : _____ % VAT% : _____ % CST% : _____ Excise Duty % Excise tariff no./Chapter id : _____ Packing & Forwarding Charges : _____ % per unit OR _____ (INR) per unit Freight Charges _____ % per unit OR _____ (INR) per unit Third party Inspection charges : ______ % per unit OR _____ (INR) per unit Octroi Charges(If applicable): _____ % Other charges (if any) : Please specify separately Page 24 of 74 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

Material / Services regd at :

M/s. BHARAT PETROLEUM CORPN. LTD

MUMBAI REFINERY

MAHUL,

MUMBAI - 400074

India

00100 60.99.99.089.8

1 set.

ER PROBE ASY.WITH PROBE ELEMNT API5L X60 21.09.2016

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING

FOR PIPELINE INTERNAL CORROSION MONITORING

FOR 16 INCH DIAMETER PIPELINE

GRADE: API-5L- X-60

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION: 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE
- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 16 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT

Page 25 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.
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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT: VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

- D. TESTING AND APPLICABLE STANDARDS
- 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE
- 2. DESIGN CODE : ASME B 31.4
- 3. END CONNECTION : ASME B 16.25
- 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS
- E. PIPELINE DATA
- 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)
- 2. PRESSURE RATING: 3600 PSI
- 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING
- F. DOCUMENTATION
- 1. GA DRAWINGS
- 2. CATALOGUE/DATASHEETS OF ER PROBES
- 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL
- 4. MATERIAL TEST CERTIFICATES
- 5. TRANSMITTER CALIBRATION CERTIFICATE
- 6. WAKE FREQUENCY CALCULATIONS
- 7. WARRANTY CERTIFICATE FOR 2 YEARS
- 8. ITP/QAP

Page 26 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.

Item	Material Description		Qty	Unit Delivery date	Unit Basic Rate (in Figures)
	9. FAT(FACTORY ACCE 10. TRANSMITTER ATE 11. AS BUILT DRAWIN	X/CCOE CERTI	FICATION	RIED OUT LOCAT	TION WISE
Unit Ba	asic Rate (In Words)	:			
Excise	Duty %	:	% VAT% :	%	CST% : %
Excise	tariff no./Chapter	id :			
Packing	g & Forwarding Charg	es :	% per un	it OR	(INR) per unit
Freight	t Charges	:	% per un	it OR	(INR) per unit
Third p	party Inspection cha	rges :	% per un	it OR	(INR) per unit
Octroi	Charges(If applica	ble) :	%		
Other o	charges (if any)	: Please	specify se	parately	
	M/s. BHARAT PETROLE MUMBAI REFINERY MAHUL, MUMBAI - 400074 India				
	60.99.99.090.8 ER PROBE ASY.WITH E		1 PI5L X 60	set. 21.09.2016	
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DETAII LOCATI		G&PIGGING STN LINE CORROSION	IS ALONGWITH N MONITORING	SYSTEM FOR P	IPELINES INCLUSIVE OF
	A. PROBE ELEMENT WI 1. PROBE TYPE : ELE 2. PROBE MOUNTING : 3. PROBE INSTALLATI 4. PROBE MONITORING 5. PROBE ELEMENT TY 6. PROBE ELEMENT MA	CTRICAL RESIST 2 INCH ACCION POSITION : FOR POSITIO	ESS SYSTEM : 12 O# CLOO BOTTOM OF PI ICAL TYPE WI	CK POSITION PELINE TH VELOCITY S	HIELD
	O. FRODE EDEMENT MA	1111(1111 - 100)	LAMPRIAT TO 1	IIE AFFIICADIE	PIPELLINE

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

MATERIAL GRADE

- A. 14 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT: 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

Page 28 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.	
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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit Unit Basic Rate Delivery date (in Figures) Description D. TESTING AND APPLICABLE STANDARDS 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE : ASME B 31.4 3. END CONNECTION : ASME B 16.25 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/QAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words) : _____ : _____ % VAT% : _____ % CST% : _____ Excise Duty % Excise tariff no./Chapter id : _____ Packing & Forwarding Charges : _____ % per unit OR _____ (INR) per unit Freight Charges _____ % per unit OR _____ (INR) per unit Third party Inspection charges : ______ % per unit OR _____ (INR) per unit Octroi Charges(If applicable): _____ % Other charges (if any) : Please specify separately Page 29 of 74 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

Material / Services regd at :

M/s. BHARAT PETROLEUM CORPN. LTD

MUMBAI REFINERY

MAHUL,

MUMBAI - 400074

India

00120 60.99.99.090.8

1 set.

ER PROBE ASY.WITH PROB ELEMNT API5L X 60 21.09.2016

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING FOR PIPELINE

INTERNAL CORROSION MONITORING

FOR 14 INCH DIAMETER PIPELINE

GRADE: API-5L- X-60

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION: 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE
- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 14 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

- D. TESTING AND APPLICABLE STANDARDS
- 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE
- 2. DESIGN CODE : ASME B 31.4
- 3. END CONNECTION : ASME B 16.25
- 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS
- E. PIPELINE DATA
- 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)
- 2. PRESSURE RATING: 3600 PSI
- 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING
- F. DOCUMENTATION
- 1. GA DRAWINGS
- 2. CATALOGUE/DATASHEETS OF ER PROBES
- 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL
- 4. MATERIAL TEST CERTIFICATES
- 5. TRANSMITTER CALIBRATION CERTIFICATE
- 6. WAKE FREQUENCY CALCULATIONS
- 7. WARRANTY CERTIFICATE FOR 2 YEARS
- 8. ITP/QAP

Page 31 of 74	Vendor Sign & Stamp	For Bharat Petroleum Corporation Ltd.

9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE II. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE DIT BASIC RATE (IN WORDS): Excise Duty %: Excise Duty %: Excise tariff no./Chapter id: Packing & Forwarding Charges: % per unit OR (Freight Charges: % per unit OR (Freight Charges: % per unit OR (Cotroi Charges(If applicable): % Other charges (if any): Please specify separately Material / Services read at: M/s. BHARAT PETROLEUM CORPN. LTD MUMBAI REFINERY MAHUL, MUMBAI - 400074 India 00130 60.99.99.090.8 ER PROBE ASY.WITH PROB ELEMENT API5L X 60 21.09.2016 ER PROBES ASSEMBLY WITH PROBE ELEMENT TRANSMITTER AND ACCESS FITTING FOR PIPELINE INTERNAL CORROSION MONITORING FOR 14 INCH DIAMETER PIPELINE GRADE: API-5L- X-60 LOCATION: VARIOUS PUMPINGEPIGGING STMS ALONGWITH BPCL PIPELINE ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING A. PROBE ELEMENT WITH ASSEMBLY 1. PROBE TYPE: ELECTRICAL RESISTANCE, RETRIEVABLE TYPE 2. PROBE MOUNTING: 2 INCH ACCESS SYSTEM 3. PROBE INSTALLATION POSITION: 12 0 dt CLOCK POSITION 4. PROBE MOUNTING: 2 INCH ACCESS SYSTEM 5. PROBE ELEMENT TYPE: CYLINDRICAL TYPE WITH VELOCITY SHIELD 6. PROBE ELEMENT TYPE: CYLINDRICAL TYPE WITH VELOCITY SHIELD 6. PROBE ELEMENT TYPE: CYLINDRICAL TYPE WITH VELOCITY SHIELD 6. PROBE ELEMENT TYPE: CYLINDRICAL TYPE WITH VELOCITY SHIELD 6. PROBE ELEMENT TYPE: CYLINDRICAL TYPE WITH VELOCITY SHIELD 6. PROBE ELEMENT TYPE: CYLINDRICAL TYPE WITH VELOCITY SHIELD 6. PROBE ELEMENT TYPE: TO THE APPLICABLE PIPELINE 6. PROBE ELEMENT TYPE: TO THE APPLICABLE P		laterial escriptio	n		Qty	Un De	it livery date		t Basic n Figure		
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Excise Duty % : % VAT% : % CST% : Excise tariff no./Chapter id :	1.	I. AS B	UILI DRAWIN	G OF THE ENTI	IRE JOB C.	AKKIED (OUI LOCAII	ON WIS	뇬		
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Packing & Forwarding Charges : % per unit OR (Freight Charges : % per unit OR (Third party Inspection charges: % per unit OR (Octroi Charges(If applicable): % provided for the charges (if any)	טע	icy o		•	% VAI	•		CDI	•		·
Freight Charges : % per unit OR (Third party Inspection charges : % per unit OR (Octroi Charges(If applicable) : % Other charges (if any) : Please specify separately Material / Services regd at : M/s. BHARAT PETROLEUM CORPN. LTD MUMBAI REFINERY MAHUL, MUMBAI - 400074 India 00130 60.99.99.090.8 1 set. ER PROBE ASY.WITH PROBE ELEMENT API5L X 60 21.09.2016 ER PROBES ASSEMBLY WITH PROBE ELEMENT TRANSMITTER AND ACCESS FITTING FOR PIPELINE INTERNAL CORROSION MONITORING FOR 14 INCH DIAMETER PIPELINE GRADE: API-5L- X-60 DETAILS AS PER SPECIFICATIONS ATTACHED LOCATION: VARIOUS PUMPING&PIGGING SINS ALONGWITH BPCL PIPELINE ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING A. PROBE ELEMENT WITH ASSEMBLY 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE 2. PROBE MOUNTING: 2 INCH ACCESS SYSTEM 3. PROBE INSTALLATION POSITION : 12 0# CLOCK POSITION 4. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD	ta	ariff n	o./Chapter	id :							
Third party Inspection charges: % per unit OR (Octroi Charges(If applicable): % Other charges (if any) : Please specify separately Material / Services regd at :	8	k Forwa	rding Charg	es :	% per	unit OR	<u> </u>		(INR)	per	unit
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Page 32 of 74 Vendor Sign & Stamp For Bharat Petroleun	Р	Page 32 of	74	Ver	ndor Sign & Sta	amp	For Bhar	at Petrole	um Corpo	ration	Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

MATERIAL GRADE

- A. 14 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT: 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit Unit Basic Rate Delivery date (in Figures) Description D. TESTING AND APPLICABLE STANDARDS 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE : ASME B 31.4 3. END CONNECTION : ASME B 16.25 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/QAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words) : _____ : _____ % VAT% : _____ % CST% : _____ Excise Duty % Excise tariff no./Chapter id : _____ Packing & Forwarding Charges : _____ % per unit OR _____ (INR) per unit Freight Charges _____ % per unit OR _____ (INR) per unit Third party Inspection charges : ______ % per unit OR _____ (INR) per unit Octroi Charges(If applicable): _____ % Other charges (if any) : Please specify separately Page 34 of 74 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

Material / Services regd at :

M/s. BHARAT PETROLEUM CORPN. LTD

MUMBAI REFINERY

MAHUL,

MUMBAI - 400074

India

00140 60.99.99.090.8

1 set.

ER PROBE ASY.WITH PROB ELEMNT API5L X 60 21.09.2016

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING FOR PIPELINE

INTERNAL CORROSION MONITORING

FOR 14 INCH DIAMETER PIPELINE

GRADE: API-5L- X-60

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION: 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE
- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 14 INCH PIPELINE: API 5L-X-60
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT: VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

- D. TESTING AND APPLICABLE STANDARDS
- 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE
- 2. DESIGN CODE : ASME B 31.4
- 3. END CONNECTION : ASME B 16.25
- 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS
- E. PIPELINE DATA
- 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)
- 2. PRESSURE RATING: 3600 PSI
- 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING
- F. DOCUMENTATION
- 1. GA DRAWINGS
- 2. CATALOGUE/DATASHEETS OF ER PROBES
- 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL
- 4. MATERIAL TEST CERTIFICATES
- 5. TRANSMITTER CALIBRATION CERTIFICATE
- 6. WAKE FREQUENCY CALCULATIONS
- 7. WARRANTY CERTIFICATE FOR 2 YEARS
- 8. ITP/QAP

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	Material Description		Qty	Unit Delivery date	Unit Basic Rate (in Figures)
	9. FAT(FACTORY ACCE 10. TRANSMITTER ATE 11. AS BUILT DRAWIN	X/CCOE CERTIFI		•	
Unit B	asic Rate (In Words)	:			
Excise	Duty %	:	_ % VAT% :	%	CST% : %
Excise	tariff no./Chapter	id :			
Packin	g & Forwarding Charg	es :	_ % per un	nit OR	(INR) per unit
Freigh	t Charges	:	_ % per un	nit OR	(INR) per unit
Third	party Inspection cha	rges :	_ % per ur	nit OR	(INR) per unit
Octroi	Charges(If applica	ble) :	_ %		
Other	charges (if any)	: Please	specify se	eparately	
	MAHUL, MUMBAI - 400074 India				
	60.99.99.091.8		1	set.	
00150	ER PROBE ASY.WITH F	ROB ELEMNT API	5L X 56	21.09.2016	
ER PR TRANS CORRO GRADE DETAI	OBES ASSEMBLY WITH P MITTER AND ACCESS FI SION MONITORING FOR : API-5L- X-56 LS AS PER SPECIFICAT ION: VARIOUS PUMPIN	ROBE ELEMENT TTING FOR PIPE 8 INCH DIAMETE IONS ATTACHED G&PIGGING STNS	LINE INTER R PIPELINE ALONGWITE MONITORING	RNAL E H BPCL PIPELINE G SYSTEM FOR PIE	PELINES INCLUSIVE OF
ER PR TRANS CORRO GRADE DETAI	OBES ASSEMBLY WITH P MITTER AND ACCESS FI SION MONITORING FOR : API-5L- X-56 LS AS PER SPECIFICAT ION: VARIOUS PUMPIN ER PROBES BASED ONI	ROBE ELEMENT TTING FOR PIPE 8 INCH DIAMETE 10NS ATTACHED G&PIGGING STNS LINE CORROSION E ASSEMBLY, TH TH ASSEMBLY CTRICAL RESIST 2 INCH ACCES ON POSITION: POSITION: PE: CYLINDRIC TERIAL: EQUIV	LINE INTER R PIPELINE ALONGWITE MONITORING ANSMITTER CANCE , RET S SYSTEM 12 O# CLOG	RNAL BPCL PIPELINE SYSTEM FOR PIE AND ACCESS FITT FRIEVABLE TYPE CK POSITION IPELINE ITH VELOCITY SHI	TING

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

- A. 8 INCH PIPELINE: API 5L X 56
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT: 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING: ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3
- C. ACCESS FITTING
- 1. ACCESS FITTING SIZE: 2 INCH
- 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3
- 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105
- 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER
- 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE
- 6. MOUNTING: FLAR WELD, NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE.
- 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER
- 8. SPECIFICATION: AS PER NACE MR0175

ACCESS FITTING ASSEMBLY SHALL BE SUPPLIED WITH ALL THE NECESSARY PACKING GASKETS, SEALING NUTS ETC SUITABLE FOR HIGH TEMPERATURE AND HIGH PRESSURE RATING AS PER SPECIFICATIONS

D. TESTING AND APPLICABLE STANDARDS

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	i	

To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Unit Material Qty Unit Basic Rate Delivery date (in Figures) Description 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE : ASME B 31.4 3. END CONNECTION : ASME B 16.25 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/OAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words) : _____ : _____ % VAT% : _____ % CST% : _____ % Excise Duty % Excise tariff no./Chapter id : _____ Packing & Forwarding Charges : _____ % per unit OR _____ (INR) per unit Freight Charges _____ % per unit OR _____ (INR) per unit Third party Inspection charges : ___ _____ % per unit OR _____ (INR) per unit Octroi Charges(If applicable): _____ % Other charges (if any) : Please specify separately Material / Services read at : M/s. BHARAT PETROLEUM CORPN. LTD MUMBAI REFINERY MAHUL, MUMBAI - 400074 India Page 39 of 74 Vendor Sign & Stamp For Bharat Petroleum Corporation Ltd.

Item	Material Description	Qty	Unit Delivery date	Unit Basic Rate (in Figures)
00160	60.99.99.091.8	1	set.	
	ER PROBE ASY.WITH PROB ELEMN	r API5L X 56	21.09.2016	

ER PROBES ASSEMBLY WITH PROBE ELEMENT

TRANSMITTER AND ACCESS FITTING FOR PIPELINE INTERNAL

CORROSION MONITORING FOR 8 INCH DIAMETER PIPELINE

GRADE: API-5L- X-56

DETAILS AS PER SPECIFICATIONS ATTACHED

LOCATION: VARIOUS PUMPING&PIGGING STNS ALONGWITH BPCL PIPELINE

ER PROBES BASED ONLINE CORROSION MONITORING SYSTEM FOR PIPELINES INCLUSIVE OF PROBE ELEMENT, PROBE ASSEMBLY, TRANSMITTER AND ACCESS FITTING

- A. PROBE ELEMENT WITH ASSEMBLY
- 1. PROBE TYPE : ELECTRICAL RESISTANCE , RETRIEVABLE TYPE
- 2. PROBE MOUNTING : 2 INCH ACCESS SYSTEM
- 3. PROBE INSTALLATION POSITION: 12 O# CLOCK POSITION
- 4. PROBE MONITORING POSITION : BOTTOM OF PIPELINE
- 5. PROBE ELEMENT TYPE : CYLINDRICAL TYPE WITH VELOCITY SHIELD
- 6. PROBE ELEMENT MATERIAL : EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE
- A. 8 INCH PIPELINE: API 5L X 56
- 7. PROBE ELEMENT SEAL MATERIAL: WELDED
- 8. PROBE FILL MATERIAL: CERAMIC
- 9. PROBE ELEMENT LENGTH: VENDOR TO ADVICE AS THE PROBE SHALL EXTEND TILL BOTTOM OF INTERNAL WALL OF PIPELINE
- 10. PROBE THICKNESS: 20 MILLS (10 MILLS USEFUL PROBE LIFE)
- 11. PROBE ADAPTER: CONNECTOR WITH SHROUDED PINS REQUIRED TO MAKE THE CABLE CONNECTION TO THE PROBE
- B. TRANSMITTER
- 1. TYPE : 2 WIRE
- 2. INPUT SOURCE : ER PROBE
- 3. OUTPUT (SWITCH SELECTABLE) : CORROSION RATE IN MPY OR MICRO MPY
- 4. OUTPUT RESOLUTION : +/- 0.1MPY/0.01MIL
- 5. OUTPUT : 4 20mA LINEAR
- 6. CABLE LEAD: MINIMUM 5 FEET (LENGTH TO BE ALTERED AS PER SITE REQUIREMENT) FOR CONNECTION WITH PROBE ASSEMBLY
- 7. POWER SUPPLY : 24VDC
- 8. LOCATION & MOUNTING : ON FIELD, NEAR PROBE ON A MS STAND WITH BRACKET AND CANOPY INCLUDING NECESSARY GROUTING FOR A FIRM SUPPORT
- 9. AMBIENT TEMPERATURE : 7 DEGREE TO 48 DEGREE CENTIGRADE
- 10. COMPLAINCE : CE, ATEX & CCOE CERTIFICATE
- 11. ENCLOSURE : IP 65
- 12. DIMENSIONS : VENDER TO SPECIFY
- 13. WEIGHT : VENDER TO SPECIFY
- 14. HAZARDOUS AREA CLASSIFICATION : ZONE-1 , GAS GROUP IIA, IIB & TEMPERATURE GRADE T3

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To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit **Unit Basic Rate** Delivery date (in Figures) Description C. ACCESS FITTING 1. ACCESS FITTING SIZE: 2 INCH 2. ACCESS FITTING TYPE: FLAR WELD (NON TEE) AS PER ASME B 31.3 3. ACCESS FITTING BODY MATERIAL : AS PER ASTM A 105 4. PLUG: HOLLOW PLUG ASSEMBLY IN STAINLESS STEEL (AISI316) WITH HEAVY DUTY CS COVER 5. TEMPERATURE RATING : (-)26 DEGREE CENTIGRADE TO (+) 204 DEGREE CENTIGRADE 6. MOUNTING : FLAR WELD , NON TEE AND TO BE WELDED DIRECTLY ON PIPELINE. 7. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING. SUITABLE LOCATION TO BE PROPOSED BY THE BIDDER 8. SPECIFICATION: AS PER NACE MR0175 ACCESS FITTING ASSEMBLY SHALL BE SUPPLIED WITH ALL THE NECESSARY PACKING GASKETS, SEALING NUTS ETC SUITABLE FOR HIGH TEMPERATURE AND HIGH PRESSURE RATING AS PER SPECIFICATIONS D. TESTING AND APPLICABLE STANDARDS 1. TEST PRESSURE : 1.5 TIMES DESIGN PRESSURE 2. DESIGN CODE : ASME B 31.4 3. END CONNECTION : ASME B 16.25 4. DIMENSIONS : AS PER MANUFACTURERS STANDARDS E. PIPELINE DATA 1. SERVICE : SKO(SUPERIOR KEROSINE OIL), AND 2 GRADES OF MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL) 2. PRESSURE RATING: 3600 PSI 3. MOUNTING LOCATION: NON PIGGABLE LOCATION OF STATION PIPING F. DOCUMENTATION 1. GA DRAWINGS 2. CATALOGUE/DATASHEETS OF ER PROBES 3. INSTALLATION, OPERATION & MAINTENANCE MANUAL 4. MATERIAL TEST CERTIFICATES 5. TRANSMITTER CALIBRATION CERTIFICATE 6. WAKE FREQUENCY CALCULATIONS 7. WARRANTY CERTIFICATE FOR 2 YEARS 8. ITP/QAP 9. FAT(FACTORY ACCEPTANCE TEST) 10. TRANSMITTER ATEX/CCOE CERTIFICATION 11. AS BUILT DRAWING OF THE ENTIRE JOB CARRIED OUT LOCATION WISE Unit Basic Rate (In Words) : _ Excise Duty % : _____ % VAT% : ____ % CST% : __

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For Bharat Petroleum Corporation Ltd.

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To:M/	s. BPCL ESTIMATE N	IUMBAI - 400038	India (300	0648)	
Item	Material Description		Qty	Unit Delivery date	Unit Basic Rate (in Figures)
Excise	tariff no./Chapter	id :			
Packin	g & Forwarding Char	ges :	% per unit	OR	(INR) per unit
Freigh	t Charges	:	% per unit	OR	(INR) per unit
Third :	party Inspection ch	arges :	% per unit	OR	(INR) per unit
Octroi	Charges(If applic	able) :	%		
Other	charges (if any)	: Please s	pecify sepa	rately	
Mater	ial / Services regd M/s. BHARAT PETROL MUMBAI REFINERY MAHUL, MUMBAI - 400074 India INSTALLATION & COM	EUM CORPN. LTD			
Mater	ial / Services regd M/s. MMPL, Refiner Bharat Petroleum C BPCL, Refinery MUMBAI - 400074 India	У	ed		
The i 10	tem 00170 covers th 89002559 PIPING MISC HOT TA		16	LS sum)	
	Carry out hot tapp hot tap fittings. and necessary manp SCOPE OF WORK SHAL WORK	All necessary tower is part of	ools, HOT T vendor scop	'AP machines, e.	
	Bidder shall quote of manpower , nece equipments etc per	ssary tools and	tackles, HO	T tapping mac	
	a.Welding of 2" ac b. Hot tapping on assembly c.Complete fit up DPT , MAGNETIC PAR the pipeline	the hydrocarbon of the ER probe	pipeline fo assembly in	r installatio	n of ER probe he NDT tests (UT ,
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				•	

Item	Material	Qty	Un		Unit Basic Rate	
	Description		De	livery date	(in Figures)	
	BPCL scope:					
	Necessary approval	s and permits for execut	ion of	job		
	Service Item 10: U	nit basic rate in words				
20	9011796 ELECT-CVL WK Excvn	2,560 In loose soil/PCC (RM RUNNIN	G METER)		
	below, upto a dept after laying of ca above and below th backfilling the sa laying of Bricks a supervision, tools excavated earth at requried for the j BPCL. Cart away t	TION e trenches under various h of approx. 750mm and 5 bles.This shall include e cable along with a la me with consolidated ear nd stone dust along wit and tackles required fo safe place in brick enc ob. This shall be made he surplus debris out of of PCC wherever applica	00mm w laying yer of th. No h all r the losure by co refin	of 100mm class B te this materials job. This ntractor	ox. and backfilling layer of stonedust Bricks on top and includes supply and , labour, s incldues keeping of enclosure ackles at no extra cost to	
	In loose soil cable trench including breaking of PCC top cover, removal and reinstallation of stonedust; bricks; etc.					
	SCOPE OF WORK SHALL BE READ AS FOLLOWS INSTEAD OF THE ABOVE MENTIONED SCOPE OF WORK					
	trenches (for layi under various kind 500 mm and width a shall include layi backfilling the sa laying of Bricks a tackles required f place and cart awa or as directed inc	lumpsum charges per run ng of 2 core 1.5 mm2 cab s of soft soil , soft ropprox.300mm and backfil ng of a layer of class B me with consolidated ear long with all materials, or the job. This incldue y the surplus debris and luding breaking of PCC we fait basic rate in words	le fro ck, P ling a Brick th. No labou s keep exces hereve	m transmind CC, upto a fter laying s on top of te this in r, supervi ing of exc s earth or	tter to control room) a depth of approx. ng of cables.This of the cable and ncludes supply and ision, tools and cavated earth at safe ut of BPCL premises	
	00001565	0.75				
30	89001567	2,560	M			
	Page 43 of 74	Vendor Sign & Stam)	For Bhara	at Petroleum Corporation Ltd.	

Item Material Qty Unit **Unit Basic Rate** Description Delivery date (in Figures) (Meter)

INST CONDUITS SUPPLY n LAYING HDPE>1"=2"

Supply and laying of heavy duty HDPE/PVC cable conduit of specified sizes for laying of special communication / DCS / OFC /instrument cables in existing cable trenches, trays, ducts, structures etc. Including supply, fabrication and erection of conduits with conduit fittings such bend, tee, couplings etc, providing identification tag, Fabrication of structural steel supports, painting with one coat of primer and two coats of enamel painting. Supply of all hardware excluding supply of structural steel. Scope Includes all necessary material transportation .

for HDPE conduits above 1" and upto 2" SCOPE OF WORK SHALL BE READ AS FOLLOWS INSTEAD OF THE ABOVE MENTIONED SCOPE OF WORK

Bidder shall quote lumpsum charges per running meter towards supply and laying of heavy duty HDPE/PVC cable conduit of 2" diameter for laying of instrument cables in existing cable trenches, trays, ducts, structures etc. Including supply, fabrication and erection of conduits with conduit fittings such bend, tee, couplings etc, providing identification tag . Supply of all hardware laying of HDPE pipe excluding supply of structural steel. Scope Includes all necessary material transportation .

ISI MARKED HDPE PIPE CONDUIT OF MINIMUM 2" INTERNAL DIAMETER

Bidder to note that HDPE cable conduit will be used in the underground portion of cable route for laying of 2 core 1.5 Sq.mm cable from ER probe transmitter to PLC in control room

Service Item 30: Unit basic rate in words _

40 89000562 1,280 SUPnINST PERFORTD CABLE TRAY - 2" (Meter)

Supply, installation and commissioning

the following sizes of 14 SWG GI cable trays by means of structural steel supports / brackets fabricated by the contractor on walls / structures / columns / walkaway / bridge,etc. including supply and fixing of GI clamps, saddles, spacers etc. for fixing cables on cable trays/ walls/ stuctures.

Bidder to note that cable tray shall be HOT dip galvanised with minimum

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Service Item 40: Unit basic rate in words

50 9006392 3,510 M

CABLE LAY 1.1KV ARM 2Cx1.5 MM SQ (Meter)

LAYING; TESTING and COMMISSIONING OF 1.1 KV GRADE CABLES; PVC/XLPE INSULATED; PVC SHEATHED; FR ARMOURED ALUMINIUM/COPPER CONDUCTOR CABLES OF FOLLOWING SIZES AS PER IS:1554 (PART-I)-LATEST VERSION AND SEALED PROPERLY WITH PVC CAPS IN BUILT-UP READY MADE TRENCHES; OVERHEAD CABLE TRAYS; PULL THROUGH PIPES OR EXPOSED ON WALL.BEAM/RAKES; TRUSSES TIE/BEAM OR EMBEDDED IN FLOOR OR BURIED DIRECTLY UNDERGROUND OR THROUGH G. I. PIPE(REFER DRAWING FOR CABLE ROUTING). UNIT RATES QUOTED FOR INSTALLATION OF CABLES SHALL BE SAME IRRESPECTIVE OF ROUTE AND METHOD OF LAYING. THE RATES SHALL INCLUDE LAYING, PULLING OF CABLES, PROPER DRESSING OF CABLES ON CABLE TRAYS, RACKS, VERTICAL RACEWAYS AND SUPPLY AND INSTALLATION OF SADDLES, SPACERS AND NYLON CHORD FOR TYING AS REQUIRED, TAGGING OF CABLES, CLAMPS. IT ALSO INCLUDES THE COST OF TRANSPORTATION OF CABLES FROM OWNER'S WAREHOUSE; CABLE IDENTIFICATION TAGS AT STRATEGIC POINTS / EVERY 50 METER INTERVAL FOR IDENTIFICATION OF CABLE; ETC. COMPLETE. THE STRAIGHT THROUGH JOINTS IN THE CABLES SHOULD BE AVOIDED. THIS ALSO INCLUDES RETURNING OF THE BALANCE QUANTITY OF CABLES NEATLY COILED ON THE DRUMS AND SEALED PROPERLY WITH PVC CAPS AND TAGGED PROPERLY INDICATING BALANCE LENGTH; SIZE ETC. TO BPCL WAREHOUSE.

2 CORE X 1.5 MM SQ. 2XWY

SCOPE OF WORK SHALL BE READ AS FOLLOWS INSTEAD OF THE ABOVE MENTIONED SCOPE OF WORK:

Bidder shall quote lumpsum charges per running meter towards supplying, laying, testing ,commissioning and termination of instrumentation cables(from ER probe transmitter to PLC in control room); pvc insulated; pvc sheathed; fr armoured aluminium/copper conductor cables of size 2Cx1.5 MM SQ as per IS:1554 (part-i)-latest version and sealed properly with pvc caps in built-up ready made trenches; overhead cable trays; HDPE pipe casing ,pull through pipes or exposed on wall.beam/rakes; trusses tie/beam or embedded in floor or buried directly underground or through g. I. Pipe(refer drawing for cable routing).Unit rates quoted for installation of cables shall be same irrespective of route and method of laying. The rates shall include laying, pulling of cables, proper dressing of cables on cable trays, through HDPE conduit ,racks, vertical raceways and supply and installation of saddles, spacers and nylon chord for tying as required, tagging of cables, clamps. It also includes the cost of transportation of cables from owner's warehouse; cable identification tags at strategic points / every 50 meter interval for

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To:M	/s. BPCL ESTIMATE M	IUMBAI - 4000	38 India	(300648)	
Item	Material Description		Qty	Unit Delivery dat	Unit Basic Rate e (in Figures)
	cables should be a specifications as	voided. Note mentioned in a	: Cable s	hall be supplie	rough joints in the das per the detailed
	2 CORE X 1.5 MM SQ		lPair x 1	.5 SQMM	
	A) GENERAL:				
	01) TYPE OF CABLE		: ARMOUR	בט	
	02) VOLTAGE		: 660 V	ED	
	03) NO. OF CORES			2), TWISTED TO	СЕТИЕР
	04) TWISTS / METER		: TEN (GETHER
	05) CONDUCTOR SIZE				
	06) CONDUCTOR MATE				F CODDED
	07) NO.OF STRANDS		: SEVEN		E COFFER
	08) DIA OF EACH ST				
	09) SHIELD ELEMENT				D
	05) SHIELD ELEMENT	11111	TAPE W		
	METALLIC SIDE HELL	TCALLY APPLIE			
	EITHER SIDE 25% OV			F.	
	10) SHIELD THICKNE				
	11) DRAIN WIRE			 MM MULITISTRAN	ED
	,		~	INED ANNEALED C	
	CONDUCTOR IN CONTI	NUOUS			CONTACT WITH
	ALUMINIUM SIDE				
			OF THE	SHIELD	
	12) INSULATION MAT	ERIAL	: PVC-C,	AS PER IS 5831	/ 84
	13) INSULATION THI				
	14) INSULATION COL				
	15) INNER SHEATH M				1 / 84
	16) INNER SHEATH T				
	17) INNER SHEATH C		: BLACK		
	18) ARMOUR TYPE			ISED STEEL WIRE	
	AS PER IS 1554 PAR	T I / 88			
	19) ARMOUR SIZE		: 1.4 MM	AS PER IS 3975	/ 99
	20) OUTER SHEATH M	ATERIAL	: PVC-ST	2 AS PER IS 583	1 / 84
	21) OUTER SHEATH T	HICKNESS	: 1.3 MM		
	22) OUTER SHEATH C	OLOR	: BLUE		
	23) OXYGEN INDEX F	OR		0% AS PER ASTM	D 2863
	04)			R & OUTER SHTH	
	24) A RIP CORD SHA				1737 L 0307
	25) TOLERANCE IN O				
	26) THE INCREMENTA				K SHALL
			TER SHEAT	H OF THE CABLE.	
	B) ELECTRICAL CHA 1) INSULATION RES		100 м онм	/ KM AT 20 DEG	C (MIN)
	·			1	
	Page 46 of 74		ndor Sign & St	amp For B	harat Petroleum Corporation Ltd.

tem	Material Description		Qty	Unit Delivery date	Unit Basic e (in Figure	
	2) CONDUCTOR RESISTANCE BETAIL AND CAPACITANCE BETAIL AND CAPACITANCE BETAIL AND CAPACITANCE BETAIL AND CAPACITANCE BETAIL AND CAPACITA AND CAPACITA AND CAPACITA AND CAPACITA AND CAPACITA AND CAPACITA CAPACITA AND CAPACITA CAPAC	TWEEN TWEEN SITANCE DISE LL BE CARRI SHEATHS: S-5831/84 E: GE SPARK TE:	: 250 pF / M : 400 pF / M : 40 uH / OHN : 30 OHM / KN : AS PER IEC : OVER 76 DE ED OUT BY VEN XCEPT INSULAT	KM AT 20 DEG (MAX) CORES A' (MAX) CORE AND (MAX) I AT 20 DEG C. 332-3 PART 3 GREJECTION RADION DURING VALUE OF TON	C (MAX) I 1 KHZ D SCREEN CAT A	
	4) CONDUCTOR RESIS D) ACCEPTANCE TEST THESE TESTS SHALL 1) CONTINUITY TEST 2) VOLTAGE TEST AS 3) CONDUCTOR RESIS 4) CABLE CAPACITANO 5) ELECTROSTATIC NO 6) TESTS FOR UNIFOR AS PER IS-2633 7) OXYGEN INDEX TES 8) DIMENSIONAL CHECARMOUR DIAMETER.	: BE CARRIED (. PER BS-530; ITANCE AND L CE AND L/R L DISE REJECT: MITY OF GAL . ST AS PER A;	OUT IN PRESEN 8 PART II (19 DRAIN WIRE RE RATIO TEST. ION RATIO TESE VANISATION OF	ST. ARMOUR	ER	OVER
	E) NOTE:					
	1) ALL THE TEST CE				resting .	TO BE
	2) ALL CABLES SHAL HYADROCARBON PLANT SHALL ALSO BE DESIG	ATMOSPHERE	, DIRECT SUN	AND IN	TRENCHES. THE	
	3) THE RELATED STAI ABOVE SHALL BE PURCHASER'S ENQUIR	OF THE LAT				
	4) IMMEDIATELY AFT: THE ENDS OF THE OF MOISTURE WITH ST	E CABLE SHA	LL BE SEALED	TO PREVENT FRO	ОМ	INGRESS
	5) ALL THE TEST DO	CUMENTS TO 1	BE SUBMITTED	FOR SCRUTINY.		
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ltem	Material Description		Qty	Unit Delivery dat	Unit Basic Rate e (in Figures)
	Service Item 50: U	nit basic rate	e in words _	•	
60	9002684 BLD PCC 1:2:4 Agg	20	30.000 (Cu	M3 bic meter)	
	required including cement of approve heights / depths a	the cost of odmake as spectand floors incl	centering and ified. The uding scaff	d shuttering rates are ap olding, unle	concrete (P.C.C.) as etc. as directed, with plicable for all ss otherwise specified.
	which are excavate	e road crossir d along the ca er to PLC pane ngineer in Cha	ngs , floori able route f el in contro arge	ng , brickwo or laying of l room as pe	rk and other places instrument cable from requirement and as
70	89003120 CVL FLRG - INTER L	OCK-RELAY	100 (Sq	M2 uare meter)	
	CIVIL FLOORING				
		thickness) in			reflective concrete
	heavy traffic load quarry sand/existi	ng sand layer,	ing the gro	ound and spre	ading min 10 cm tk .rry sand), including Engineer-in-charge.
	heavy traffic load quarry sand/existi labour etc. comple Bidder to note tha removed for excava	ng sand layer, te to the enti t above item s tion and resto	ing the grown (excluding re satisfaction of contraction of contrac	ound and spre cost of qua ction of the for refixing able trench	ading min 10 cm tk rry sand), including

To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit **Unit Basic Rate** Description Delivery date (in Figures) Also kindly note that the paver blocks along the cable route shall be removed and stacked carefully so prevent any damage during removal and relaying. Any damaged paver blocks shall be arranged by the bidder for relaying without any extra cost to BPCL Service Item 70: Unit basic rate in words _ 89000164 150 80 M2 CVL FLRG - CEMENT TILES 20tk (Square meter) CIVIL FLOORING Providing and laying the out side floor with coloured cement flooring tiles 20 mm or nearest thick (Euro cone/ ultra or equivalent approved pattern) over a base course of cement mortar 1:3(1 cement: 3 sand), 15 mm average thick cement plaster with necessary cement grout for the proper binding of tiles to mortar, including pointing the joints and closing the voids with cement of the same colour to match, finishing etc. complete at all height as per the direction of the Engineer-in- Charge. Bidder to note that above item shall be used for restoration of area where the cement floor tiles have been damaged during excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room. Service Item 80: Unit basic rate in words 90 9008031 5.000 М3 BRICK MSN FULL ABV PLINTH 1:4 CM 1:4 35k (Cubic meter) Providing and constructing 225mm thick brick masonry at all levels in cement mortar 1:4 (1 cement :4 coarse sand) with good quality locally available bricks having minimum compressive strength of 35 kg/cm2 including raking out joints, curing etc. as directed. The thickness for all vertical and horizontal joints shall not exceed 10mm. Bidder to note that above item shall be used for restoration of any brickwork damaged during excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control Page 49 of 74 For Bharat Petroleum Corporation Ltd. Vendor Sign & Stamp

	Madautal		1114		Half Barta Bara	
ltem	Material Description	Qty	Unit Delive	ery date	Unit Basic Rate (in Figures)	
	Description		Delive	i y date	(iii i iguies)	
	Service Item 90: Unit basic rate in words					
100	89002588		M2			
100	CVL PLSTR - CVL PL		(Square met	cer)		
		, -	(12.1	,		
	CIVIL					
	PLASTERING					
		Plastering with cement mortar 1:4 mix (1 cement: 4 fine sand), two coat, 20				
	_	first coat of 12 mm &				
		roweled hard and finish				
		including necessary scaffolding, curing etc. complete, all as per detailed specifications, at all heights and levels."				
	2F001110001010, 00 011 110151102 0110 101012.					
		it above item shal be u				
		ring excavation and re				
	of cable from ER probe transmitter situated in pump house to PLC panel inside control room.					
Service Item 100: Unit basic rate in words						
110	000051					
110	9002654 BLD PNT EXT WEATH	PROOF 2 COATS	M2 (Square met	er)		
	bub ini aki mbain inoor 2 coarb (bquare meter)					
	Providing and applying exterior grade weather proof paint of approved brand n make (Weather shield/Apex) on exterior walls including preparation of surface,					
	scaffolding etc complete					
	2 COATS Ridder to note that above item shall be used for restoration of any paint work					
	Bidder to note that above item shal be used for restoration of any paint work damaged during excavation and restoration of cable trench for laying of cable					
	from ER probe transmitter situated in pump house to PLC panel inside control					
	room.	room.				
	Sarvice Item 110.	Service Item 110: Unit basic rate in words				
	DELVISO ISSUE ITO SUBTO IGGO III WOLGO					
	Service Tax%	VAT%		CST%		
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To:M/s. BPCL 1	ESTIMATE	MUMBAI	- 400038	India	(300648)
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Item	Material	Qty	Unit	Unit Basic Rate
	Description		Delivery date	(in Figures)

10 Scope of work

SUPPLY, INSTALLATION AND COMMISSIONING OF ER (ELECTRICAL RESISTANCE) PROBE BASED ON LINE INTERNAL CORROSION MONITORING SYSTEMS AT TOTAL 13 NUMBER OF PUMPING AND INTERMEDIATE PIGGING LOCATIONS OF MUMBAI - MANMAD - BIJWASAN PIPELINE AND

BINA KOTA PIPELINE

1.0 PREAMBLE:

BPCL is operating cross country pipelines from Mumbai- Manmad- Bijwasan and Bina - Kota and for transportation of finished petroleum products (MS / HSD / SKO) from Mumbai and Bina Refinery. This pipeline is having various pumping and intermediate pigging stations along the pipeline route at various locations in various states.

BPCL requires to install ER (Electrical Resistivity) probe system to be provided at total 13 locations (total 16 numbers) of MMBPL & BKPL. The details of the locations is enclosed in clause no 2.0. The total scope of work in brief is as follows:

For real time monitoring of the pipeline internal corrosion in SCADA and for optimizing the dosing of corrosion inhibitor in the pipeline an online corrosion monitoring system is proposed for which following jobs are involved:

- 1. Supply, installation & commissioning of ER probes based pipeline internal corrosion monitoring system and associated accessories like probe assembly, access fitting, corrosion data transmitters etc.
- 2. ${\tt HOT}$ work for installation of ER probes assembly on station piping. (Offline welding of access fitting and line tapping).
- 3. Supply, laying, testing of cables including all the civil work (excavation / restoration / grouting, anchor fasteners / RCC / PCC / dismantling), laying of control cables in HDPE casing from ER probe transmitter to control room and restoration.
- 4. Cable terminations at ER probe transmitter end and PLC end.
- 5. Commissioning of the system at all locations and imparting training during commissioning.
- 2.0 Details of locations for supply, installation and commissioning of ER probes:
- Sl. No. Location State Cross Country Pipeline Diameter Pipe line grade Pipe thickness
- 1 Mumbai Maharashtra 18" API-5L-X-65 9.5 mm 15.2mm
- 2 Washala Maharashtra 18" API-5L-X-65 9.3 mm 14.2mm
- 3 Manmad Receipt Maharashtra 18" API-5L-X-65 9.6mm 12.2mm
- 4 Manmad Despatch Maharashtra 14" API-5L-X-60 9.9mm 16.6mm

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- 6 Gujri Madhya Pradesh 14" API-5L-X-60 9.4mm 26mm
- 7 Manglya Receipt Madhya Pradesh 14" API-5L-X-60 7.6mm 10.6mm
- 8 Manglya Despatch Madhya Pradesh 16" API-5L-X-60 9.8mm 16.6mm
- 9 Kota Rajasthan 16" API-5L-X-60 7.8mm 26mm
- 10 Malarna Rajasthan 16" API-5L-X-60 11.8mm 21mm
- 11 Bharatpur Rajasthan 16" API-5L-X-60 12.6mm 13.6mm
- 12 MathuraUttar Pradesh 16" API-5L-X-60 17.5mm 22mm
- 13 Piyala Receipt Haryana16" API-5L-X-60 12.3mm 21.8mm
- 14 Piyala Despatch Haryana 8" API-5L-X-56 11.2mm 13.8mm
- 15 Bijwasan Delhi 8"API-5L-X-56 8.2mm 12mm
- 16 Bina Madhya Pradesh 18" API-5L-X-65 13mm 26mm

3.0 SCOPE OF WORK:

The scope of work this contract shall be as follows and vendor shall quote lump sum charges for each item.

- 3.1: SUPPLY OF ER PROBES AT VARIOUS LOCATIONS OF PIPELINES
- 1. Item no 10 : Supply of ER probes and associated accessories at Mumbai
- 2. Item no 20 : Supply of ER probes and associated accessories at Washala
- 3. Item no 30 : Supply of ER probes and associated accessories at Manmad receipt
- 4. Item no 40 : Supply of ER probes and associated accessories at Bina
- 5. Item no 50 : Supply of ER probes and associated accessories at Manglya dispatch
- 6. Item no 60 : Supply of ER probes and associated accessories at Kota
- 7. Item no 70 : Supply of ER probes and associated accessories at Malarna
- 8. Item no 80 : Supply of ER probes and associated accessories at Bharatpur
- 9. Item no 90 : Supply of ER probes and associated accessories at Mathura
- 10. Item no 100: Supply of ER probes and associated accessories at Piyala receipt
- 11. Item no 110: Supply of ER probes and associated accessories at Manmad dispatch $\,$
- 12. Item no 120: Supply of ER probes and associated accessories at Sanghvi
- 13. Item no 130: Supply of ER probes and associated accessories at Gujri
- 14. Item no 140: Supply of ER probes and associated accessories at Manglya receipt
- 15. Item no 150: Supply of ER probes and associated accessories at Piyala dispatch
- 16. Item no 160: Supply of ER probes and associated accessories at Bijwasan

Bidder shall quote lump sum charges per location for supply of ER (Electrical Resistance) probes and all other related accessories like data transmitters and receivers inclusive of flame proof enclosures, intrinsic safety barriers

ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

and canopy stand, etc as mentioned in the scope of work

PART B: INSTALLATION AND COMMISSIONING OF ER PROBES AT VARIOUS LOCATIONS OF PIPELINES

1. Item no 10: HOT work for installation of ER probes on station piping

Bidder shall quote lump sum charges per location for hot work required job such as offline welding of access fitting and tapping on station piping to be done for installation of ER probe assembly in station piping inclusive of all the associated mechanical works, necessary tools, HOT Tap machines, lifting equipments, necessary tools and tackles and necessary manpower at all the 16 locations as per the scope of work including mobilization and demobilization.

2. Item no 20. Civil work for, excavation for laying of cables from pump house area to control room , etc

Bidder shall quote lump sum charges per running meter for excavation of cable trench required for laying of cables from pump house area to control room, restoration of the areas along the cable route nearer to the original condition. This item includes supply and laying of single brick layer over the cable along with all materials, labour, supervision, tools and tackles required for the job.

3. Item no 30: SUPPLY & LAYING OF HDPE PIPE CONDUIT FOR CABLE LAYING

Bidder shall quote lump sum charges per running meter for supply of heavy duty ISI mark HDPE cable conduit of 2" diameter and laying of ER probe cable from transmitter to control room through HDPE conduit. Scope includes all necessary material transportation to individual locations.

4. Item no 40 : SUPPLY, INSTALLATION AND COMMISSIONING OF HOT DIP GALVANIZED CABLE TRAYS

Bidder shall quote lump sum charges per running meter for SUPPLY & INSTALLATION of 14 SWG GI cable trays of 2" width by means of structural steel supports / brackets fabricated by the bidder on walls / structures / columns / walkaway / bridge, etc. including supply and fixing of GI clamps, saddles, spacers etc. for fixing cables on cable trays/ walls/ stuctures. Cable tray shall be hot dip galvanised and thickness of coating shall be minimum 50 microns.

5. Item no 50 : SUPPLY , LAYING , TESTING & COMMISSIONING OF CONTROL CABLE FROM ER PROBE TRANSMITTER TO CONTROL ROOM

Bidder shall quote lump sum charges per running meter for supply, laying, testing ,commissioning and termination of instrumentation cables (from ER

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probe transmitter to PLC in control room) of 660V grade 2Cx1.5 MM SQ cables as per details mentioned in RFQ

The rates shall include laying, pulling of cables through cable trench and through HDPE conduits, proper dressing of cables on cable trays, racks, vertical raceways and supply and installation of saddles, spacers and nylon chord for tying as required, tagging of cables, clamps. It also includes the cost of transportation of cables from owner's warehouse; cable identification tags at strategic points / every 50 meter interval for identification of cable; etc. complete. The straight through joints in the cables should be avoided. Note: Cable shall be supplied as per the detailed specifications as mentioned in RFQ.

6. Item no 60: SUPPLY & LAYING OF PCC FOR RESTORATION WORKS

Bidder shall quote lump sum charges per cubic meter for supply and laying of PCC (1:2:4). PCC shall be required for restoration of the excavated area like road crossings, flooring, brickwork and other places which are excavated along the cable route for laying of instrument cable from ER probe transmitter to PLC panel in control room as per requirement and as directed by BPCL Engineer in Charge

7. Item no 70: RELAYING OF AVAILABLE CONCRETE PAVER BLOCKS

Bidder shall quote lump sum charges per square meter for or refixing of any paver blocks removed for excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room.

8. Item no 80: SUPPLY AND LAYING OF CEMENT FLOOR TILES

Bidder shall quote lump sum charges per square meter for supply and laying of cement tiles per square meter for restoration of area where the cement floor tiles have been damaged during excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room.

9. Item no 90: SUPPLY AND CONSTRUCTION OF BRICK MASONRY WORK

Bidder shall quote per cubic meter for supply and construction of brick masonry work which shall be used for restoration of any brickwork damaged during excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room.

10. Item no 100: PLASTERING WITH CEMENT MORTAR 1:4 MIX (1 CEMENT: 4 FINE SAND)

Bidder shall quote lumpsum charges for plastering of concrete and brick

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

masonry surface or for restoration of any cement plaster damaged during excavation and restoration of cable trench for laying of cable from ER probe transmitter situated in pump house to PLC panel inside control room.

11. Item no 110: PROVIDING AND APPLYING EXTERIOR GRADE WEATHER PROOF PAINT

Bidder shall quote lumpsum charges per square meter for painting of surface with weather proof paint. This item shall be used for restoration of any paint work damaged during excavation and restoration of cable trench for cable laying from ER probe transmitter situated in pump house to PLC panel inside control room.

4.0 SYSTEM SPECIFICATIONS

4.1 TECHNICAL REQUIREMENTS

The electrical resistance (ER) probes to be installed at the Despatch and Receipt Stations as

indicated in clause 2.0 shall be retrievable from the line under pressure. Tubular type ER probes shall be used on the pipeline. All materials in contact with fluid shall be in

accordance with NACE Standard MR-0175

Pipeline inlet pressure may vary according to pipeline pressure drop due to different flow rate.

Hence the corrosion monitoring system shall be suitable for operation under this fluctuating pressure and flow conditions.

Each probe shall be connected to a transmitter (6 wire system) to give an output of 4~20~mA,

in proportion to metal loss. The transmitters shall be intrinsically safe certified. The 4--20mA output from the transmitter (2 wire system) shall be available for interfacing with SCADA / PLC. The suitable safety barrier between transmitters & SCADA shall be provided by the vendor. The Bidder shall provide operation manual for these instruments.

4.2 MATERIAL

Scope of supply shall consist as $\min \min$ requirement of the following components

4.2.1 ER PROBE

- i. Probe (16 nos): 1Nos. each location as indicated in clause 2.0.
- ii. Transmitter (16 nos): 1 nos for each location as indicated in clause 2.0
- iii. Probes shall be high pressure tubular type with velocity shields and body material shall be same as that of probe element for installation with high pressure hollow plug access fitting assembly.
- iv. The probe shall be suitable for measurement of corrosion rate in the

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range of 0-10 mpy.

v. Probe life shall be at least 2 yrs. at 1 to 2.5 mpy corrosion rate.

vi. Probe element thickness shall be 20 mills having minimum 10 mills useful probe life.

4.2.2 TRANSMITTER

Transmitter shall be with 4-20~mA current loop for communication and for interfacing with PLC. It

should have intrinsically safe certificate from authorized certifying agency in India

- i. Type: 2 wire type
- ii. Input: ER probe
- iii. Output: 4-20 mA
- iv. Operating temperature: (-)18 degree centigrade to (+)60 centigrade
- v. Dimensions: As per vendor standard specifications
- vi. Weight: As per vendor standard specifications
- vii. Cable lead: Minimum 5ft for connection with ER probes or as per site requirement
- viii. Power supply: 24V DC Loop powered from receiver unit
- ix. Mounting: At site near probe by bracket / yoke support on MS stand with canopy
- x. Transmitter to control room distance : Upto 3000 meter
- \times i. Hazardous area classification : Zone-1 , gas group IIA, IIB & temperature grade T3
- xii. Enclosure : IP 65
- xiii. Complaince : CE, ATEX & CCOE certificate
- 4.2.3 ACCESS FITTING ASSEMBLY FOR ER PROBE
- 16 Nos. for ER Probe, 1 for each location as indicated in clause 2.0
- 2" NB, 5.25" height, flare weld access Fitting Assembly (non-tee), body carbon steel, acme

thread outlet with hollow-plug assembly in AISI-316 along with heavy duty protective C.S.

cover complete with essential spare.

- i. Access fitting size: 2 inch
- ii. Access fitting height 5 to 6 inches
- iii. Access fitting type: Flar weld (non tee) as per ASME B 31.3
- iv. Access fitting body material : As per ASTM A 105
- ${\tt v.\,Plug:}$ Hollow plug assembly in stainless steel (AISI316) with heavy duty CS cover
- vi. Temperature rating : (-)26 degree centigrade to (+) 204 degree centigrade
- vii. Mounting: Flar weld, non tee and to be welded directly on non piggable portion of pipeline
- viii. Specification: As per NACE MR0175

Access fitting assembly shall be supplied with all the necessary packing

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gaskets, sealing nuts etc suitable for high temperature and high pressure rating as per specifications

- A. Testing and applicable standards
- 1. Test pressure : 1.5 times design pressure
- 2. Design code : ASME B 31.4
- 3. End connection : ASME B 16.25
- 4. Dimensions : as per Bidders standards
- B. Pipeline data
- 1. Service : SKO(SUPERIOR KEROSINE OIL), and 2 grades of MS(MOTOR SPIRIT) & HSD(HIGH SPEED DIESEL)
- 2. Pressure rating: 3600 psi
- C. Documentation
- 1. GA drawings
- 2. Catalogue/datasheets
- 3. Installation, operation & maintenance manual
- 4. Material test certificates
- 5. Transmitter calibration certificate
- 6. Wake frequency calculations
- 7. Warranty certificate for 2 years
- 8. ITP/QAP
- 9. Fat(factory acceptance test)
- 10. Transmitter ATEX/CCOE certification

5.0 INSPECTION AND TESTS

The Bidder & Bidder shall perform all inspection and tests as per the requirements

of this specification and the relevant codes, prior to shipment from his Works. Such inspection

and tests shall be, but not limited to, the following:

 $5.1 \ \text{All}$ assemblies and components shall be 100 % visually inspected & hydro tested and test

certificates for the same shall be provided.

- 5.2 Dimensional checks shall be carried out as per the approved drawings.
- 5.3 Chemical composition and mechanical properties including hardness shall be checked as per

relevant material standards and this specification.

- 5.4 Non-destructive inspection of the probe assembly shall be carried out as given below:
- 5.4.1 All butt and repair welds of pressure containing parts if any shall be

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examined 100% by

radiography. Acceptance limits shall be as per ASME B31.4.

5.4.2 Welds, which in purchaser's opinion cannot be inspected by radiographic methods, shall be

checked by ultrasonic or magnetic particle methods. Methods of examination shall be as per

ASME Section VIII Div.1 Appendix 12 and Appendix 6 respectively. 5.4.3 All forgings shall be wet magnetic particle inspected on 100% of forged or extruded surfaces.

Method and acceptance shall comply with MSS-SP-53.

5.4.4 The end section of the components to be welded shall be 100% ultrasonically tested for

lamination type defects for a distance of 50 mm from the ends prior to being prepared. The

presence of any discernible defects shall be cause for rejection.

5.4.5 All fillet welds of thickness < 6 mm shall be examined 100% by Magnetic Particle Inspection

and 6 mm shall be examined 100% by angle probe UT. Acceptance criteria for MPT and UT

shall be as per ASME Sec. VIII Div.1 Appendix 6 and Appendix 12 respectively.

 $5.4.6\ \mathrm{BPCL}$ / BPCL nominated TPI may also perform stage wise inspection and witness tests

at Bidder's Works prior to shipment. Bidder shall give reasonable notice of time

and shall provide, without charge, reasonable access and facilities required for inspection by

the BPCL / BPCL nominated TPI. Inspection and tests performed/witnessed by the BPCL / BPCL nominated TPI shall in no way relieve the bidder's obligation to perform the required inspection and tests.

5.4.7 The hydro test water shall be clean, non-toxic, non-corrosive, neutral fresh water with

chloride contents not exceeding 250ppm.

5.4.8 Test procedure and ITP shall be addressed to BPCL for review and approval.

6.0 TEST CERTIFICATES

Bidder shall submit the following certificates:

a) Test certificates relevant to the chemical analysis and mechanical properties including

of the materials used for the manufacture as per relevant material specification.

- b) Test reports on non-destructive testing.
- c) Test certificates for hydrostatic tests.
- d) Test reports of heat treatment carried out.
- e) Dimensional & visual check report.
- f) Surface preparation and painting, marking report.

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g) Inspection release note.

Certification for use in hazardous area shall be as follows:

a) Certificates from statutory authorities like BASEEFA, FM, PTB, UL, and CENELEC etc. for items of

foreign origin, and from CMRI etc. for items of Indian origin.

b) Approval certificate from PESO (Petroleum Explosive Safety Organizer) / CCE (Chief Controller of Explosives) for items to be installed in India, irrespective of country of origin

and the same is mandatory. In case PESO (Petroleum Explosive Safety Organizer) / CCE certificate

is not available at the time of quotation, bidder shall confirm that the certificate shall be

furnished before shipment.

c) Approval certificate from BIS (Bureau of Indian Standards) for all flameproof instruments of

Indian origin.

7.0 PAINTING, MARKING AND SHIPMENT

1. After all inspection and test required have been carried out; surface shall be thoroughly

cleaned, freed from rust and grease and applied with sufficient coats of corrosion resistant

paint.

2. Each assembly shall be tagged and stamped legibly on the edge of the inlet flange using die

stamps with characters at least 12 mm high.

3. The assembly shall be fitted with a stainless steel nameplate, attached to the body with

stainless steel wire. At least the following information shall be clearly stamped on the plate

- a) Bidder's name
- b) Rating
- c) Material Body/plug etc
- d) P. O. Number and Tag No's.
- 4. All necessary precautions shall be taken for adequate protection of the assemblies during

shipment and storage.

8.0 DOCUMENTATION

8.1 DOCUMENT TO BE SUBMITTED ALONG WITH THE OFFER

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The bidder shall submit the following documents with the quotation:

a) Preliminary cross sectional drawing of ER probe assemblies showing all the parts, material list &

critical dimensions along with Data Sheets for all components.

- b) Offered Inspection and Testing.
- c) Table of compliance (Appendix A) and data sheet duly filled by the vendor.
- d) Mechanical data sheet duly completed and certified clearly highlighting the acceptance / deviations offered.
- e) List of spares required for commissioning and start-up.
- f) List of spares required for two year of operation.
- g) Operating and Maintenance manual.
- h) Quality control plan

8.2 DOCUMENTS TO BE SUBMITTED AFTER PLACEMENT OF PURCHASE ORDER/ LOI

The bidder shall submit, but not limited to, the following documents for BPCL's approval.

- a) Fabrication drawings, material details.
- b) Welding, Heat Treatment, Inspection and Testing Procedures.
- c) Quality Control Manual and Quality Control Plan/ITP.
- d) Packaging and transportation details.
- e) Proposed painting procedure.
- f) Spare part list for 2 years operation.
- g) Spare part list for commissioning and start-up.
- h) Operating & maintenance manual.
- i) Engineering, purchasing and construction schedule.
- j) Intrinsically safe certificates with catalogue wherever applicable.
- k) Preservation procedure for coupons, probes and other spare accessories.
- 1) Instrument Index.
- m) Cable Schedule.
- n) Junction Box Schedule
- o) Loop Drawing.
- p) Power Consumption.
- q) Graphics Details.
- r) Datasheets and Specification of Systems.
- s) System architecture drawing.
- t) Modbus mapping details.

Bidder shall submit total index of drawings / documents required for review/records based on PO/PR/MR along with schedule date of submission of each drawing/document. The drawing schedule shall be submitted in to BPCL for approval. The drawing schedule shall be specific with regard to drawing/ document no, the exact title and size of the drawing / document. For submission of drawing schedule, the supplier shall proceed based on PO/PR/MR and subsequent correspondence. With each submission of drawings / documents,

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supplier shall submit index with schedule v/s actual submission dates, submission of drawings, revision no, date of approval etc. Any submission without index shall not be entertained for review. It shall be ensured that proper sequencing of the drawings/documents to be submitted is maintained in the drawing schedule.

8.3 Manufacture of corrosion coupon assembly fittings shall commence only after approval of the

above documents. Once approval has been given by BPCL, any changes in design, material and method of manufacture shall be implemented only after subsequent and

specific approval of BPCL in writing.

- 8.4 On receipt of written approval, the bidder shall submit to BPCL all documents as listed in Clause
 - 8.2 above.
- 8.5 Prior to shipment, the Bidder shall submit test certificates as listed in Clause 6.0 of this

specification.

8.6 Documents shall be in the English language only.

8.7 PROGRESS REPORTING:

Bidder shall submit monthly progress report and updated procurement, engineering and manufacturing status (schedule Vs actual) every month in, beginning within 2 weeks from PO.

In case of exigencies, BPCL can ask for report submission as required on weekly / fortnightly / adhoc basis depending on supply status and bidder shall furnish such reports promptly without any price implication. Format of progress report shall be submitted by the bidder during kick off meeting or within one week of receiving PO whichever is earlier.

9.0 QUALITY ASSURANCE & CONTROL

9.1 The bidder shall operate a Quality System meeting the requirements of the relevant

Part of ISO 9000. The Bidder shall have in effect at all times a QA/QC program which

clearly establishes the authority and responsibility of those in charge of the quality system.

Persons performing quality functions shall have sufficient and well defined authority to enforce $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

quality requirements that initiate, identify, recommend and provide solutions to quality

problems and verify the effectiveness of the corrective action. 9.2 A copy of the Bidder's QA/QC program shall be submitted to the BPCL with its quotation for

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 ${\tt BPCL's}$ review and concurrence prior to award. If Bidder's QA/QC program and facility, where

the work is to be performed, is ISO 9000 certified, then only a copy of the bidder's ISO 9000

certificate is required.

9.3 The bidder shall ensure that his sub-suppliers operate a quality system meeting the specified conformance criteria to ISO 9000. The Bidder's quality system

shall be subject to the BPCL's approval prior to commitment to a $\operatorname{Purchase}$

Order.

9.4 Major sub-suppliers shall be subject to identical approvals. BPCL reserves the right to conduct a

Quality Audit at the Bidder's/sub-supplier's facilities at any stage during manufacture.

9.5 The bidder shall identify in purchase documents to its sub-vendors all applicable QA/QC requirements imposed by BPCL, and shall ensure compliance thereto. On

request, bidder shall provide objective evidence of its ${\tt QA/QC}$ surveillance of

its sub Vendor's activities.

9.6 The bidder shall submit certified reports of production tests as soon as the

tests are completed satisfactorily.

9.7 BPCL reserves the right to inspect materials and workmanship at all stages of

manufacture and to witness any or all tests. The bidder shall provide the

BPCL with a copy of its Manufacturing and Inspection Plan for review and

inclusion of any mandatory witness points $30\ \mathrm{days}$ after award but prior to the pre-inspection

meeting.

10.0 SCOPE OF SUPPLY:

10.1 BPCL'S SCOPE:

- 1. Necessary work permit & clearance.
- 2. Necessary approvals for materials and procedures.
- 3. Electricity/power if required for the site shall be provided to the Bidder free of cost.

Necessary cabling from the supply point shall be carried out by the Bidder.

10.2 BIDDER'S SCOPE:

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To:M/s	. BPCL	ESTIMATE	MUMBAI	_	400038	India	(300648

Item	Material	Qty	Unit	Unit Basic Rate
	Description		Delivery date	(in Figures)

- 1. All the material , installation & commissioning , supervision of installation & commissioning , cable laying from transmitter to corrosion meter in control room including excavation and area restoration ,software for training , inspection ,tests and test certificates, painting, marking and shipment, material preservation at site till commissioning, quality assurance, quality control and all the documents.
- 2. Supply all necessary supervision / skilled manpower of various categories for carrying out the complete job as per the detailed scope of work and to the satisfaction of Engineer In Charge
- 3. Supply of necessary PPEs (Personal Protective Equipments) to all workmen including supervisor.

11.0 SPECIAL TERMS AND CONDITIONS OF THE CONTRACT:-

- 1. Bidder shall submit QAQC procedure and get it approved before carrying out the job.
- 2. The Bidder should do manual excavation where ever possible. Use of diesel driven excavator may be permitted after identification of all utilities (electric cables, drain pipe, HDPE pipe)
- going through the excavation area. Any damage caused to utilities during excavation shall be rectified by the Bidder at no extra cost to BPCL
- 3. Bidder shall arrange for the proper barricading of the trench/pits and safety warning boards at site.
- 4. Cable laying philosophy shall be as follows:
- A. Paved area: Cable tray/ buried underground
- B. Unpaved area: Buried under ground
- C. Type of cable trays: Hot dip galvanized prefabricated
- D. Cable protection sleeve: HDPE pipe

Bidder to note that the exact cable routing shall be decided at site based on actual site

conditions . Exact cable quantities/sizes shall be based on actual measured route lengths at $\,$

site by Bidder in coordination with Engineer-in-Charge/Client. Bidder shall ensure that there is

no surplus or shortage of cables at site and procure cables accordingly. The payment of cable

will be for the actual length of cable laid.

After award of work, vendor shall start to visit all the locations for fixing of ER probes within a week and take all measurements (cable route, hot tapping location, procurement quantities of cable, HDPE pipe, GI cable trays etc) related to the installation of the system, as directed by BPCL Engineer In Charge. Prepare layout drawings in details for cable route and system installation for approval from BPCL.

5. The supervisor of Bidder or Bidder himself must be present at site during

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Item Material Qty Unit Unit Basic Rate Description Delivery date (in Figures)

the execution of work.

6. Supplier shall note that training for BPCL personnel shall be arranged and carried out by an experienced and trained corrosion monitoring specialist of the Corrosion

Monitoring System supplier during commissioning stage at any of the locations mentioned in Annexure 2 as convenient to BPCL and no separate payment shall be made for the same

- 7. The housekeeping at the site shall be maintained by the Bidder on daily basis. The place of storage of material shall be designated and after the completion of work, all the area shall be cleaned to its original position.
- 8. Bidder shall deploy skilled as well as experienced supervisor and skilled workers as per the instructions / approval of the site in charge following all the safety conditions strictly. Bidder should provide all personal safety / protective equipments to the laborers /workers/supervisors.
- 9. The damages occurred during daily execution of job shall be rectified by the Bidder at no extra cost.
- 10. The quantities indicated in the schedule of quantities and rates are indicative and payment shall be made against RA bills(to be raised monthly) based on actual/jointly certified measurements for the work done during the preceding month on the basis of item rates as agreed in the contract, on the terms and manner as described above.
- 11. Bidder shall arrange for the lodging, boarding as well as the transport arrangement of his personnel to the work site.
- 12. The Bidder shall ensure strict compliance in respect as to time or mode of execution of any work or as to any precaution to be taken and / or temporary or alternative arrangement to be made.
- 13. The excavated earth shall be deposited away from the trench sides, in such a manner so as not to create artificial surcharge to the trench sides and also obstruct other operations to be carried out later on.
- 14. Bidder shall note that BPCL shall not be responsible for any theft of Bidder's material from site. No complaint shall be entertained in this regard.
- 15. Water used for civil construction jobs shall be made available by the Bidder .Water used should be potable drinking water and should not be hard/salty.
- 16. Proper curing of RCC / PCC support to be done as per IS codes. Water used for curing shall be potable drinking water only.
- 17. The Bidder shall maintain good housekeeping on day to day basis at the site.
- 18. BPCL shall not allow for night stay of the vendor personnel in any of their premises.
- 19. Bidder shall satisfy all contract labour / supervisors entry rules and regulations including police verification of all the labours / workers and supervisors prevalent at respective ER probe installation locations. No relaxation shall be provided to Bidder for the same.
- 20. During execution of the job, in case if any damages occurred to the BPCL property then the damages to be rectified by the vendor without any extra cost to BPCL. Otherwise BPCL reserves the right to get the job done at risk and

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Item Material Qty Unit Unit Basic Rate
Description Delivery date (in Figures)

cost of the bidder.

21. For any assistance / clarifications required you may contact Shri.S.S.Varadkar, Sr.Manager (Mech. - Maint.), MMBPL on Mobile No. 9833356451 or Mr.Namit Chittoria, (Dy.Mgr - Maint) on mobile no 8108880516.

12.0 DEFECT LIABILITY PERIOD:

1. Defect liability period for the entire job shall be two year from the date of completion of the job.

13.0 CONTRACT VALIDITY:

- 1. Contract shall be valid for a period of 6 months from the PO date. Job shall be completed within 120 days from the date of award of Purchase Order .LD clause shall be applicable as per memorandum of agreement.
- 2. Bidder shall maintain a hindrance register for daily updating and get it certified by BPCL site in charge. Responsibility to prove the delay in work on account of BPCL shall be based on entries made in the hindrance register only.

14.0 SAFETY CONDITIONS:

- 1. Use of PPE is must while executing the work. The Bidder shall provide proper personnel protective equipment to personnel carrying out the work.
- 2. All the safety precautions shall be taken while working inside the premises and as mentioned in the work permit issued by BPCL.
- 3. The job is being carried out inside BPCL Installations and therefore all the safety terms and conditions mentioned in the work permit towards the safety shall be binding to the Bidder. No idling charges shall be entertained in case of non compliance of safety issue or stoppage of the work due to the operational requirement etc.

15.0 PAYMENT TERMS:

A. MATERIAL SUPPLY:

70% payment against material supply shall be done on receipt of material at all the respective locations.

Balance 30 % payment against material supply shall be done after completion of all the jobs and commissioning of the system in all respects to the satisfaction of Engineer In Charge and as per the detailed scope of work.

B. SERVICE JOBS

For service jobs payment shall be done monthly against the bills raised for executed jobs.

10% retention money shall be retained for a period one year or till completion of guarantee period whichever is later.

C. PERFORMANCE BANK GUARANTEE

Bidder shall submit a PERFORMANCE BANK GUARANTEE VALID FOR A PERIOD OF TWO YEARS in lieu of warranty of the system for a period of two years.

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ItemMaterialQtyUnitUnit Basic RateDescriptionDelivery date(in Figures)

APPENDIX A: - TABLE OF COMPLIANCE.

The Bidder shall submit the complete table of compliance as part of the technical offer. The Bidder shall confirm compliance with each clause of this specification by writing "yes" in the column headed "Compliance". Where the Bidder is unable to comply with a particular clause, the Bidder shall write "no" in the column headed "Compliance" and shall describe the deviation with justification in the appropriate adjacent cells, which may be extended on separate pages as required.

Ref.clause no Compliance (yes/no)DeviationJustification / remarks

2

3

##.

15

In the commercial offer the Bidder shall clearly identify the non-compliant Clause Number and the price reduction available to the Purchaser should the Purchaser technically accept the proposed deviation.

The corrosion monitoring items shall be procured from one of the following vendors:

- A. CAPROCO
- B. ROHRBACK COSASCO SYSTEMS CORROSION MANAGEMENT
- C. METAL SAMPLES
- D. CORMON
- E. CorrOcean
- F. Emerson Process Management

All the components shall be purchased from a single Bidder only.

DATA SHEET TO BE FILLED BY BIDDER

ER PROBES BASED CORROSION MONITORING SYSTEM FOR

PIPELINES

- A General Design dataREQUIREMENTS PERTAINING TO PROBE VENDOR ACCEPTANCE / DEVIATIONS
- 1 PIPELINE MUMBAI -MANMAD BIJWASAN PIPELINE
- 2 PIPELINE LINE SIZE /THICKNESS REFER SECTION 2.0 of scope of work
- 3 PIPELINE MATERIAL REFER SECTION 2.0 of scope of work
- 4 SERVICE / SERVICE CODE SKO AND 2 GRADES OF MS & HSD
- 5 CLASS/PRESSURE RATING 3600 PSI
- 6 CORROSION ALLOWANCE 0.5 MM
- 7 INSTALLATION POSITION 12 O' CLOCK
- 8 PIPELINE PIGGABLE NOT APPLICABLE
- 9 AMBIENT TEMPERATURE 5 DEGREE TO 48 DEGREE CENTIGRADE

В

MATERIAL & CONSTRUCTION DETAILS

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			-

To:M/s. BPCL ESTIMATE MUMBAI - 400038 India (300648) Item Material Qty Unit **Unit Basic Rate** Delivery date (in Figures) Description 1 PROBE TYPE ELECTRICAL RESISTANCE, RETRIEVABLE TYPE, ON 2" ACCESS SYSTEM 2 ER PROBE MOUNTING 2 INCH ACCESS SYSTEM ASSEMBLY 3 ER PROBE LENGTH VENDOR TO ADVICE AS PER PIPE DIA 4 ER PROBE MONITORING POSITION BOTTOM OF PIPELINE PROBE ELEMENT 5 ER PROBE ELEMENT TYPE CYLINDRICAL TUBE 6 ELEMENT MATERIAL EQUIVALENT TO THE APPLICABLE PIPELINE MATERIAL GRADE 7 ELEMENT SEAL MATERIAL WELDED 8 ELEMENT FILL MATERIAL CERAMIC 9 VELOCITY SHIELDS REQUIRED 10 ELEMENT THICKNESS 20 MILLS(MINIMUM 10 MILLS USEFUL LIFE), SUFFICIENT FOR 2 YEARS AT 1 TO 2.5 MPY CORROSION RATE ACCESS FITTING 11 ACCESS FITTING SIZE 2 INCH 12 ACCESS FITTING TYPEFLAR WELD (NON TEE) AS PER ASME B 31.3, TO BE DIRECTLY WELDED ON NON PIGGABLE PORTION OF PIPELINE 13 ACCESS FITTING BODY MATERIAL ASTM A105 14 PLUG HOLLOW PLUG ASSEMBLY IN AISI316 WITH HEAVY DUTY CS COVER TESTING & APPLICABLE STANDARDS 15 TEST PRESSURE 1.5 TIMES DESIGN PRESSURE 16 DESIGN CODE ASME B 31.4 17 END CONNECTION ASME B 16.25 18 DIMENSIONS BIDDERS STANDARD 19 DESIGN LIFE (YEARS) 25 TRANSMITTER FOR PROBES 20 TYPE 2 WIRE 21 INPUT SOURCEELECTRICAL RESISTANCE PROBE 22 OUTPUT (SWITCH SELECTABLE) CORROSION RATE IN MPY OR MICRO MPY METAL LOSS IN MILS OR MICRO MILS 22 OUTPUT RESOLUTION +/- 0.1MPY/0.01MIL 23 OUTPUT 4 - 20mA LINEAR 24 CABLE LEAD FROM PROBE TO TRANSMITTER MINIMUM 5 FEET OR AS PER SITE 25 DISTANCE BETWEEN TRANSMITTER & PLC / SCADA PANEL (TRANSMITTER RANGE) MINIMUM 3000 FEET 26 POWER SUPPLY24V DC 27 LOCATION & MOUNTINGON FIELD, NEAR PROBE ON A BRACKET BY SUPPORT ON MS STAND WITH CANOPY INCLUDING NECESSARY GROUTING 28 AMBIENT TEMPERATURE 5 DEGREE TO 48 DEGREE CENTIGRADE 29 COMPLAINCE CE, ATEX & CCOE CERTIFICATE 30 ENCLOSURE IP65 31 WEIGHT VENDOR TO SPECIFY 32 DIMENSIONS VENDOR TO SPECIFY 33 HAZARDOUS AREA CLASSIFICATION Zone-1 , Gas group IIA, IIB & TEMPERATURE GRADE T3

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ADDITIONAL REQUIREMENTS / NOTES:

Item	Material	Qty	Unit	Unit Basic Rate
	Description		Delivery date	(in Figures)
	having three nos o output range of 4 provision of test 2. Owner will provishall be done by t Transmitter shall same two-wire cabl TECHNICAL ATTACHME	de 24VDC power supply fo he bidder from power supp relay 4-20 mA signal prop e for interfacing with PD NTS (to be filled by bidd	t shall be made r transmitter. ply point to transmitter to transmit to medical to Medica	of transmitter by BPCL for Necessary cabling ansmitter.
	2. LIST OF SPECIAL Sr no DESCRIPTION	TOOLS AND TACKLES PART NUMBER QUANTITY		
	3. LIST OF RECOMMEN	IDED SPARES FOR 2 YEARS O	F NORMAL OPERAT	ION
	Sr no DESCRIPTION	PART NUMBER QUANTITY		
In i	shall be listed. 2) Bidder shall li	are offered as a kit, the st spares separately for f all taxes, duties/charge	each item as a	
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TERMS & CONDITIONS

1.Pricing types

PRICING TYPE

FOR LOCAL:

Firm, inclusive of all packing & forwarding charges, taxes, duties, levies, transportation up to BPCL Warehouse. However, basic material cost, packing & forwarding charges, duties, taxes, transportation charges if applicable shall be indicated in the quotation.

Octroi: We shall reimburse the Octori charges if applicable as per prevailing rate against the original octroi receipt alongwith B-form. However, you shall mention the prevailing octroi rate in your quotation.

No deviations will be accepted.

PL NOTE WE WILL NOT ISSUE FORM 'C' FOR THIS MATERIAL. PLEASE QUOTE FOR FULL CST, IN CASE CST IS APPLICABLE.

FOR IMPORT:

Please note that your quotation shall be Preferable in US / euro \$. Please quote FOB Price upto nearest international airport. Your quote price should firm till completion of order.

2.Terms of delivery

FOR LOCAL:

Material to be delivered on "Door Delivery" basis at our Mumbai Refinery Warehouse.

Our Warehouse shall accept material between 8:00 hrs till 14:00 hrs. Saturdays and Sundays are holidays at BPCL. In the event of placement of order, material shall be delivered strictly within the above mentioned stipulated time. Consignments reaching our warehouse late shall not be entertained.

DELIVERY INSTRUCTIONS :

Driver / Helper / Delivery man bringing the material must carry with them any one of the identity proof in originals, viz, Driving license / PAN card / Aadhar card etc,. Without original identity proof, your person will not be allowed inside the Refinery.

- * Only diesel driven vehicle with spark arrestor is allowed to enter inside the Refinery.
- * Three wheeled vehicles shall not be permitted.
- * Trucks bringing in the material shall have the provision for sideways opening.
- * Vehicle must have a spare tire (stepney).

FOR IMPORT:

In case of Foreign Vendors: FOB nearest airport.

3.Shipping instructions

FOR IMPORT:

Material to be despatched through our Freight Forwarder whose details shall be made available in our purchase order.

4.Terms of payment

AS PER TENDER SCOPE OF WORK.

No advance payment will be made.

Taxes and duties:

Taxes and duties will be paid at actuals up to CDD. After CDD any increase will be borne by the vendor.

Any increase / decrease in Excise Duty, Taxes and statutory levies on the date of delivery during the scheduled delivery period will be on BPCL's account.

Any upward variation in Excise Duty, Taxes and statutory levies after contractual delivery date shall be to vendor's account.

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5.Warranties

Material shall be guaranteed for Good Workmanship, Quality of Material and satisfactory performance for a period of 18 months from the date of despatch or 12 months from the date of commissioning whichever is earlier.

6.Penalty for breach of contract

BREACH OF CONTRACT

PRICE REDUCTION CLAUSE :

Contractual delivery date for despatches F.O.R. Destination/ F.O.R. Site, the date of delivery shall be the date on which the goods/ material are delivered to nearest destination rail head or owner's warehouse at Site. The time and date of delivery of stores/ material/ equipment as stipulated in the order shall be deemed to be the essence of the contract. In case of delay in execution of the order beyond the date of delivery as stipulated in the order or any extensions sanctioned, BPCL may at its option:

- 1.Accept delayed delivery at prices reduced by a sum equivalent to one half of one percent(1/2%) of the value of any goods not delivered for every week of delay or part thereof, limited to a maximum of 5% of the total order value.
- 2. Cancel the order in part or full and purchase such cancelled quantities from elsewhere on account and at the risk of the vendor, without prejudice to its right under (1) above in respect of goods delivered.

7.Guarante	es
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8.Contract riders (clauses)

Material if rejected shall be replaced free of cost on F.O.R. BPCL Warehouse basis.

The clauses to be included in all the tenders are as given below:

Owner reserves its right to allow Public Sector Enterprises (Central/State), purchase preference as admissible/applicable from time to time under the existing Govt. policy. Purchase preference to a PSE shall be decided based on the price quoted by PSE as compared to L1 Vendor at the time of evaluation of the price bid.

Clause regarding EMD acceptance from NSIC/MSE units

Units registered with National Small Industries Corporation (NSIC) and/or Micro or small Enterprises (MSE) are however, exempted from payment of EMD subject to:

- 1. The unit being registered for the item tendered
- 2. Registration certificate being valid as on date of quotation

The photocopy of the valid NSIC registration certificate/review certificate duly attested by a gazetted officer/notorised and/or Valid MSE registration with any notified body specified by ministry of micro, small and medium enterprises should accompany the bid documents. Failing which such bid will be treated as bid received without EMD and liable to be rejected. Clause regarding purchase preference to Micro and Small Enterprises

Owner reserves its right to allow Micro and Small Enterprises (MSEs) and MSEs owned by Scheduled Caste (SC) or the Scheduled tribe (ST) entrepreneurs, purchase preference as admissible/applicable from time to time under the existing Govt. policy. Purchase preference to a MSE and a MSE owned by SC/ST entrepreneurs shall be decided based on the Net Evaluated Price quoted by the said MSEs as compared to L1 Vendor at the time of evaluation of the price bid. Bidders claiming purchase preference as MSE need to submit the following documents:

- a. Notarized copy of all the pages of the EM-II certificate issued by the appropriate authorities mentioned in the Public procurement policy of MSEs-2012.
- b. Vendors' declaration on a duly notarized Rs.100 stamp paper stating that, in the event of award of contract, all the ordered supplies shall be made from the unit for which MSE certificate has been submitted.

The photocopy of the Valid MSE registration with any notified body specified by ministry of micro, small and medium enterprises should accompany the bid documents. Failing which no price preference will be considered in such cases.

The Net Evaluated Price is the all inclusive delivered price.

Net Evaluated Price = Quoted Basic Price + Excise duty + Freight +local taxes and duties + Octroi Charges and /or entry tax less Cenvat Benefits on Excise

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and Input Tax Credit on VAT.

In case the charges like, freight, Octroi charges and/or entry tax are not indicated explicitly in the bid, BPCL will consider the standard % as deemed fit for estimation.

Criteria for the award of tender quantity to MSE vendors For general items where 20% is applicable

In case bidder is registered as MSE quotes within the price brand of L1+15 percent, such MSE shall also be allowed to supply a portion of the requirement by bringing down their price to L1 price where L1 price is from someone other than a micro and small enterprise. Such MSE shall be allowed to supply 20% of total tendered value.

In case of more than one such MSE qualify as above; the supply of up to 20% shall be shared proportionately. Further, if L1 happens to be an MSE, the entire quantity (100%) shall be awarded to MSE vendor without any share to other MSE vendors.

9.Other contractual stipulations

The Bidder shall be agreeable to accepting part order at Owner's option without any limitation whatsoever and also acceptable to repeat order at the same unit prices, terms and conditions.

Important Notice

ımportan	t Nouce
Sr.No	Description
001	Quotation received after due date will not be entertained
002	Your quotation must specify exact amount or percentage discount, Excise, S.T., Charges, Transport, Packing & forwarding, Octroi, etc. as applicable.
003	In case you are unable to quote, kindly send the quotation with a regret for our records. Non-receipt of a regret will adversely affect your vendor rating.
004	No quotation will be accepted without your rubber stamp and signature.
005	Your quotation must be strictly in enclosed envelope indicating Collective RFQ No., RFQ No. and due date.
006	For all future correspondences please mention the vendor code Collective RFQ Number & RFQ Number.
007	Retention Money 10 % shall stand deducted from each and every running bill submitted in the event of contract is awarded.
	LIST OF ENCLOSURES 1. Scope of work

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Tear off Port	ion to be pasted on the en	velope containing offer		
Collective RFQ No.: 1000263024				
Our Reference: RFQ No. : 6000966342 Subject:		Due Date : 27.09.2 Due Time : 14:00:0		
	To, BHARAT PETROLEUM CORPORA: P & CS DEPT .SOUTH BLOCK MAHUL, CHEMBUR, MUMBAI 400074			
Purchase Group : N1(-INSTRUMENT ITEMS			



BHARAT PEROLEUM CORPORATION LIMITED

INTEGRITY PACT

Between

Bharat Petroleum Corporation Limited (BPCL) hereinafter referred to as "The Principal".

And

hereinafter referred to as "The Bidder/Contractor/Supplier"

Preamble

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

Section 1 - Commitments of the Principal

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

- a) No employee of the Principal, personally or through family members, will in connection with the tender, or the execution of the contract, demand, take a promise for or accept, for himself/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
- b) The Principal will, during the tender process, treat all Bidders with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential / additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
- c) The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder / Contractor/Supplier

- (1) The Bidder / Contractor/Supplier commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - a) The Bidder / Contractor/Supplier will not directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person, any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange, any advantage of any kind whatsoever during the tender process or during the execution of the contract.

-1-

- b) The Bidder / Contractor/Supplier will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
- c) The Bidder / Contractor/Supplier will not commit any offence under the relevant Anti-Corruption Laws of India; further the Bidder / Contractor/Supplier will not use improperly, for purposes of competition or personal gain, or pass on (o others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d) The Bidder / Contractor/Supplier will, when presenting his bid, disclose any and all payments he has made, is committed to, or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder / Contractor/Supplier will not instigate third persons to commit offences outlined above or be an accessory to such offences.

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

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

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

Section 4 - Compensation for Damages

- (1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Eamest Money Deposit/Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor/Supplier liquidated damages equivalent to Security Deposit / Performance Bank Guarantee.
- (3) The Bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder / Contractor/Supplier can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder /

Contractor/Supplier shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous Transgression

- (1) The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders / Contractors / Suppliers / Subcontractors

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

Section 7 - Punitive Action against violating Bidders / Contractors / Suppliers/Subcontractors

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

Section 8 - Independent External Monitors

- (1) The Principal has appointed competent and credible Independent External Monitors for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
- (3) The Bidder/Contractor/Supplier accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Bidder/Contractor/Supplier. The Bidder/Contractor/Supplier will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to this project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Supplier/ Subcontractor with confidentially.
- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder/Contractor/Supplier. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendation. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the Bidder/Contractor/Supplier to present its case before making its recommendations to the Principal.

- (6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or infimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
- If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (8) The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

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

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

Section 10 - Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Mumbai. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Bidder/Contractor/Supplier is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

K-T Subnoman

Place

Bharat Petroleum Lomoration Limited

For the Bidder/Contractor/ Supplier

Witness 1:(Signature/Name/Address)

Witness 2:(Signature/Name/Address)

Additional Information **Integrity Pact**

- 1) Proforma of Integrity Pact (IP) shall be uploaded by the Bidder/s along with the unpriced bid documents duly signed (or digitally signed in case of e-tender) by the same signatory who is authorized to sign the bid documents. All the pages of the Integrity Pact shall be duly signed. Bidder's failure to upload the IP duly signed (Digitally) along with bid documents shall result in the bid not being considered for further evaluation
- 2) If the Bidder has been disqualified from the tender process prior to the award of the contract in accordance with the provisions of the IP, BPCL shall be entitled to demand & recovered from Bidder Liquidated Damages amount by forfeiting the EMD/Bid Security as per provisions of IP.
- 3) If the contract has been terminated according to the provisions of the IP, or if BPCL is entitled to terminate the contract according to the provisions of the IP, BPCL shall be entitled to demand & recovered from Contractor Liquidated Damages amount by forfeiting the Security Deposit/Performance Bank Guarantee as per provisions of the IP.
- 4) Bidders may raise disputes/complaints, if any, with the nominated Independent External Monitor (IEM). The IEM's name, address & contact number is given below:

Shri Brahm Dutt A-1/8 Safdarjung Enclave New-Delhi 110029

Mob:-0 98719 20282

e-mail ID: dutt.brahm@gmail.com