

**COMMERCIAL AMENDMENT NO. 1**

**TO**

**TENDER DOC. NO.: SG/B269-475-PA-T-8701/23 (RWTP, RO-DMP, CPU & ZLD PLANT)**

**FOR**

**PANIPAT REFINERY EXPANSION PROJECT (P25) (CLIENT: M/S IOCL)**

## COMMERCIAL AMENDMENT NO. 1

RFQ No. /Tender No. SG/B269-475-PA-T-8701/23  
Item /Name of work RWTP, RO-DMP, CPU & ZLD PLANT  
Project PANIPAT REFINERY EXPANSION PROJECT (P25) (Client: M/s IOCL)

The terms, conditions and specifications of Bidding Document stand modified to the extent indicated under column "MODIFICATIONS/ ADDITIONS/ DELETIONS". All other terms & conditions, stipulations, specifications etc. of Bidding Document including Amendments, if any, issued earlier shall remain unaltered.

Sl. No.	Part of Bidding Document	Document Reference	Clause / Item No.	Subject	Modifications/Additions/Deletions
1.	Instructions to Bidder	Instructions to Bidder	19.2	Bid Security	In Cl. No. 19.2, "Scanned copy of ..... be provided." is replaced with following : "Udyam Registration Certificate or any other registration certificate like NSIC, UAM, EM Part-II will be acceptable upto 31.03.2022 in line with Gazette notification no. 2119 ('E) dated 26.06.2020 and subsequent notification No. 2347(E) dtd 16.06.2021 & 278 (E) dtd 19.01.2022. However, post 31.03.2022, instructions issued by Ministry of MSME in this regard shall be applicable. Accordingly, Bidder shall upload the scanned copy of their registration certificate in support of such claims, in the e-procurement website."
2.	Part-I: Commercial Part	Bid Data Sheet (BDS)	14	Evaluation and comparison of bids	The evaluation and comparison of bids shall be carried out as per following:  I. The Total amount quoted shall be calculated / established based on price quoted in the Schedule of Price (SOP) after arithmetic check in line with Clause 35.0 of ITB and SOP Provisions.  II. To arrive at the evaluated price, loading on total quoted price shall be done as follows: a) <i>Total Lumpsum Price quoted by bidder in FORM SP-0</i> b) <i>Loading of GST as per Form SP-3 Part-A on prices for Supply of Indigenous Goods quoted in Form SP-01A</i> c) <i>Loading of Basic Customs Duty (CD), other import duties, SWS</i>

Sl. No.	Part of Bidding Document	Document Reference	Clause / Item No.	Subject	Modifications/Additions/Deletions
					<p>and IGST/ (CGST+SGST), as per Form SP-3 Part-B on Foreign Imported Supplies prices quoted in Form SP-01 B</p> <p>d) Loading of GST as per Form SP-3 Part-C on Supply of services quoted in Form SP-2.</p> <p>e) Charges for 2 years operation &amp; maintenance and PWCAMC quoted in FORM SP-7</p> <p>f) Loading as per Annexure A-X to Special Conditions of Contract considering the guaranteed figure(s) quoted in FORM SP-8.</p> <p>III. Conditional discount, if offered, shall not be considered for evaluation. However, discount furnished in the SOP shall be considered for evaluation &amp; Ordering.</p> <p>IV. Suo moto price change as per clause no. 35.3 of ITB.</p> <p>V. 2 Years O&amp;M spares quoted in FORM <b>SP-6</b> shall not be considered for evaluation</p> <p>VI. PPLC policy and its clauses as per SCC ANNEXURE A-XIII shall be considered for evaluation</p>
3.	Part-I: Commercial Part	General Conditions of Lumpsum Turnkey Contract (GCC)	1.0.31.0, 1.0.55.0, 1.0.60.0, 2.7.3.0, 3.0.1.0, 3.0.2.1, 3.0.2.3, 3.0.3.1 (iii), 3.0.4.1, 3.0.4.3.1, 3.0.5.1, 3.0.6.6, 3.0.8.1, 3.1.1.0, 3.1.1.0 e,	Relevant clause of GCC	The respective clause of GCC stands replaced with revised clause as per document enclosed as Appendix-I to this amendment.

Sl. No.	Part of Bidding Document	Document Reference	Clause / Item No.	Subject	Modifications/Additions/Deletions
			h, m, q (i), 5.0.2.1, 5.3.1.0, 7.0.5.0		
4.	Part-I: Commercial Part	Special Conditions of Contract (Part-A)	19	Mechanisation of Construction Activities and Mobilization of Construction Equipment	<ul style="list-style-type: none"> <li>Clause no. indicated as '19.12' shall be read as '19.1.2'.</li> <li>In Clause 19.1.2, the sentence "OWNER shall provide only the Land on hire basis for the fabrication yard" mentioned in 6th line stands replaced by: "The Land required for setting up Fabrication Yard shall be arranged by Contractor at their-own cost outside the Refinery Premises."</li> </ul>
5.	Part-I: Commercial Part	SCC (Part-A)	21	Tests and Inspection of Works	Following TPI agency is added at Sl. No-21.1-(a)-(ix) of SCC PART-A: ix. M/s IRCLASS SYSTEMS AND SOLUTIONS PRIVATE LIMITED
6.	Part-I: Commercial Part	Special Conditions of LSTK Contract (SCC- Part- B)	2, 3.4	Relevant clause of SCC (Part-B)	The respective clause of SCC (Part-B) stands replaced with revised clause as per document enclosed as Appendix-II to this amendment.
7.	Annexure to Special Conditions of Contract (SCC) Part-B	New Document	Clause no. 4 of Annexur e to SCC Part-B	Appendix-I of Annexure to SCC Part-B	Appendix-I of Annexure to SCC Part-B enclosed with this amendment as Appendix-III forms integral part of Tender Document.
8.	Annexure A-X to SCC]	Loading Criteria for RWTP, RO- DMP, CPU &	-	-	'Loading Criteria for RWTP, RO-DMP, CPU & ZLD PLANT (Plot Plan & Water) [Doc. No. B269-472/475/476-17-44-LC-8701 Rev.0]' enclosed in the Bidding document stands replaced with 'Loading Criteria for RWTP, RO-DMP, CPU & ZLD PLANT (Plot Plan & Water) [Doc. No. B269-472/475/476-17-44-LC-8701 Rev.1]' enclosed as Appendix-IV with this



Sl. No.	Part of Bidding Document	Document Reference	Clause / Item No.	Subject	Modifications/Additions/Deletions
		ZLD PLANT (Plot Plan & Water)			amendment.
9.	Part-II: Price Part	Preamble to Schedule of Prices, BOQ / Price Schedule Format	-	Preamble to Schedule of Prices, BOQ / Price Schedule Format	The Preamble to Schedule of Prices Rev. 1 and BoQ/ Schedule of Price (Form SP-0 to SP-8) i.e. Page 735 of 7166 to 756 of 7166 and excel file of BOQ {Doc. Name BOQ_156658} issued with Bidding Document stand replaced with Preamble to Schedule of Price Rev. 2 and BOQ/ Schedule of Price (Form SP-0 to SP-8) enclosed as Appendix-V to this amendment and been published on the website <a href="https://iocletenders.nic.in">https://iocletenders.nic.in</a> . This revised excel sheet of BoQ/ Schedule of Price shall supersede "BoQ/ Schedule of Price" available in the Bidding Document. The prices must be quoted strictly in this revised BOQ format only. In case Bidder(s) submit/s their prices in earlier revision of BoQ/ Schedule of Price, same shall not be considered and their bid shall be liable for rejection.
10.	Bidding Forms	Form-G		Proforma of Declaration of Black Listing / Holiday Listing	Proforma of Declaration of Black Listing / Holiday Listing (Form-G) enclosed with the Tender document stands replaced with Appendix-VI enclosed with this amendment.

**Note:** Bidder to submit a copy of this Amendment along with enclosures, if any, duly signed & stamped along with Un-Priced Techno-Commercial Bid, as a token of acceptance.

(Signature & Stamp of the Bidder)

Enclosures:

- Appendix-I: LSTK GCC (9 Pages) + High Sea Sales Agreement (2 pages)
- Appendix-II: LSTK SCC (9 Pages)
- Appendix-III of Annexure to Special Conditions of Contract Part-B (3 Pages)
- Appendix-IV: Loading & Penalty Criteria for RWTP, RO-DMP, CPU & ZLD PLANT (Plot Plan & Water) [Doc. No. B269-472/475/476-17-44-LC-8701 Rev.1) (5 Pages)
- Appendix-V: Preamble to Schedule of Price and BOQ/ Schedule of Price (Form SP-0 to SP-8) (14 + 12 Pages)
- Appendix-VI: Proforma of Declaration of Black Listing / Holiday Listing (FORM-G) REV.1(02 Pages)

**LSTK GCC**

**1.0.31.0** “Materials” shall mean all materials, plant, machinery, instruments, components, assemblies, parts, spares and any other items and things whatsoever required for completion of job in LSTK Contract in all respect, and will include the replacement of any defective materials and of any materials damaged, lost, or destroyed during transit, storage, fabrication, erection, installation, testing, pre-commissioning, commissioning or otherwise upto and until issue of the Completion Certificate, and shall also include all construction materials.

**1.0.55.0** “Supply” or “Supplies” shall mean the totality of the materials by expression or implication required to be supplied by the CONTRACTOR for execution of jobs within the Scope of Supplies.

**1.0.60.0** “Utilities” shall mean water (including raw water and treated water of all kinds), steam, gases of all kinds, power, electricity, gas and other sources of energy, lubricants, fuels, chemicals of all types (except catalysts and adsorbents forming part of the Plant or Process) whatsoever required for or incidental to the performance, testing or pre-commissioning of the works.

**2.7.3.0** Upon Cancellation of the Contract, the OWNER shall take over from the CONTRACTOR, the approved materials supplied by the CONTRACTOR and lying at the job site on the date of receipt of notice of cancellation by the CONTRACTOR, and the decision of the Engineer-in-Charge as to the approved materials lying at the site on the date of cancellation and the quantities thereof shall be final and binding upon the CONTRACTOR.

**3.0.1.0** Notwithstanding anything to the contrary in the Contract Documents expressed or implied, the CONTRACTOR shall be and remain at all times exclusively responsible to Supply all material and provide all, labour, equipment, machinery and facilities and utilities and other items and things whatsoever required for or in connection with the work, including but not limited to those indicated by expression or implication in the job description, Schedule of Rates, the specifications, plans, drawings and/or other Contract documents or howsoever otherwise as shall or may from time to time and at any time be necessary for

execution and the performance of the job under the contract.

### **3.0.2.0 MATERIALS**

3.0.2.1 (a) These General Conditions of Contract shall, on issue of the Letter of Acceptance to the CONTRACTOR, constitute a firm contract for the sale and supply to the OWNER of all materials as determined by the CONTRACTOR within the scope of services to be necessary to establish, commission and operate (so far as concerns mandatory spares) the Plant/Unit at the price of materials specified in the Price Schedule/Form SP-1A and SP-1B. It is hereby clarified that the said contract shall include a contract for the sale and supply within the price of materials (and any recoveries in respect thereof under any policy of insurance) of all materials required for the replacement of any defective materials and any materials lost, damaged or destroyed during transit, storage, fabrication, erection or otherwise prior to the issue of the Completion Certificate.

(b) All materials imported into India shall be consigned either to the OWNER or to the CONTRACTOR as the consignee of the materials.

(c) If the material is consigned to the OWNER, the title to the materials shall vest in the OWNER as soon as the materials are placed free on board (FOB) for consignment or ultimate consignment to India for delivery to the OWNER.

(d) If the material is consigned to the CONTRACTOR, the material shall be transferred by the CONTRACTOR to the OWNER by way of High Seas Sale, by endorsement of the Bill of Lading/Airway Bill/Consignment Note by the CONTRACTOR in favour of and in the name of the OWNER. Title of the material in such case shall pass to the OWNER on endorsement of the Bill of Lading /Airway Bill in favour of the OWNER. In the absence of any separate or specific High Seas Sales Contract covering such material these General Conditions of Contract shall operate as a contract for the High Seas Sale of such material.

**3.0.2.3** The CONTRACTOR shall be responsible at his own cost and initiative within the scope of services, to take delivery of the materials from the port of delivery in India in respect of imported materials and from the factory or warehouse or other place(s) of delivery in respect of indigenous materials and to transport these to the CONTRACTOR's stockpiles, godowns or other places of

storage approved by the Engineer-in-Charge, and to transport the same from said godowns or place(s) of storage to the work site.

**3.0.3.1 (iii)** All materials shall be taken delivery of, held, stored and utilised by the CONTRACTOR as Trustee of the OWNER, and delivery of the material to the CONTRACTOR shall constitute an entrustment thereof to the CONTRACTOR, with the intent that any utilisation, application or disposal thereof by the CONTRACTOR otherwise than for contractual obligation in terms of the contract shall constitute a breach of trust by the CONTRACTOR.

**3.0.4.1** The CONTRACTOR shall within 56 (Fifty Six) days from the date of acceptance of bid, furnish to the OWNER a detailed priced Bill of Materials specifying the materials, which on preliminary determination made by the CONTRACTOR, will be required to be supplied and used in the works in order to execute the job under the LSTK contract and to operate the Plant/Unit (to the extent of the mandatory spares), including any construction materials, and the price(s) thereof within the accepted lumpsum price thereof.

**3.0.4.3.1** The priced Bill of Materials as approved by the OWNER shall constitute the Bill of Materials envisaged in the contract documents. However, no such approval shall, in any manner, absolve the CONTRACTOR of his full responsibility under the contract to sell and supply to the OWNER at and within the price of materials quoted in the Price Schedule, all materials required for the execution and which are required to establish, commission and operate (to the extent of mandatory spares) the Plant/ Unit in accordance with the contract and the specifications, complete in all respects including spares, tools, tackles and testing equipment, so far as included within the scope of supply, whether or not any particular material is actually included within or omitted in the Bill of Materials and whether or not the price thereof is included in the price indicated in the Bill of Materials and whether or not the price thereof is in conformity with the price thereof indicated in the Bill of Materials. The review and approval of the Bill of Materials and the prices therein are intended only for the satisfaction of the OWNER that the priced Bill of Materials, prima-facie covers the materials required to be supplied by the CONTRACTOR within the scope of supply.

**3.0.5.1** The CONTRACTOR shall supply the materials required to be supplied

within the Contractor's scope of supply in accordance with and to meet the requirements in quality, quantity and other particulars of the descriptions, specifications, plans, drawings, designs and other documents applicable thereto, and the CONTRACTOR shall be deemed to have undertaken that all materials selected, procured and supplied by the CONTRACTOR within the scope of supply shall be of the best quality and workmanship and shall be capable of producing the designed and desired results and to perform the designed and desired functions to meet the contractual requirements in all respects for the project.

**3.0.6.6** Notwithstanding that any area(s) or source(s) has/have been suggested by the OWNER to the CONTRACTOR from which any material for execution of job under the contract can be obtained, the CONTRACTOR shall independently satisfy himself of the suitability, accessibility and sufficiency of the source(s) of supply suggested by the OWNER and suitability of the material available from such source(s) with the intent that any suggestion as aforesaid shall not anyway relieve the CONTRACTOR of his full liability in respect of the suitability and quality of the material(s) obtained from said source(s) and the Contractor shall obtain material(s) therefrom and use the same for the awarded job(s) entirely at his own risks and costs in all respects, with the intent that any such suggestion by the Owner shall only be by way of assistance to the Contractor and shall not entail any legal responsibility or liability upon the OWNER.

**3.0.8.1** Except as specifically provided to the contrary in the Special Conditions of Contract the CONTRACTOR shall within the price of materials and scope of supply be liable to pay and bear any and all duties, taxes, levies and cesses lawfully payable on any goods, equipment or materials imported for execution of the awarded job(s) and on materials sold and supplied to the OWNER pursuant to the Contract.

**3.1.1.0** The OWNER may supply within its scope of supply specific equipment and/or materials. The supply of equipment and materials to the CONTRACTOR shall be on the following terms and conditions:

e) The equipment and/or material(s) supplied or procured by the OWNER shall be utilized by the CONTRACTOR only for the execution of the job and even so shall not (unless specifically authorized by the OWNER in this behalf) be utilized for

manufacturing any item(s) which can be obtained in finished form from standard manufactures.

h) All equipment and materials supplied by the OWNER shall be taken delivery of, held, stored, and utilized by the CONTRACTOR as trustee of the OWNER, and delivery of material to the CONTRACTOR shall constitute an entrustment thereof by the OWNER to the CONTRACTOR, with the intent that any utilization, application or disposal thereof by the CONTRACTOR otherwise than for job in terms hereof shall constitute a breach of trust and breach of contract by the CONTRACTOR.

m) The CONTRACTOR shall use the equipment and materials supplied by the OWNER carefully and judiciously with no wastage or the minimum possible wastage, wherever some wastage is inevitable or unavoidable, in any case within the wastage limit, if any, specified by the OWNER in respect of any such material(s). For any excess wastage or generation of scrap or misuse or injudicious, careless or wrong use of OWNER supplied materials, as to all of which the decision of the Engineer-in-Charge shall be final and binding on the CONTRACTOR, the CONTRACTOR shall be bound to replace the material lost by such excess, misuse or injudicious, careless or wrong use with material of equivalent quantity and grade acceptable to the OWNER within the time limit specified by the OWNER and where this is not done or is not possible, practicable or advisable to be done, in the opinion of the OWNER, which shall be final and binding on the CONTRACTOR, the OWNER shall be compensated by the CONTRACTOR for the replacement costs at site thereof plus the costs of procurement at 15% (fifteen percent) of the assessed replacement cost thereof. Failing remittance of this amount by the CONTRACTOR to the OWNER within a week of demand made by the OWNER, the OWNER shall be entitled to recover/adjust the amount demanded from any money due from the OWNER to the CONTRACTOR and/or from any Security or any other deposits of the CONTRACTOR lying with the OWNER under this and/or any other contract, without any further notice to the CONTRACTOR. The decision of the OWNER in respect of the actions contemplated in this clause shall be final and binding on the CONTRACTOR.

q) The OWNER shall not be responsible for any delay in the supply of any such equipment and/or materials supplied or procured or agreed to be supplied or

procured by the OWNER, and no such delay or failure shall in any way render the OWNER liable for any claim for damages or compensation by the CONTRACTOR notwithstanding that an increase in the time of performance of the contract is involved by virtue of such delay and notwithstanding any labour, machinery or equipment brought upon or to the job site by the CONTRACTOR for the performance of the work being rendered idle by such delay or failure, PROVIDED that:

- (i) If in spite of best efforts on the part of the CONTRACTOR to coordinate and expedite deliveries of any material or equipment to be used for the performance of the awarded work(s) the CONTRACTOR has been unable to persuade or otherwise to get the manufacturer, supplier or transporter thereof to agree to supply or deliver the material or equipment within the date(s) of the anticipated requirement of such equipment or material by the CONTRACTOR to match the actual requirement of such material with the progress of work achieved by the CONTRACTOR, the CONTRACTOR shall give written notice thereof to the Engineer-in-Charge and to the OWNER at least 15 (fifteen) days prior to the requirement specifying the material or equipment involved, the manufacturer, supplier or transporter involved, the steps which the CONTRACTOR has taken to expedite supply or delivery of such material or equipment, and the anticipated date of actual requirement of such material or equipment for the execution and to match the actual progress of the work by the CONTRACTOR, so that Engineer-in-Charge and/or OWNER may also intervene to expedite delivery of such material(s) or equipment. Such intervention shall be without prejudice to the CONTRACTOR's obligation(s) to timely provide such material or equipment, nor shall it entitle the CONTRACTOR to an extension of time for Mechanical Completion/Final Completion of the works or any activity in relation thereto.

**5.0.2.1** No rejected material, component or sub-assembly shall be used or reused for manufacture, production or fabrication of any material(s) intended for ~~intended for~~ awarded job.

**5.3.1.0** After the final tests have been successfully completed in respect of all the works envisaged in the contract, or after the UNIT has been Mechanically

completed, as the case may be, the CONTRACTOR shall clear the job site of all scaffolding, wiring, pipes, surplus materials, CONTRACTOR's labour, equipment and machinery and shall demolish, dismantle and remove all CONTRACTOR's site offices and quarters and other temporary works, structure and constructions and other items and things whatsoever brought upon or erected at the job site or on any land allotted to the CONTRACTOR by the OWNER and not used in the awarded job(s) and shall remove all rubbish from the job site and the land allotted to the CONTRACTOR and shall clear, level and dress the job site and said land to the satisfaction of the Engineer-in-Charge and shall put the OWNER in undisputed custody and possession of the job site and all land allotted by the OWNER to the CONTRACTOR and unless the CONTRACTOR shall have fulfilled the provisions of the clause, the works shall not be deemed to have been completed and the Completion Certificate shall not be granted.

**7.0.5.0** Within 28 (Twenty Eight) days of completion of the inspection/measurements, the CONTRACTOR shall clear the job site(s) made available by the OWNER to the CONTRACTOR of all surplus materials, CONTRACTOR's labour, equipment and machinery and shall demolish, dismantle and remove such temporary works, structure and construction and other items and things brought upon or erected at the job site(s) and not incorporated in the awarded job(s) and shall remove all rubbish from the job site(s) and shall clear, dress and restore the job site(s) to the satisfaction of the Engineer-in-Charge and shall put the OWNER in undisputed custody and possession thereof and of the entire works.



### HIGH SEAS SALES AGREEMENT

This High Seas Sales Agreement is made on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ between \_\_\_\_\_ (name), \_\_\_\_\_ (address) (hereinafter referred to as "Seller") and Indian Oil Corporation Ltd. having Corporate Office/Refinery Headquarters/Office at \_\_\_\_\_ (address) (hereinafter referred to as "Buyer") pursuant to and under the Umbrella of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ between the Buyer and Seller (hereinafter referred to as the "Umbrella Contract") for High Seas Sale of the following specific consignments pursuant to the Umbrella Agreement:

1.	Description of Goods covered by this High Sea Sales Agreement	As mentioned in Schedule Annexed.
2.	Foreign Supplier	(Name and Address)
3.	Country of Origin of Goods	_____
4.	Details of Invoice of Foreign Supplier	Invoice Number _____ dated _____
5.	Details of Import Value (CIF) as per Invoice of Foreign Supplier	a) FOB Value USD _____ equivalent to Rs. _____ b) Freight Charges Rs. _____ c) Insurance Charges Rs. _____ CIF Value (a+b+c) = Rs. _____
6.	Bill of Lading/ Airway Bill No. and Date	Bill of Lading/ Airway Bill No. _____ dated _____, 20__
7.	Vessel/ Air Carrier's Name & IMO No.	Name _____ IMO Number _____
8.	Sellers Invoice on Buyer in respect of the Goods	Invoice Number _____ dated _____, 20__
9.	Value of Sellers Invoice in Indian Rupees	Rs. _____

10.	Load Port of Consignment/Goods	_____
11.	Port of Discharge of Consignment/Goods	_____
12.	Transfer of Title	All the rights and title of ownership in the above consignment/ goods will be transferred by Seller to Buyer by way of High Seas Sale by endorsing the above-mentioned Bill of Lading/ Airway Bill in favour of Buyer.
13.	Other Terms and Conditions	As per the Umbrella Agreement
14.	Obligation to return Exchange Control of Bill of Entry	Buyer shall arrange for delivery of Exchange Control copy of Bill of Entry to Seller after clearance of the goods through Customs in India.
15.	Amendment of Agreement	Any amendment or supplement to this High Sea Sales Agreement is Valid only if agreed between Seller and Buyer in writing and signed by authorised representatives of both parties.

In Witness whereof the Seller and the Buyer hereto have set their respective hands on the date mentioned above.

For Seller

For IOC Ltd.

Name:

Name:

Place:

Place:

**LSTK SCC****2. PRICE AND TAXES**

2.1 The entire Scope of Work under this Contract has been classified as Supply of materials and Services under GST and the place of supply of services shall be deemed to be the locations of the job/work site of the Unit as mentioned elsewhere in the Bidding Documents. The CONTRACTOR is required to accordingly take GST registration for supply of Services and for subsequent invoicing for services to the OWNER under the Contract.

2.1.1 Without prejudice to the CONTRACTOR's obligations in respect of materials under the General Conditions of Contract and these Special Conditions of Contract, for the purposes of clarity and price segregation, the OWNER shall within the umbrella of the Contract place a separate Purchase Order on the CONTRACTOR for the High Seas Sale and Supply of imported goods/materials at a total price not exceeding the total lumpsum price of imported materials indicated in Form SP-01B.

2.2 Except for applicable price discount and price escalation (if any) specifically provided for in the contract documents, the quoted price(s) shall remain firm and fixed, and valid until completion of the Contract, irrespective of the time taken for Mechanical Completion and/or Commissioning of the Work(s)/Unit, and the CONTRACTOR shall not be entitled to claim and waives and relinquishes any right to claim compensation or damages or escalation for extended stay on any ground.

2.3 The OWNER shall reimburse the CONTRACTOR the amount of taxes calculated as per the rate indicated in Part-A and Part-C of Form SP-03 upto the rate thereof indicated in Part-A and Part-C of Form SP-03 respectively, increased or reduced by any increase or reduction in the applicable rate of IGST or SGST or CGST after the last date for submission of the final price bids and upto the date of relative supply or invoice. In addition, the OWNER shall reimburse and bear customs duties (BCD, SWS and IGST) on import of materials title whereof vests in or is transferred to the OWNER subject to the limit of the amount calculated as per the rate indicated in Part-B of Form SP-03, increased or reduced by any increase or reduction in the applicable rate(s) of customs duty(ies) after the last date for submission of the final price bids.

2.4 Except as indicated in Paragraph 2.3 above, no other taxes and duties or levies shall be eligible for reimbursement or paid or borne by the OWNER unless specifically stated to the contrary elsewhere in the Tender documents.

### 3.4 IMPORTED MATERIALS

**3.4.1** The OWNER is intending to avail of the benefit of the Manufacturing and Other Operations in Warehouse Regulations (MOOWR, 2019) in respect of materials imported into India. Under MOOWR, 2019, Capital Goods can be imported into India without payment of BCD, SWS and IGST and these taxes and duties (BCD, SWS and IGST) stand deferred till the time that the imported Capital Goods are cleared for home consumption.

**3.4.2** The OWNER, however, recognizes that for a variety of reasons, including space constraints in bonded warehouse at construction/ Unit site, it may not be possible to clear all the imported goods under bond by filing Into Bond Warehouse Bill of Entry, and that some imported goods/materials may have to be imported against Bill of Entry for Home Consumption on payment of customs duties.

**3.4.3** All the consignments of imported materials title whereof vests in or is transferred to the OWNER shall be cleared by the CONTRACTOR from customs under the GSTN/ IEC Code of the OWNER as the importer of the goods by filing Into Bond Warehouse Bill of Entry under MOOWR, 2019 or Bill of Entry for Home Consumption, as directed by the OWNER, and the CONTRACTOR shall for the purpose undertake and perform all services and formalities necessary for clearance of the goods/ materials for Home Consumption or under bond from customs, as the case may be. Subject to the provisions hereinafter appearing, the OWNER as the importer shall be responsible to re-imburse to the CONTRACTOR Customs Duties (BCD, SWS and IGST) on such imported materials cleared for home consumption, and shall be responsible to pay and bear when payable, the customs duties payable on imported materials cleared by filing Into Bond Warehouse Bill of Entry. The CONTRACTOR shall on behalf of the OWNER and for the benefit of the OWNER within the scope of services cause to be prepared for the signature of the OWNER all documents required for the customs clearance of the goods/ materials under Bill of Entry for home consumption or under Into Bond Warehouse Bill of Entry

pursuant to the MOOWR, 2019, as the case may be, and shall do, undertake and complete all services and formalities required for clearance of the goods/materials under Bill of Entry for Home Consumption or under the Into Bond Warehouse Bill of Entry, as the case may be, and thereafter shall lift, load, transport and deliver the goods/materials to the Into Bond Warehouse/Bonded Warehouse at construction/Unit site in compliance with the MOOWR, 2019, or otherwise deliver the customs cleared goods to the job site/site of Unit.

**3.4.4** The CONTRACTOR shall within 7 (seven) days of dispatch/ shipment of any imported goods/materials title whereof vests in or is transferred or intended to be transferred to the OWNER forward to the OWNER the Supplier's/ Vendor's Invoice (in line with approved billing breakup of the materials), Bill of Lading/Airway Bill, package wise Packing List, Certificate of Origin and other documents relating to the identification of the materials necessary for the customs classification and the clearance of the goods through Customs under Into Bond Warehouse Bill of Entry or Bill of Entry for Home Consumption, as the case may be. The CONTRACTOR shall be fully responsible for Port and Customs clearance including stevedoring, handling, unloading, loading and storage in bonded warehouse or otherwise at or about the port, and for satisfying all Port and Customs formalities for the clearance of the goods/materials, including preparation of the relevant Bill(s) of Entry and other documents and formalities required for import of the goods into India and/or clearance of the goods through Customs. The CONTRACTOR shall also be fully responsible for and shall bear the charges arising out of any delay, penalty, demurrage, and other charges upto and relating to the customs clearance of the goods/materials and for lifting the imported goods/materials from the docks, port and/or bonded warehouse at or about the port.

**3.4.5** The CONTRACTOR shall not clear any construction material/ equipment which is not intended for supply in the Project/Unit in the IEC of the OWNER. Bill(s) of Entry in respect of such material/equipment shall be filed in the name of CONTRACTOR and shall not be part of MOOWR, 2019 or any customs clearance on behalf of the OWNER, and shall be at sole cost and responsibility of the CONTRACTOR in all respects.

**3.4.6** If the CONTRACTOR intends to source import of goods title whereof vests in or is transferred to or is intended to be transferred to the OWNER from a country with which India has a Free Trade Agreement or a Comprehensive Economic Partnership Agreement or any such Agreement or Treaty, or under Generalized System of Preference (GSP), the

CONTRACTOR shall do so only after informing the OWNER. In such event, the CONTRACTOR shall satisfy and ensure compliance of all laws and regulations related to such imports under Into Bond Warehouse Bill(s) of Entry or under Bill(s) of Entry for home consumption.

**3.4.7** The CONTRACTOR shall provide the OWNER with all documents necessary for the OWNER to claim Input Tax credit (ITC) under GST as claimed in the GST invoice. Should the CONTRACTOR fail to provide any such document(s) resulting in a shortfall in the ITC to the OWNER, such shortfall shall be made good by the CONTRACTOR, and shall be deductible without prejudice to any other mode of recovery from the Running Account or other bills or payments to the CONTRACTOR.

**3.4.8** The CONTRACTOR shall appoint a Customs House Clearing Agent of good standing.

**3.4.9** (a) EPCG/Post Export EPCG or Project Import Benefit or any other such Scheme or Benefit whereunder the Owner is entitled to import goods at nil or concessional rate of Custom Duty with export or other obligations on the OWNER is not presently envisaged. However, if any time prior to the import of goods/materials under the contract, the OWNER opts to avail of the benefit of EPCG / post export EPCG or Project Import benefit or any other such Scheme or Benefit, this shall be communicated to the CONTRACTOR and the CONTRACTOR shall be bound to perform all services and provide the OWNER with all assistance at the time of import of the goods/ materials to enable customs clearance of the goods/materials under Into Bond Warehouse Bill of Entry or Bill of Entry for Home Consumption and payment of nil or concessional rate of duty under the chosen Project Scheme or Benefit when cleared from customs or from bonded warehouse for home consumption.

(b) If the OWNER opts to avail of the benefits of EPCG/Post export EPCG, EPCG/Post export EPCG License shall be provided by the OWNER to the CONTRACTOR, and customs clearance shall be done under Indian Oil's Import Export Code after endorsement of EPCG License number in the relevant Bill of Entry. In such event, the rate of Customs Duties indicated in Part-B of Form SP-03 shall stand reduced by the amount of the resultant reduction in the Customs Duties payable or notionally payable, as the case may be.

**3.4.10** The following shall be applicable with respect to issue of Essentiality Certificate and

imports against EPCG/post export EPCG and other special License(s):

(a) The Essentiality Certificate (EC) for imported goods/ materials consigned to the OWNER shall be issued by the OWNER to the CONTRACTOR for value not exceeding the CIF value quoted in Form SP-01B.

(b) The OWNER shall not be obliged to provide the documents required to obtain the Essentiality Certificate or Special License(s), as the case may be, for materials consigned to the CONTRACTOR title whereof does not vest in nor is intended to be transferred to the OWNER or to any Supplier for use in fabrication, and for materials imported by indigenous Sub-contractors.

(c) In order to enable the OWNER to obtain the Essentiality Certificate or other applicable Special License(s) from the concerned authorities, the CONTRACTOR shall furnish to the OWNER and CONSULTANT the required particulars (e.g., Description of Materials, Quantity, Value, Vendor particulars, Purchase Order particulars, Port of Discharge, etc.) at least 2 months prior to the expected arrival of relative materials at Indian Port. The OWNER does not assume any responsibility or liability for any delay in timely issue of Essentiality Certificate or EPCG or other Special License(s) covering the materials imported into India. However, where OWNER fails to provide the Essentiality Certificate to the Contractor for reasons not attributable to the CONTRACTOR, the CONTRACTOR shall make a request to the OWNER to permit clearance of goods against Bill of Entry for Home Consumption on basis that merit rate of duty will be payable on the clearance of the goods for home consumption, in order to avoid any delay in the execution of the Project, and the OWNER shall reimburse the CONTRACTOR the merit rate of duty(ies) paid on the clearance of such goods.

(d) The CONTRACTOR shall be responsible to register the import License/Essentiality Certificate with Customs Authorities at the Port of Import, and to answer and sort out queries (if any) raised by Customs Authorities with regard to any import(s). All the services and facilitation shall be provided by CONTRACTOR including Into Bond process with Customs.

**3.4.11** Irrespective of the provisions with regard to any claim for insurance in respect thereof, the CONTRACTOR shall at its own cost and initiative arrange for the supply and delivery upto site of work/Unit materials required to be imported into India for the purpose of replacing

defective materials or materials damaged or destroyed or lost during transit, storage, fabrication, erection, testing, pre-commissioning, commissioning or otherwise up to and until issue of the Completion Certificate. The Essentiality Certificate or Special License(s) required for the purpose shall also be provided by the OWNER in accordance with the provisions hereof foregoing, provided that the OWNER shall not pay nor shall be liable to pay any customs or customs related duties on any such imported materials which are re-imported after repair or are imported in replacement of goods/materials previously imported either under Into Bond Warehouse Bill of Entry pursuant hereto or under Bill of Entry for Home Consumption. The customs duties (BCD, SWS and IGST) on such repaired or replaced goods/materials shall be wholly paid and borne by the CONTRACTOR within the price of materials quoted in Form SP-01B, and Bill of Entry for Home Consumption shall be filed at the time of the import of such replaced goods/ materials.

**3.4.12 (a)** On Mechanical Completion of the Unit, the CONTRACTOR shall undertake a reconciliation and accounting of the materials imported with the materials incorporated in the Unit/Works, and of the surpluses and scrap/wastage. Such reconciliation shall be a pre-condition to the release of any payment against the Final Bill and / or release of any Bank Guarantee(s) furnished by way of security deposit to the OWNER.

(b) If for any cause the CONTRACTOR is unable to reconcile and account for the imported materials as envisaged above or to complete such reconciliation of imported materials before the payment of the Final Bill to the CONTRACTOR, the CONTRACTOR shall submit a suitable bank guarantee in a format and from a bank in India (including the Indian branch of a foreign bank) acceptable to the OWNER for an amount determined by the OWNER in consultation with the CONTRACTOR to secure the OWNER against any claims by the Customs or other concerned Authority for duty or penalty on any un-reconciled material imported by or in the name of the OWNER under the Contract and remaining un-reconciled or unaccounted for. Release of payment against the Final Bill shall be subject to the CONTRACTOR furnishing such bank guarantee. The said bank guarantee shall be valid for a period of one (1) year and shall be renewed thereafter until reconciliation with the Customs Authority of the imports under the Contract and release of the Bond submitted in this behalf by the OWNER to the Customs Authorities. Further, if the un-reconciled value of the imported materials and penalties leviable thereon is greater than the amount payable on the Final Bill, the release of the Bank Guarantee(s) submitted by the CONTRACTOR towards Security Deposit shall also be subject



to the CONTRACTOR having furnished to the OWNER the said Bank Guarantee.

(c) Notwithstanding the provisions set forth herein above, after undertaking a materials reconciliation of surplus materials as set forth in Clause 5.3.2.0 (vi) of the General Conditions of Contract, the CONTRACTOR shall within the scope of services, with the approval of the Engineer-in-Charge, properly store the surplus materials and usable or saleable scrap, and clear away and remove promptly from the Site any wreckage, rubbish or unusable or unsaleable scrap, and dispose of the same at the cost of the CONTRACTOR.

**3.4.13** From the time that the imported material(s)/goods come into custody of the CONTRACTOR pursuant to this Contract, such goods/materials shall be deemed to be Owner supplied materials supplied to the CONTRACTOR under bond or trust, to which all applicable provisions relating to materials under the General Conditions of Contract shall ipso facto apply.

**3.4.14** Without prejudice to the CONTRACTOR's obligations with respect to materials under the Contract, the OWNER shall arrange for and take out and maintain an All-Risk Marine cum Erection Insurance Policy covering any loss of or damage to materials title whereof vests in or is transferred to the OWNER during ocean, land or air transportation, storage, erection, testing and commissioning of the Project/Unit.

#### **3.4.15 EVALUATION OF BIDS**

**3.4.15.1** The price bids shall be evaluated by the OWNER taking into account the total price and taxes quoted in SP Forms as mentioned below and/or elsewhere in the Tender documents.

**3.4.15.2** In order to ensure that the CONTRACTOR does not derive any undue benefit in the evaluation of its bid with regard to the taxes and duties quoted by the CONTRACTOR in Form SP-03, the following stipulations shall apply with regard to the taxes and duties quoted by the CONTRACTOR in Form SP-03:

(i) The total amount of SGST and CGST invoiced or claimed by the CONTRACTOR from the OWNER with respect to the indigenous supply of goods/materials under the contract shall be limited to the total amount of SGST and CGST calculated as per the rate indicated in Part-A of Form SP-03, and the OWNER's liability to reimburse the CONTRACTOR such taxes shall be

limited to the total amount of such taxes calculated as per the rate indicated in Part-A of Form SP-03 as increased or reduced for any increase or reduction in the applicable rate(s) of such taxes after the last date of submission of the final price bids and upto the date of delivery of relative materials. The CONTRACTOR shall pay and bear any SGST and/or CGST payable by the CONTRACTOR in excess thereof. If on any accounting, whether after preparation of the Final Bill or otherwise, it is found that the CONTRACTOR has been paid SGST & CGST in excess of the total amount thereof as calculated as per the rate indicated in Part-A of Form SP-03, increased or reduced as stated above in respect of any increase or reduction in the rate of such taxes subsequent to the last date for final price bids and upto the date of delivery of relative materials, the CONTRACTOR shall forthwith refund to the OWNER such excess and failing such payment the OWNER may, without prejudice to any other mode of recovery available to the OWNER, recover such excess from any monies due to the CONTRACTOR under this or any other contract, or from the Security Deposit held under this or any other contract irrespective of whether the Security Deposit is held by way of Bank Guarantee or in any other form.

(ii) If the total customs duties (BCD, SWS and IGST) paid or notionally payable on the import of goods/materials into India exceeds the total value thereof calculated as per the rate indicated by the CONTRACTOR in Part-B of Form SP-03 as increased or reduced for any increase or reduction in the applicable rate(s) of BCD, SWS and/or IGST after the last date of submission of the final price bids upto the date of relative import(s), the CONTRACTOR shall pay and bear and/or reimburse to the OWNER such excess customs duties (BCD, SWS and/or IGST). For this purpose, the customs duties (BCD, SWS and IGST) paid on imported goods/materials cleared through customs on a Bill of Entry for Home Consumption shall be calculated on the basis of the customs duties actually paid thereon, while customs duties on goods/materials imported into India and cleared through customs by filing Into Bond Warehouse Bill of Entry shall be notionally calculated on the basis of the duties notionally payable on such goods/materials based on the classification given in respect of such goods/materials in the Into Bond Warehouse Bill of Entry. If on any accounting, whether after presentation of the Final Bill or otherwise, it is found by the OWNER that the customs duty paid on goods/materials imported into India and cleared through customs against Bill of Entry for Home Consumption and the customs duties notionally calculated as above in respect of goods/materials imported into India and cleared through customs against Into Bond Warehouse Bill of Entry is more than the total of the customs duties (BCD, SWS and IGST) calculated as per the rate indicated in Part-B of Form SP-03, increased or reduced as stated above for any increase in the rate(s) of BCD, SWS

and/or IGST after the last date of submission of the final price bids and upto the date of relative import, the excess shall be paid forthwith by the CONTRACTOR to the OWNER, and failing such payment, the OWNER may, without prejudice to any other mode of recovery available to the OWNER, recover such excess from any monies due to the CONTRACTOR under this or any other contract or the Security Deposit held under this or any other contract irrespective of whether the Security Deposit is held in the form of Bank Guarantee or in any other form.

(iii) The payment or reimbursement of CGST and SGST by the OWNER on the supply of services (including for services by foreign CONTRACTOR or foreign Consortium member or foreign JV partner to be paid for in foreign currency) under the contract shall be limited to the GST calculated as per the rate indicated by the CONTRACTOR in Part-C of Form SP-03 as increased or reduced by any increase or reduction in the applicable GST rate(s) after the last date for submission of the final price bids upto the date of Invoice of relative service(s). The Contractor shall pay and bear any GST payable on the supply of services under the contract in excess of the total amount of GST payable for the services calculated as per the rate indicated in Part-C of Form SP-03, after adjustment of any increase or reduction in the rate of GST as aforesaid after the last date of submission of final price bids and upto the date of invoice for relative service(s). If on accounting after presentation of the Final Bill or otherwise, it is found that the OWNER has paid and/or reimbursed the CONTRACTOR GST on services in excess of the total amount calculated as per the rate indicated in Part-C of Form SP-03, as increased or reduced by any increase or reduction in the applicable rate(s) of GST after the last date for submission of the final price bids and upto the date of invoice, the CONTRACTOR shall forthwith refund to the OWNER such excess, failing which the OWNER may, without any prejudice to any other right of recovery available to the OWNER recover such excess from any payments due to the CONTRACTOR under this or any other contract or from the Security Deposit held under this or under any other contract irrespective of whether such Security Deposit is in the form of Bank Guarantee or in any other form.

3.4.16 Notwithstanding anything contained in forgoing clause 2 and clause 3.4, if there is an increase in the rate of taxes and duties and the financial implication arises beyond the contractual completion period ("Relevant Date" as described in 8.1.4.0 (i) of LSTK GCC), Owner shall reimburse the same, if the increase in rate of taxes and duties is entitled for tax credit to the Owner. In other cases, Contractor shall bear the increase in the rates of taxes and duties.

## **APPENDIX-III**

## **1. Risk Coverage**

- The risk coverage under the policy shall commence from the date and the moment goods/consignments are lifted, mechanically or manually from anywhere in India/ abroad for loading on to the transport (All modes included) and remain in force during loading transit up to the site of erection, unloading and storage at site and intentional storage at any Indian sea/ Airport or port city for bonding and/ or other allocation and distribution to project site/ fabricators. Such intentional storage shall also be covered at offsite storage locations anywhere in India for storage/ storage cum fabrication.
- However, value for such intermediate storage shall not exceed 10% of the project value declared for this automatic cover.
- It shall also remain in force during transportation of items/ dismantled items to and from vendor's work including all risk in course of repair/ reconditioning work at vendor's workshop, transportation from vendor's and supplier's work and warehouse to intermediate site, site stores, handling shifting of goods/consignments, pre-assembly for the purpose of erection, erection, testing and commissioning and until completion of Erection, Testing, all other pre commissioning activities of the plant, Commissioning and Trial Operation of all connected systems in respect of equipment covered and commissioning.
- The risk coverage shall continue till successful commissioning/testing of the project, up to the stabilized load at which the plant is taken over by the principal so that same facilities will be migrated to Corporate Package Policy of IOCL. This is to ensure that at no point of time the facility/facilities remain uninsured.

## **2. Parties whose interests are insured**

- Principal Beneficiary: Indian Oil Corporation Limited (IOCL) and their Subsidiaries and JV's in India.
- Executing Agencies: Contractors and their sub-contractors.

## **3. Risks at site during storage/erection Exceptions (i.e. which are not covered):**

- War, invasion, act of foreign enemy, hostilities or war like operations (whether war be declared or not), civil war, rebellion, revolution, insurrection, mutiny, civil commotion, military, or usurped power, martial law, conspiracy, confiscation, commandeering a group of malicious persons or persons acting on behalf of or in connection with any political organization, requisition or destruction or damage by order of any government de jure or de facto or by any public, municipal or local authority.
- Nuclear reaction, nuclear radiation or radioactive contamination. iii. Willful act or willful negligence of the Insured or of his responsible representative.
- Note: Needless to add, such act has to be "gross" and at the decision making level. The onus of proof shall be on the successful bidder.

#### 4. Add-on Covers

1. PER BOTTOM LIMIT / PER SENDING LIMIT FOR INLAND/ IMPORT: Rs. 100 crores
2. Clearance and Removal of debris: 10% of the loss amount subject to maximum of INR 150,000,000
3. Escalation: 20% of the Policy Sum Insured
4. Expediting Expenses: 15% of the net claim amount subject to maximum amount of INR 100,000,000
5. Additional Customs Duty: INR 100,000,000
6. Waiver of Subrogation
7. Surrounding Property: INR 200,000,000
8. Intermediate Storage at Fabricator's workshop: Intermediate Storage at Fabricator's workshop for INR 500,000,000 any one accident and in aggregate
9. 72 Hours Clause
10. Loss minimization Expenses: INR 100,000,000
11. Automatic Restatement Clause: 10% of the Policy Sum Insured subject to maximum of INR 300,000,000 as part of basic cover
12. Professional Fees clause (0.25% of the Sum Insured subject to INR 50,000,000)
13. 50/50 clause:
14. Waiver of Contribution clause
15. Third party Liability: INR 100,000,000 for one accident and INR 250,000,000 for all accidents combined
16. Fragile Items: Rs. 2 crs in each event and in aggregate as part of the basic cover.
17. Cover for loss or Riot, Strike, Malicious Damage: Subject to a limit of INR 500,000,000
18. Extended Maintenance Cover: twelve months
19. Cover for valuable documents: The liability of the insurers shall not exceed in the aggregate during the policy period an amount of INR 7,500,000.
20. Third Party liability during extended maintenance
21. Damage due to falling Objects
22. Property belonging to or held in the premises of the insured: INR 400,000,000
23. **Design defect for DE-4 for EAR Projects and DE-3 for CAR projects or LEG 2/96**

##### **DE 3 Limited Defective Condition Exclusion**

This policy excludes loss of or damage to and the cost necessary to replace, repair or rectify

- Property Insured which is in a defective condition due to a defect in design, plan, specification, materials, or workmanship of such Property Insured or any part thereof
- Property Insured lost or damaged to enable the replacement, repair or

rectification of Property Insured excluded by (a) above

Exclusion:

(a) above shall not apply to other Property Insured which is free of the defective condition but is damaged in consequence thereof.

For the purpose of the Policy and not merely this Exclusion, the Property Insured shall not be regarded as lost or damaged solely by virtue of the existence of any defect in design, plan, specification, materials, or workmanship in the Property Insured or any part thereof.

**DE 4 Defective Part Exclusion**

This policy excludes loss of or damage to and the cost necessary to replace, repair or rectify

- Any component part or individual item of the Property Insured which is defective in design, plant, specification, materials, or workmanship
- Property Insured lost or damaged to enable the replacement, repair or rectification of Property Insured excluded by (a) above

Exclusion:

(a) above shall not apply to other Property Insured which is free of the defective condition but is damaged in consequence thereof.

For the purpose of the Policy and not merely this Exclusion, the Property Insured shall not be regarded as lost or damaged solely by virtue of the existence of any defect in design, plan, specification, materials, or workmanship in the Property Insured or any part thereof

24. Hydrocarbon processing endorsement: Limit to be defined
25. Inland Transit to cover movement/ transit between one part of site to other part of site including movement from/to off-site storage spanning over public road in between, cover to include loading, unloading: INR 100,000,000 per conveyance.
26. Civil Engineering Works:
27. Multiple insured including non-vitiation clause:
28. Cessation of Work Clause:
29. Cover of temporary structure and content
30. Public Authority Clause: The total liability of the Company under this clause during the currency of the policy shall not exceed INR 100,000,000.
31. Payment on Account
32. Non-Cancellation clause
33. Primary Insurance clause
34. Underground cables and pipes:
35. Piling endorsement
36. Fire-fighting facilities
37. Warranty concerning structures in earthquakes zones
38. Safety measures w.r.t. precipitation, flood and inundation
39. STFI

APPENDIX-IV

# LOADING CRITERIA FOR RWTP/RODMP/ZLDP/CPU

**PROJECT** : PANIPAT REFINERY EXPANSION  
PROJECT (P-25)  
**OWNER** : M/s IOCL  
**LOCATION** : PANIPAT, HARYANA  
**PMC** : M/s ENGINEERS INDIA LIMITED  
**JOB No.** : B269

1	02.03.2022	REVISED & ISSUED WITH AMENDMENT-01	SC/DD	VS/PKG	JKJ
0	08.11.2021	ISSUED WITH BIDS	SC/DD	VS/PKG	JKJ
A	19.10.2021	ISSUED FOR COMMENTS	SC/DD	VS/PKG	JKJ
Rev. No.	Date	Purpose	Prepared by	Checked by	Approved by



## 1.0 SCOPE OF WORK

The scope of work of Raw Water Treatment Plant (RWTP), RO Based Desalination Plant (RODMP), Zero Liquid Discharge Plant (ZLDP), Condensate Polishing Unit (CPU) & Condensate Polishing Unit-PNCP Area (CPU-PNCP) tender shall include Project Management; Residual Process Design & Detailed Engineering; Procurement; Fabrication; Inspection; Supply; Manufacture; Transportation of all equipment/materials to the work site & Storage at site; assembly, erection & installation; Construction and Erection of Civil & Structural, Mechanical, Electrical, Instrumentation & Piping works; Acid /Alkali proof tiling; Painting; Testing; Pre-commissioning, trial run for 30 days before commissioning; commissioning; Training of IOCL's personnel; performance guarantee test run for 72 hours continuous operation in presence of IOCL's & EIL's Representatives; guaranteeing and handing over of RWTP/RODMP/CPU/ZLDP/CPU-PNCP with complete accessories & auxiliaries to the Client on lump sum turnkey basis as per design basis, equipment list, standards, P&IDs, data sheets, drawings, etc., all complete within BIDDER's specified battery limits including supply of spares, chemicals & consumables.

## 2.0 LOADING ON ACCOUNT OF GAURANTEED POWER CONSUMPTION

2.1 The BIDDER shall furnish along with the price offer Guaranteed Shaft Power Consumption in BKW (per pump) for the following pumps (considered under evaluation) at motor terminal as per FORM SP-8 included in Schedule of Price:



**TABLE: 1**

Item No.	Tag No.	Item (Pump Set)	No. of Pumps (Working + Standby) (Note-1)	Reference Document
a.	475-P-102 A/B/C	Filter Feed Pumps-I	3 Nos.(2 W + 1S)	B269-475-17-44-DS-1007
b.	475-P-108 A/B/C	RO-I Cartridge Filter Feed Pumps	3 Nos.(2 W + 1S)	B269-475-17-44-DS-1023
c.	475-P-109 A/B/C/D/E/F	RO-I Feed Pumps (VFD Driven)	6 Nos.(4 W + 1S + 1 Store Standby)	B269-475-17-44-DS-1025
d.	475-P-110 A/B/C/D/E/F	RO-II Feed Pumps (VFD Driven)	6 Nos.(4 W + 1S + 1 Store Standby)	B269-475-17-44-DS-1028
e.	475-P-111 A/B/C/D	RO-III Feed Pumps (VFD Driven)	4 Nos.(2 W + 1S + 1 Store Standby)	B269-475-17-44-DS-1031
f.	475-P-121 A/B/C	RO-IV Feed Pumps (VFD Driven)	3 Nos.(1 W + 1S + 1 Store Standby)	B269-475-17-44-DS-1062
g.	475-P-112 A/B/C/D/E/F/G	MB Feed Pumps	7 Nos.(5 W + 2S)	B269-475-17-44-DS-1036

### Notes:

- Only Operating pumps shall be considered under evaluation.
- For power consumption guarantee of the pumps, BIDDER to refer the datasheet as indicated in above Table and other relevant process information as provided in bid.

3. BIDDER is required to ensure that equipment/ system are designed for and shall meet the necessary technical requirements as spelt out in the tender documents for smooth operation of the unit.
- 2.2 For each item (stated in Table-1 above), BIDDER shall furnish the guaranteed value of power (Brake KW) required at each pump shaft at the rated point with zero percent positive tolerance including errors in instruments and measurements. For each item, guaranteed shaft power shall be indicated in BkW per Pump in the FORM SP-8 of Schedule of Price (SOP). **"Rated Point" shall mean the maximum flow rate and differential head as mentioned in the Process Datasheet(s) of the respective pump(s).**

- 2.3 Loading on 'Total Guaranteed Shaft Power Consumption' calculated based on guarantee values indicated by the BIDDER as per FORM SP-8 shall be considered for evaluation for 10 Years on the basis of 8000 working hours per year as per the following formula :

$$\text{Loading for Differential Power Cost in INR} = (\text{BKW}_{\text{Guar}} - \text{BKW}_{\text{DAT}}) \times C \times 8000 \times D_F$$

Where

$\text{BKW}_{\text{Guar}}$  = Total Guaranteed Shaft Power (in BkW) at Pump shaft for all operating pumps under evaluation (calculated based on guarantee values quoted by the BIDDER in FORM SP-8)

$\text{BKW}_{\text{DAT}}$  = Datum Value (in BkW) considered for evaluation as per Clause 2.4

C = Cost of Power = INR 7.35 per KWH.

$D_F$  = 4.02 (Discounting factor considering a period of 10 years operation starting from 4<sup>th</sup> year)

#### 2.4 Datum Value ( $\text{BKW}_{\text{DAT}}$ ):

The datum value shall be defined as the arithmetic average of the 'Total Guaranteed Shaft Power (in BkW) at pump shaft for all operating pumps under evaluation' calculated based on guarantee values quoted by all the techno-commercially acceptable BIDDERS in FORM SP-8.

- 2.5 In case BIDDER's value of 'Total Guaranteed Shaft Power' is lower than the 'Datum Value', no negative loading shall be considered for price evaluation. However, the BIDDER's value shall be considered as BIDDER's guarantee and shall have to be demonstrated during testing at the respective pump manufacturer's shop.

- 2.6 The maximum loading to be applied, however, shall not exceed 10% (ten percent) of the total Lumpsum price as quoted by BIDDER in SP-0.



### 3.0 PRICE REDUCTION ON ACCOUNT OF NOT MEETING GUARANTEED POWER CONSUMPTION FIGURES

3.1 All pumps (operating, standby and store standby) from each Item (Pump Set) listed in Table-1 above shall be performance tested at the respective pump manufacturer's shop to demonstrate the Guaranteed Shaft Power figures. The arithmetic average of measured shaft power consumption of all pumps (operating, standby and store standby) of a given item (pump set), shall be considered as Actual Shaft Power Consumption of one operating pump for that item (pump set), which shall be considered for calculating Total Actual Shaft Power Consumption.

3.2 In addition and without prejudice to any other reduction, discount or adjustment in price which the OWNER is entitled to, if the 'Actual Total Shaft Power Consumption (as obtained from performance tests) of all operating pumps under evaluation' exceeds the 'Total Guaranteed Shaft Power' calculated based on guarantee values furnished by the BIDDER in his bid by up to 4%, the OWNER shall be entitled to an adjustment (price reduction) in the Lumpsum Price by way of discount as follows:

a)  $PR = (BKW_{ACT} - BKW_{Guar}) \times C \times 8000 \times D_F$

Where,

PR = Price Reduction on account of excess Shaft Power in Indian Rupees


$BKW_{ACT}$  = Total Actual Shaft Power (in BKW) at pump shaft for all operating pumps under evaluation (Actual Shaft Power shall be as obtained during performance test at shop)


$BKW_{Guar}$  = Total Guaranteed Shaft Power (in BKW) at Pump shaft for all operating pumps under evaluation (calculated based on guarantee values quoted by the BIDDER in FORM SP-8)

C = Cost of Power = INR 7.35 per KWH

$D_F$  = 4.02 (Discounting factor considering a period of 10 years operation starting from 4<sup>th</sup> year)


b) In case excess Power consumption is more than 4% of the guaranteed value, the CONTRACTOR shall carry out mutually agreed repair / rectification / modification / replacement of the equipment to meet the shortfall of guaranteed parameter requirements at his own cost and through his own agency and complete the repair / rectification / modification / replacement to improve the supplied equipment to prove guaranteed parameters in the final testing. The CONTRACTOR shall not be entitled to any extension of time and any additional cost incurred thereof for undertaking any remedy / replacement / rectification as specified above. If the equipment is still not capable of performing within the acceptable limits, it will be Owner's decision with respect to rejection or penalties which shall be final and binding on the CONTRACTOR.

- c) In case the Total Actual Shaft Power as obtained from Performance Test results, is less than the Total Guaranteed Shaft Power figure (calculated based on guarantee values quoted by the BIDDER in FORM SP-8), no benefit shall be passed on to the CONTRACTOR. 
- 3.3 The total reduction in price on all accounts as defined in the various clauses of this document shall be limited to a maximum of 10% (ten percent) of the total Lumpsum price as quoted by BIDDER in SP-0.
- 3.4 While computing price adjustment negative value, if any, shall be ignored and not taken into account.

 <p>ENGINEERS INDIA LIMITED <small>(A Govt. of India Undertaking)</small></p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>1 OF 14</b></p>


APPENDIX-V

# PREAMBLE TO SCHEDULE OF PRICES (REVISED)

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>2 OF 14</b></p>

### **PREAMBLE TO SCHEDULE OF PRICES**

1. Price must be filled strictly in the format enclosed. If price is quoted in separate typed sheets or any variation is noticed with respect to the attached format, the bid is liable to be rejected. In case any contradiction is noticed between price formats attached with bidding document and price format used in price bid submitted, description/ contents of price format attached with bidding document shall prevail.
2. Bidder shall specify name of company and sign & affix seal on all pages of price bid.
3. Bidder shall quote Two prices – **SUPPLY PRICE (SP-1)** and **SERVICE PRICE (SP2)**.
  - a) **SUPPLY PRICE (SP-1)** shall include price of all Materials (Indigenous Supply price quoted in SP-01 A and Imported Supply price quoted in Form SP-01 B) required for completion of the Works in all respects including construction material. SUPPLY PRICE (SP-1) shall mean sum of prices quoted in SP-01A (in INR) and SP-01B (in foreign currency).
  - b) **SERVICE PRICE (SP-2)** shall comprise of Engineering price, prices for Construction Services and other allied services including training required as per bidding document.
4. SUPPLYPRICE (SP-1) and SERVICE PRICE (SP-2) shall be considered as separate prices and the entire contract shall be considered to be fully and conclusively covered under these prices.
5. **Total Lump Sum Price means aggregate of Lump Sum prices quoted in FORM SP-1, and FORM SP-2. However, for convenience of all, bidder is required to summarize above price in FORM SP-0.**
6. Break-up of Lump Sum price indicated in FORM SP-4 & FORM SP-5 is for breakdown of Supply Price and Service Price (including Engineering & construction). However, total price payable under the Contract shall be restricted to Lump Sum price quoted in Form SP-1

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>3 OF 14</b></p>

and SP-2 respectively.


7. In case of any contradiction between lump sum price mentioned in FORM SP-0 and breakup of lump sum price mentioned in FORM SP-1 and FORM SP-2, following precedence shall apply :

- a) FORM SP-0;
- b) FORM SP-01A & SP-01B, FORM SP-2

In case of this contradiction, Prices of SP-1 & SP-2 shall be modified on Pro-rata based on Price quoted in Form SP-0, limited to lump sum prices quoted in Form SP-0.

8. **In case of** any contradiction between Lump Sum Prices indicated in SP-01A & SP-01B & SP-2, and their break down in SP-4 & SP-5 respectively; the prices in SP-01A & SP-01B & SP-2 shall prevail respectively
9. **The price quoted shall be Lump sum Price on Turnkey (Supply of services & Material at Project Site) basis. Total payments to be made to the Contractor shall be limited to Lump sum price indicated in the Price Bid, irrespective of the progressive payments made during execution based on the split up of price.**
10. SP-0 is considered as the Contract Price or Total Lump Sum Price which Owner agrees to pay and the Contractor agrees to accept as full compensation for the Contractor's full performance of the Work (i.e. Engineering, Supply and Construction & other services) in accordance with the provisions of the Contract Documents. These Prices shall remain firm, fixed and valid till the completion of the Works and will not be subject to variation on any account except as otherwise specifically provided in the Bidding Documents and Change Orders, if any subject to the provisions of the Contract.
11. Obligation of the Contractor is not limited to the quantities that the Contractor may either indicate in the Schedule of Breakup of Prices




 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>4 OF 14</b></p>

along with his bid or in the billing schedules after award of work. Contractor shall carry entire scope of Work as detailed in various sections/volumes of the Bidding Document within the quoted Price of SP-0


12. **Lump sum prices quoted by the Contractor shall include cost of any other supplies/work(s) services not specifically mentioned in the Bidding Document but necessary for the efficient, trouble free operation of the Plant and to make this package job complete.**
13. **Contractor to note that breakup of Lump sum price in SP forms are for interim payment purpose only and total price payable under the Contract shall be restricted to the Lump sum Price/Contract Price.**
14. Design and Engineering Price indicated in **FORM SP-2 shall not exceed 7% (Seven percent)** of Total Lump Sum Price (in FORM SP-0). In case the price for Engineering Price Component exceeds the above-mentioned limit, then such additional amount shall be payable to the Contractor in the Final Bill.
15. The total price quoted for supply portion in FORMS SP-01A & SP-01B and Engineering Price indicated in FORM SP-2 of Price Schedule i.e. Service Price for Engineering and Supply Price taken together **shall not exceed 68%(Sixty Eight percent)** of the total LumpSum Price (in FORM SP-0). In case the price for Engineering and Supply component exceeds the above-mentioned limit, then such additional amount shall be payable to the Contractor in the Final Bill.
16. **SUPPLY PRICE(SP-1)**
  - 16.1. **SUPPLY PRICE (SP-1)** shall include price of Sale and Supply, to Owner, of all Materials required for completion of job in LSTK Contract as determined by Bidder, within the scope of work, to be necessary to establish, commission and operate the Plant/Unit, delivered on CFR basis at Indian Port of Owner's choice in respect of imported materials, delivered ex-factory for Indigenous materials, and delivery to Site at the price of materials, as specified in the Price Schedule/Schedule of Prices. SUPPLY PRICE shall include price of all Materials required for completion of the Works in all respects and also shall include all associated activities. The guidelines for covering the materials and



 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>5 OF 14</b></p>


associated activities under **Supply Price** are specified here below:

- 16.2. **SUPPLY PRICE (SP-1)** shall include supply of all materials as mentioned under **SP-4**.
- 16.3. **SUPPLY PRICE (SP-1)** shall include supply of any other Materials, not mentioned under SP-1 and SP- 4, but required as per provisions of the Bidding or Contract Documents.
- 16.4. **SUPPLY PRICE (SP-1)** shall include the price of mandatory spare parts but exclude the price of 2 years recommended spare parts.
- 16.5. **SUPPLY PRICE (SP-1)** shall include the price of spare parts for pre-commissioning, commissioning, defect liability period and the price for such spares shall be included in the individual equipment.
- 16.6. **SUPPLY PRICE (SP-1)** shall include price for special tools and tackles, if any.
- 16.7. **SUPPLY PRICE (SP-1)** shall include supply of lubricants, chemicals, Oils, catalyst etc. as mentioned under **SP-4**, as applicable.
- 16.8. **SUPPLY PRICE (SP-1)** shall include Procurement services of the Materials and shall include other services including but not limited to: clearance of the goods through custom and port clearance including filling and/or filling of all custom manifests, bill of entry, and custom declarations documents relating to identification of the materials necessary for the customs classification and the clearance of the goods through Customs under Into Bond Warehouse Bill of Entry or Bill of Entry for Home consumption, as the case may be and other documents as may be required for the clearance of the goods from custom or port authorities, for which purpose the Owner shall from time to time grant to Contractor or the Contractor's designates, such authority as may be reasonably required by the Contractor ; stevedoring, clearing, forwarding, and handling services as required for clearing, forwarding, and handling imported and indigenous materials and consignments including payment of at Contractor's cost of any demurrage, wharfage, port charges, siding charges, retention charges, detention charges or any other charges whatsoever and howsoever designated or levied by any railway, airport, ship and/ or any other authorities for or in connection with the loading, unloading or deletion of any materials or vessels or other means of transport beyond the

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>6 OF 14</b></p>

free period or unloading, clearance, retention or detention of loading, as the case may be, provided by the relevant authorities in this connection.

- 16.9. **SUPPLY PRICE (SP-1)** shall include the cost of all inspections including Third Party Inspection, as applicable as per provisions of the Bidding Document.
- 16.10. **SUPPLY PRICE (SP-1)** shall include cost of transportation; taking delivery of the Materials from the port of delivery in India in respect of imported materials and from the factory or ware house or other places of delivery in respect of indigenous materials and to transport these to the Contractor's stockpiles, go-downs or other places of storage approved by the Owner, and to transport the same from said godowns or places of storage to the work site.
- 16.11. **SUPPLY PRICE (SP-1)** Price shall include supply of all construction materials as required for completion of the Work in all respects under construction portion. Construction Materials, in general, shall include cement, reinforcement bar, sand, aggregates, stones, bricks, earth and clay, nuts and bolts, screws and nails and other fasteners of all kinds, all type of structural steel materials, woods and boards of all kinds, sanitary pipes and fittings, sewage pipes and fittings, drainage pipes and associated fixtures and fittings, cisterns, toilets, toilet seats and other sanitary fittings of any kind whatsoever, water proofing compounds, chemicals, paints, varnishes, white- washes, distempers, plaster of paris and other finishing materials whatsoever, barricading materials of all kinds and welding and other electrodes, lead and other alloys and compounds and consumables whatsoever involved for and / or required for completion of job.
- 16.12. **SUPPLY PRICE** shall also include any incidental or auxiliary supplies which are not specified in the Bidding Document specifically but which are required for completion of Works in all respects which could be reasonably implied from the contents of the Bidding Document.
- 16.13. SP-1 Price shall include all materials which are in the form of finished goods and are consigned to OWNER. SP-1 shall also include consumables whatsoever involved for and / or required for completion of job.

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>7 OF 14</b></p>

16.14. All materials under SP-1 shall be the property of OWNER and Contractor shall act as a trustee of OWNER for custody of these materials and any surplus material left at Site shall be regulated as per provisions given in the Bidding document.

16.15. SUPPLY PRICE (SP-1) shall include all applicable taxes & duties except the taxes & duties quoted in Form SP-3 **(Part-A, Part-B and Part-C)**

#### 17. **SERVICE WORKS (SP-2)**


17.1. **SP-2** Price shall include Residual Process Design & Detailed engineering and Construction portion as per requirement for complete work in accordance with the provisions of the Bidding Document. The price in SP-2 shall not include Taxes and duties; the same shall be reimbursed to the Contractor subject to the provisions mentioned in the Special Conditions of Contract.

17.2. **SP-2** Price (under construction portion) shall include prices of all type of construction services required for completing the Works in all respects including construction, testing, pre-commissioning, commissioning, PGTR and handing over to Owner. This shall include all type of Services required for completing the works in all respects as per the scope of work specified in the Bidding Document. The major services are specified here below, without being limited to guidelines mentioned under the Para 17.0

17.3. **SP-2** Price (Construction portion) shall include - Supply, procurement, mobilization and deployment of all labour, construction plant/ equipment/ machinery necessary for lifting, loading, handling, removing, transporting, unloading or securing the materials.


17.4. **SP-2** Price (Construction portion) shall include - The cost of mobilization including but not limited to mobilization of vehicles, movements, machinery, equipment, gear, tools, tackles, and other items and goods and personnel necessary for or to perform the works contemplated under the Contract.

17.5. **SP-2** Price (Construction portion) shall include - The cost of all construction plants and equipment's, vehicles, movements, supply of water and power, construction of temporary roads and access, temporary works, pumps, wiring, pipes, scaffolding, piling, shuttering and other

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>8 OF 14</b></p>

materials, supervision, labour, fuel, stores, geo technical investigation

- 17.6. **SP-2** Price (Construction portion) shall include -All supervision charges, establishment charges, overheads, contingencies, site organization, charges etc.
- 17.7. **SP-2** Price (Construction portion) shall include - The cost of all indemnities under the Contract, and insurance premia on insurance required in terms of the Contract documents. **“Insurance” here shall include Insurance other those specified under Owner’s scope.**
- 17.8. **SP-2** Price (Construction portion) shall include - The cost of all rents, royalties, licenses, permits, permission and any other fee, duty, penalty, levy payable on the excavation, transportation of any material or acquisition or use of any right of way or other right, licenses, permit, privilege, permission or uses required for the performance of work.
- 17.9. **SP-2** Price (Construction portion) shall include - Assembly of sub-assemblies, installation, alignment, welding, and Erection Completion under all the disciplines – civil and structural, mechanical, pressure vessels, rotary equipment’s, package equipment’s, HMTD equipment’s, piping, electrical, instrumentation, insulation, fire proofing, refractory, painting, etc as required according to the specifications and drawings.
- 17.10. **SP-2** Price (Construction portion) shall include - Testing, Hydraulic testing/pneumatic testing at Site.
- 17.11. **SP-2** Price (Construction portion) shall include - Pre-commissioning of the complete Unit
- 17.12. **SP-2** Price (Construction portion) shall include - Commissioning of the Complete Unit
- 17.13. **SP-2** Price (Construction portion) shall include - Performance Guarantee runs of the plant
- 17.14. **SP-2** Price (Construction portion) shall include - The incidental cost arising out of Punch list/ check list issued by commissioning team of licensor or owner or operation group of Owner during pre-commissioning / commissioning for smooth and trouble free operation of the

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>9 OF 14</b></p>

system/ units.

17.15. SP-2 prices shall include Training charges.

17.16. CONSTRUCTION PRICE shall also include any incidental or auxiliary works which are not specified above or in the specifications or in the Conditions of Contract or in the Bidding Document specifically but which are required for completion of Works in all respects and which could be reasonably inferred from the contents of the Contract Document.


18. It will be the duty of the Contractor to duly observe and perform all laws, rules, regulations, orders and formalities applicable to all Taxes and duties on the manufacture, sale, import and/ or supply of any material to OWNER and/ or applicable Taxes on the services performed by the Contractor pursuant hereto. The Contractor shall keep OWNER indemnified for and against any and all claims, demands, prosecutions, penalties, damages, demurrages, and/ or other levies whatsoever made or levied by the court or Custom Authorities with respect to any alleged breach, evasion, or infraction of such duties, taxes, charges, or levies or any breach or infraction of such laws, rules, regulations, orders, or formalities concerning the same and from the consequences thereof.

19. Bidder shall furnish the details of **taxes & duties in FORM SP-3** (Part-A, Part-B and Part-C) of Schedule of Prices, which would be applicable with respect to Supply Price and Service Price.

20. The Bidder shall indicate in **FORM SP-6** the list of recommended O&M spares for two (2) years normal operation of the Unit/Plant as recommended by the manufacturers of various Systems (other than start up/commissioning, Mandatory spares required during the defect liability period). Prices of O&M spares shall be kept valid for a period of 12 months after the Defect and Liability period. **This Price shall not be considered for Price Evaluation.**


21. PWCAMC (SP-7)

21.1. Bidder shall indicate a separate price for 5(five) years Post Warranty Comprehensive Annual Maintenance Contract (PWCAMC) in his bid

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>10 OF 14</b></p>

in FORM SP-7 for the listed Item.

- 21.2. The quotation by the bidder indicated in SP-7 for 5(five) years Post Warranty Comprehensive Annual Maintenance Contract (PWCAMC) charges is mandatory and shall be considered in the evaluation of the bid.
- 21.3. The Prices for 5(five) years Post Warranty Comprehensive Annual Maintenance Contract (PWCAMC) quoted in FORM SP-7 shall not be included in the total Lump sum Price (SP-0).
- 21.4. The 5(five) years Post Warranty Comprehensive Annual Maintenance Contract (PWCAMC) charges quoted by the bidder shall be exclusive of all output taxes and duties. For the purpose of comparison of bids, no loading of output tax on charges shall be done. i.e. prices quoted by bidder shall only be considered for comparison of bids. The taxes and duties shall be paid as per prevailing rate against tax invoice and related documents of the contractor.
- 21.5. The price quoted for PWCAMC shall be valid till completion of scope of PWCAMC
- 21.6. IOCL shall place separate order for Post Warranty Comprehensive Annual Maintenance Contract (PWCAMC) before the completion of defect liability period.
- 21.7. Cost of each item/system towards PWCAMC charges for a period of 5 years quoted in SP-7 by bidder following methodology shall be applied for ordering purpose:
- 21.7.1. Bidder shall quote minimum 25% of the cost for each item/system (as indicated in SP-4 by bidder for which PWCAMC services have been sought as per technical portion of bidding document) for the PWCAMC charges for a period of 5-years in SP-7 for each item/system separately.
- 21.7.2. Ordering purpose the total PWCAMC charges item/ system wise shall be distributed across 5 years considering 18% of PWCAMC value

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>11 OF 14</b></p>

for 1st year, 19% for 2nd year, 20% for 3rd Year, 21% for 4th year & 22% for 5th Year.

21.7.3. In case a bidder quotes less than the minimum stipulated amount towards PWCAMC (i.e., less than the defined % of the cost of system) evaluation shall be done at quoted rate; however, for award of work the differential amount of the minimum % (defined in tender) of the total supply cost quoted and the actual PWCAMC quote shall be adjusted from supply price during release of payments towards supply. This differential amount shall be reimbursed year-wise in same proportion as that of annual PWCAMC value along with PWAMC payment corresponding to the fourth quarter of that particular year.

21.8. 5 year PWCAMC (Post Warranty Comprehensive Annual Maintenance Contract), shall be started after Defect Liability period.

## 22. OPERATION & MAINTENANCE (SP-7)

22.1. Bidder shall indicate a separate price for YEARLY OPERATION & MAINTENANCE in his bid in FORM SP-7.


22.2. The quotation by the bidder indicated in SP-7 for YEARLY OPERATION & MAINTENANCE charges are mandatory and shall be considered in the evaluation of the bid.

22.3. The Prices for YEARLY OPERATION & MAINTENANCE quoted in FORM SP-7 shall not be included in the total Lump sum Price (SP-0).

22.4. The YEARLY OPERATION & MAINTENANCE charges quoted by the bidder shall be exclusive of all output taxes and duties. For the purpose of comparison of bids, no loading of output tax on charges shall be done. i.e. prices quoted by bidder shall only be considered for comparison of bids. The taxes and duties shall be paid as per prevailing rate against tax invoice and related documents of the contractor.


22.5. The price quoted for YEARLY OPERATION & MAINTENANCE shall be valid till completion of Defect liability period.

22.6. Cost of OPERATION & MAINTENANCE charges quoted in SP-7 by bidder following methodology shall be applied for ordering purpose:

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>12 OF 14</b></p>

- 22.6.1. Prices for 2 years Operation & Maintenance (O&M) Contract for Unit/Plant considering limit of minimum 4% of lump sum price (as indicated in SP-0 by bidder). Also bidder to note that 1st year O&M charges shall not exceed from 2nd year charges.
- 22.7. The Contractor will be entitled to receive payment of Operation & Maintenance Charges on monthly basis during running/ Operation of the RWTP, RO-DMP, CPU & ZLD Plant. The Yearly operation charges as indicated above shall be on pro-rata basis for arriving Monthly charges for a particular year for Payment purpose, subject to deduction of Penalties and other recoveries, if any, as per provisions and Terms and conditions of the Contract.
- 22.8. The Operation & Maintenance Charges shall also be payable in case the RWTP, RO-DMP, CPU & ZLD Plant is not under operation / shut down for the reason(s) attributable to the Company (IOCL).
- 22.9. The Operation & Maintenance Charges shall not be payable in case the RWTP, RO-DMP, CPU & ZLD Plant is not under operation for the reason(s) attributable to the Contractor. Pro-rata deduction of Operation & Maintenance Charges will be made in the event of non-operation/shut down of the RWTP, RO-DMP, CPU & ZLD Plant for reason(s) attributable to the Contractor.
- 22.10. The situation under Force Majeure condition will be guided as per Force Majeure Clause in the Tender.
- 22.11. The scope of operation shall be as per relevant section of Technical specification (Document no. B269-472/475/476-17-44-SS-1003) and Annexure-X to SCC titled “Guaranties and Penalties for RWTP, RO-DMP, CPU & ZLD” and/or any other part of Technical section.
- 22.12. IOCL shall place separate order for operation and maintenance. However, after placement of order for 2 years operation & maintenance within the validity period, the Prices for 2 years operation & maintenance shall remain firm and fixed till the faithful execution of the Contract.
- 22.13. For recovery of Penalty (if applicable) as per Annexure-X to SCC titled “Guaranties and Penalties for RWTP, RO-DMP, CPU & ZLD”, the monthly Operation Charges shall be considered as monthly (average) Operation Charges for the Particular Year as quoted/accepted for



 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>13 OF 14</b></p>


the year in which such event of non-compliance occurs.

23. Bidder shall indicate in **FORM SP-8** the Guaranteed Utility Consumption which would be considered for loading as per attached Loading Criteria for the Package.
24. INR = Indian Rupees, USD= US Dollars, EURO= Euros, YEN= Japanese Yen, SGD=Singapore Dollar, GBP=Great British Pound"
25. Deleted
26. Indian Bidders shall quote the price for materials and services to be procured from India and for expenses to be incurred in India only in Indian Rupees.

Indian bidders may quote the prices for materials and services to be imported into India in Foreign Currency. Such bidders quoting in foreign currency shall separately indicate in a list the materials and services to be imported into India and the Foreign Currency price payable for such materials and services. For the purpose of this clause and any other relevant provisions in these documents, Foreign Currency (FC) shall mean and be limited to US DOLLARS, EURO, JAPANESE YEN, SGD and GBP

However, maximum no. of currencies of quote shall be limited to Indian Rupees and any one of the allowed Foreign Currencies mentioned above.

27. The Liability of payment of excess of Custom Duty, on account of change in **DDP Value referred to in FORM SP-4** shall be to Contractor's account.
28. Bidder shall submit unpriced Price schedule (all Forms) indicating 'QUOTED' in all columns in their unpriced bid. Bidder shall submit their Priced Bid duly filled in with prices, stamped & signed by Bidder on each page and scanned & uploaded in the respective "PRICE BID" folders only on the e- procurement Portal as mentioned in the ITB.

 <p>ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)</p>	<b>PACKAGE : RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>  <b>BIDDING DOCUMENT NO. : SG/B269-475-PA-T-8701/23</b>		
<p>DOCUMENT TITLE: <b>SCHEDULE OF PRICE</b></p>	<p>DOCUMENT NO. <b>A-1.11</b></p>	<p>REV. <b>02</b></p>	<p>PAGE <b>14 OF 14</b></p>

29. Input Tax Credit (ITC) on account of GST is not applicable. 100% loading of GST charges shall be taken into account for evaluation as per the details provided in SP-3 (Part-A, Part-B and Part-C).
30. Bidder confirms that he has noted the contents of the Preamble to Schedule of Price, Price Schedule, Bidding document and quoted his prices accordingly without any deviation and without changing format of Price Schedule including this BOQ.

Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPATREFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

NOTES :

1. The price quoted shall be Lump sum Price on Turnkey basis. Total payments to be made to the Contractor shall be limited to Lump sum price indicated at FORM SP-0 in the Price Bid and Taxes and duties calculated as per the rates quoted in Form SP-3 Part-A, Form SP-3 Part-B, Form SP-3 Part-C irrespective of the progressive payments made during execution based on the split up of price.
2. Refer Preamble to Schedules of Prices enclosed elsewhere in the Bidding document and its subsequent amendment.

Bidder Name :

PRICE SCHEDULE (Form SP-0)

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	TEXT #	NUMBER #
Sl. No.	Item Description	Quantity	Units	Quoted Currency in INR / Other Currency	Total Lumpsum Price In Figures To be entered by the Bidder
1	<p>LUMPSUM TURNKEY BASIS WITH SINGLE POINT RESPONSIBILITY INCLUDING BUT NOT LIMITED TO THE FOLLOWING ACTIVITIES OF WORKS:</p> <p>PACKAGE- RWTP, RODMP, CPU &amp; ZLD Plant WITH COMPLETE ACCESSORIES &amp; AUXILIARIES: The scope of work shall include Project Management; Residual Process Design &amp; Detailed Engineering; Procurement; Fabrication; Inspection; Supply; Manufacture; Transportation of all equipment/materials to the work site &amp; Storage at site; assembly, erection &amp; installation; Construction and Erection of Civil &amp; Structural, Mechanical, Electrical, Instrumentation &amp; Piping works; Acid /Alkali proof tiling; Painting; Testing; Pre-commissioning, trial run for 30 days before commissioning; commissioning; Training of IOCL's personnel; performance guarantee test run for 72 hours continuous operation in presence of IOCL's &amp; EIL's Representatives; guaranteeing and handing over of RWTP, RO-DMP, CPU &amp; ZLD Plant to the Client on lump sum turnkey basis as per design basis, equipment list, standards, P&amp;IDs, data sheets, drawings, etc., all complete within Contractor's specified battery limits including supply of spares, chemicals &amp; consumables.</p> <p>Completion of all works in all respects as per provisions of the Bidding Document and directions of the Engineer-in-Charge, including any other activity of work required to complete the Plant in all respects to make the Plant functional.</p>				
1.01	FOREIGN CURRENCY PART	1	Lumpsum	USD	
1.02	INDIAN CURRENCY PART	1	Lumpsum	INR	

<a href="#" style="background-color: #4a86e8; color: white; padding: 2px 5px; text-decoration: none;">Validate</a>	<a href="#" style="background-color: #4a86e8; color: white; padding: 2px 5px; text-decoration: none;">Print</a>	<a href="#" style="background-color: #4a86e8; color: white; padding: 2px 5px; text-decoration: none;">Help</a>			
<b>Name of Work: RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>					
<b>Bidding Document No: SG/B269-475-PA-T-8701/23</b>					
<b><u>BREAKUP OF TOTAL LUMP SUM PRICE - SUPPLY PORTION</u></b>					
<p><u>Notes :</u></p> <p>1. All supplies for the completion of the work shall be included in the Form SP-01A and SP-01B only.</p> <p>2. Bidder to furnish further breakup of Form SP-01A and SP-01B in Form SP-4 in terms of % of total supply price quoted in Form SP-01A and SP-01B, in unpriced part of their Bid, which is enclosed in the Bidding document as PDF.</p> <p>3. No supplies shall be included under Form SP-2.</p>					
<b>Bidder Name :</b>					
<b><u>PRICE SCHEDULE (Form SP-01A)</u></b>					
<b>(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )</b>					
<b>NUMBER</b>	<b>TEXT #</b>	<b>NUMBER #</b>	<b>TEXT #</b>	<b>TEXT #</b>	<b>NUMBER #</b>
<b>Sl. No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Units</b>	<b>in INR</b>	<b>Total lumpsum Price In <span style="color: red;">Figures</span> To be entered by the Bidder [except GST (IGST/CGST &amp; SGST)]</b>
<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>12</b>	<b>13</b>
1	Lumpsum price for supply portion for completion of scope of work as per bidding document which includes following but not limited to: Procurement, supply, transportation, Shop fabrication, assembly testing of all items/ Equipment's / Components / Materials / bought outs, Procurement of raw materials and sub-ordered equipment, bought outs, shop fabrication/assembly, inspection, testing, supply of all spares, consumables, lubricants, chemicals, catalysts, as required, special tools and tackles required for work as per DESCRIPTION PROVIDED IN DETAILED SCHEDULE OF PRICES (Form SP-4) & Bidding Document for RWTP, RO-DMP, CPU & ZLD Plant bidding document.				
1.02	IN INDIAN CURRENCY	1	Lumpsum	INR	

<input type="button" value="Validate"/>	<input type="button" value="Print"/>	<input type="button" value="Help"/>			
<b>Name of Work: RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>					
<b>Bidding Document No: SG/B269-475-PA-T-8701/23</b>					
<b><u>BREAKUP OF TOTAL LUMP SUM PRICE - SUPPLY PORTION</u></b>					
<p><u>Notes :</u></p> <p>1. All supplies for the completion of the work shall be included in the Form SP-01A and SP-01B only.</p> <p>2. Bidder to furnish further breakup of Form SP-01A and SP-01B in Form SP-4 in terms of % of total supply price quoted in Form SP-01A and SP-01B, in unpriced part of their Bid, which is enclosed in the Bidding document as PDF.</p> <p>3. No supplies shall be included under Form SP-2.</p>					
<b>Bidder Name :</b>					
<b><u>PRICE SCHEDULE (Form SP-01B)</u></b>					
<b>(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )</b>					
<b>NUMBER</b>	<b>TEXT #</b>	<b>NUMBER #</b>	<b>TEXT #</b>	<b>TEXT #</b>	<b>NUMBER #</b>
SI. No.	Item Description	Quantity	Units	Quoted Foreign Currency Other than INR as per Bidding Document	Total lumpsum Price In <b>Figures</b> To be entered by the Bidder(except Custom Duty, SWS, and IGST/CGST& SGST and its related cess, if any)
<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>12</b>	<b>13</b>
1	Lumpsum price for supply portion for completion of scope of work as per bidding document which includes following but not limited to: Procurement, supply, transportation, Shop fabrication, assembly testing of all items/ Equipment's / Components / Materials / bought outs, Procurement of raw materials and sub-ordered equipment, bought outs, shop fabrication/assembly, inspection, testing, supply of all spares, consumables, lubricants, chemicals, catalysts, as required, special tools and tackles required for work as per DESCRIPTION PROVIDED IN DETAILED SCHEDULE OF PRICES (Form SP-4) & Bidding Document for RWTP, RO-DMP, CPU & ZLD Plant bidding document.				
1.01	IN FOREIGN CURRENCY	1	Lumpsum	<b>USD</b>	

Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

BREAKUP OF TOTAL LUMP SUM PRICE - Engineering, Construction/Installation, Start-up, Pre-Commissioning, Commissioning, PGTR, Training Notes

1. All services for the completion of the work shall be included in the Form SP-2 only.
2. Bidder to furnish further breakup of Form SP-2 in Form SP-5 in terms of % of total service price quoted in Form SP-2, in unpriced part of their Bid, which is enclosed in the Bidding document in PDF.
3. No services shall be included under Form SP-01A and SP-01B.

Bidder Name :

**PRICE SCHEDULE (Form SP-2)**

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )

NUMBER	TEXT #	NUMBER #	TEXT #	TEXT #	NUMBER #
Sl. No.	Item Description	Quantity	Units	Quoted Currency in INR / Other Currency	Total lumpsum Price In Figures To be entered by the Bidder (except IGST/CGST& SGST and its related cess, if any)
1	2	4	5	12	13
1	Lump sum Engineering price for completion of scope of work as per bidding document which includes following but not limited to: Design and Detailed Engineering of RWTP, RO-DMP, CPU & ZLD Plant Tender as per DESCRIPTION PROVIDED IN DETAILED SCHEDULE OF PRICES (Form SP-5) & as per Bidding Document.				
1.01	IN FOREIGN CURRENCY	1	Lumpsum	USD	
1.02	IN INDIAN CURRENCY	1	Lumpsum	INR	
2	Lump sum price for construction portion as per requirement detailed out in various section of bidding document which includes following but not limited to: Construction, installation completion of work in all respects for Package including required Cranes, Scaffolding, temporary barricading, Transportation and site handling of material/equipments, supply of consumables, tools and tackles, field engineering services, Receipt, storage, conservation, preservation of FIM and contractor supplied items etc. Fabrication, construction, assembly, erection at site for all piping, civil, structural, architectural, mechanical, electrical and instrumentation works within battery limit, coating, painting, testing, etc. providing all temporary works/structures and equipment for completion, obtaining statutory approvals, pre-commissioning, commissioning, performance guarantee test runs, Training to Owner personals, completing all the work in all respects to make system smooth, operable and handing over as per Bidding Document requirements and instructions of the Engineer In Charge				
2.01	IN FOREIGN CURRENCY	1	Lumpsum	USD	
2.02	IN INDIAN CURRENCY	1	Lumpsum	INR	
3	TOTAL OF DESIGN , ENGINEERING AND CONSTRUCTION PRICE [1 + 2]				
3.01	IN FOREIGN CURRENCY	1	Lumpsum	USD	
3.02	IN INDIAN CURRENCY	1	Lumpsum	INR	

Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

TAXES AND DUTIES ON REIMBURSEMENT BASIS (not included in quoted price in SP-0)

Notes:

1. Bidder are advised to consider prevailing rates of taxes & duties for quoting the below percentage. The reimbursement shall be paid against submission of original tax invoices with related documents. All related and relevant documents , but not limited to Original tax invoice, bill of entry, importer invoice, endorsed copy of consignment note or bill of lading etc, shall be submitted by the contractor as per prevailing rules and regulations and as per Clause 3 of SCC-Part B and its amendment thereof.

2. No other taxes and duties except mentioned in this form shall be eligible for reimbursement.

3. Bidder to note that breakup of lump sum price in SP forms are for interim progressive payment purpose only. The total price Payable under the contract shall be restricted to the quoted lump sum price and rate of taxes & duties quoted below. If any mismatch in actual progressive invoice value and rate of taxes & duties quoted below, bidder will adjust the same in lump sum Price quoted in SP forms, so that there should not be any additional liability to the OWNER.

4. Bidder to note evaluation shall be done as per BID DATA SHEET Sl.no. 14 after loading the IGST/GST (at prevailing rate on the last price bid submission date) to be paid by OWNER on FOREIGN CURRENCY part of Services (calculated based on the percentage quoted by bidder in SP-5).

Bidder  
Name :

PRICE SCHEDULE (Form SP-3 PART-A)

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )

NUMBER	TEXT #	TEXT #	NUMBER #
Sl. No.	Item Description	Percentage	Rate
1	2	5	13
1	GST on supply of Indigenous goods (on SP-01A)	Percentage	

Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

**TAXES AND DUTIES ON REIMBURSEMENT BASIS (not included in quoted price in SP-0)**

**Notes:**

1. Bidder are advised to consider prevailing rates of taxes & duties for quoting the below percentage. The reimbursement shall be paid against submission of original tax invoices with related documents. All related and relevant documents, but not limited to Original tax invoice, bill of entry, importer invoice, endorsed copy of consignment note or bill of lading etc, shall be submitted by the contractor as per prevailing rules and regulations and as per Clause 3 of SCC-Part B and its amendment thereof.

2. No other taxes and duties except mentioned in this form shall be eligible for reimbursement.

3. Bidder to note that breakup of lump sum price in SP forms are for interim progressive payment purpose only. The total price Payable under the contract shall be restricted to the quoted lump sum price and rate of taxes & duties quoted below. If any mismatch in actual progressive invoice value and rate of taxes & duties quoted below, bidder will adjust the same in lump sum Price quoted in SP forms, so that there should not be any additional liability to the OWNER.

4. Bidder to note evaluation shall be done as per BID DATA SHEET Sl.no. 14 after loading the IGST/GST (at prevailing rate on the last price bid submission date) to be paid by OWNER on FOREIGN CURRENCY part of Services (calculated based on the percentage quoted by bidder in SP-5).

Bidder  
Name :

**PRICE SCHEDULE (Form SP-3 PART-B)**

**(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )**

NUMBER	TEXT #	TEXT #	NUMBER #
Sl. No.	Item Description	Percentage	Rate
1	2	5	13
2.1	Basic Customs Duty & other import duties on Supply of Imported Goods other than those mentioned below (on SP-01B)	Percentage	
2.2	SWS on Duties quoted at S.no. 2.1	Percentage	
2.3	IGST / (CGST+SGST) on (on SP-01B + (Duties at Sr. 2.1 and 2.2 above)	Percentage	



Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

**TAXES AND DUTIES ON REIMBURSEMENT BASIS (not included in quoted price in SP-0)**

**Notes:**

1. Bidder are advised to consider prevailing rates of taxes & duties for quoting the below percentage. The reimbursement shall be paid against submission of original tax invoices with related documents. All related and relevant documents, but not limited to Original tax invoice, bill of entry, importer invoice, endorsed copy of consignment note or bill of lading etc, shall be submitted by the contractor as per prevailing rules and regulations and as per Clause 3 of SCC-Part B and its amendment thereof.

2. No other taxes and duties except mentioned in this form shall be eligible for reimbursement.

3. Bidder to note that breakup of lump sum price in SP forms are for interim progressive payment purpose only. The total price Payable under the contract shall be restricted to the quoted lump sum price and rate of taxes & duties quoted below. If any mismatch in actual progressive invoice value and rate of taxes & duties quoted below, bidder will adjust the same in lump sum Price quoted in SP forms, so that there should not be any additional liability to the OWNER.

4. Bidder to note evaluation shall be done as per BID DATA SHEET Sl.no. 14 after loading the IGST/GST (at prevailing rate on the last price bid submission date) to be paid by OWNER on FOREIGN CURRENCY part of Services (calculated based on the percentage quoted by bidder in SP-5).

Bidder  
Name :

**PRICE SCHEDULE (Form SP-3)**

**(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )**

NUMBER	TEXT #	TEXT #	NUMBER #
Sl. No.	Item Description	Percentage	Rate
1	2	5	13
3	GST on supply of services offered by Indian Bidder/Indian Member of Consortium/JV, quoted in Indian Currency and Foreign Currency (partbreakup of SP-2 calculated based on percentage quoted in SP-5)	Percentage	

Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

Price Schedule of recommended Spares for Two Years Operation and Maintenance

Notes

- Contractor shall provide itemized priced list of two years operation and maintenance (O&M) spares along with the bid. Prices of O&M spares shall be kept valid for a period of 12 months after contractual mechanical completion. Owner reserves the right to place the order for such O & M spares.
- 2 years operation & maintenance spares shall be furnished as per this format and shall not be included in the quoted supply prices. Quoted 2 years operation & maintenance spares shall not be considered for evaluation.
- Bidder shall indicate Zero (0) in the row where bidder does not recommend spares and the same shall be considered as "Not Quoted"
- Currency of bid shall be as per Preamble to Schedule of Rates.

Bidder

Name :

PRICE SCHEDULE (Form SP-6)

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )

NUMBER	TEXT #	TEXT #	NUMBER #	TEXT	TEXT	NUMBER
Sl. No.	Item	Quoted Currency in INR / Other Currency (Select Currency)	UNIT RATE (FOB at Loading Port) - Foreign Supply)/( FOT Despatch Point Price)- Indian Supply	Item Description	Unit	Ocean Freight upto Port of Entry (Mumbai / Kolkata Seaport) / Inland Freight upto Site (in percentage of Column 13)
1	2	12	13	18	19	26
1	AMOUNT OF FOREIGN COMPONENT					
1.01	Item 1	USD				
1.02	Item 2	USD				
1.03	Item 3	USD				
1.04	Item 4	USD				
1.05	Item 5	USD				
1.06	Item 6	USD				
1.07	Item 7	USD				
1.08	Item 8	USD				
1.09	Item 9	USD				
1.10	Item 10	USD				
1.11	Item 11	USD				
1.12	Item 12	USD				
1.13	Item 13	USD				
1.14	Item 14	USD				
1.15	Item 15	USD				
1.16	Item 16	USD				
1.17	Item 17	USD				
1.18	Item 18	USD				
1.19	Item 19	USD				
1.20	Item 20	USD				
1.21	Item 21	USD				
1.22	Item 22	USD				
1.23	Item 23	USD				
1.24	Item 24	USD				
1.25	Item 25	USD				
1.26	Item 26	USD				
1.27	Item 27	USD				
1.28	Item 28	USD				
1.29	Item 29	USD				
1.30	Item 30	USD				
2	AMOUNT OF INDIAN COMPONENT					
2.01	Item 1	INR				
2.02	Item 2	INR				

Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

Price Schedule of recommended Spares for Two Years Operation and Maintenance

Notes

1. Contractor shall provide itemized priced list of two years operation and maintenance (O&M) spares along with the bid. Prices of O&M spares shall be kept valid for a period of 12 months after contractual mechanical completion. Owner reserves the right to place the order for such O & M spares.
2. 2 years operation & maintenance spares shall be furnished as per this format and shall not be included in the quoted supply prices. Quoted 2 years operation & maintenance spares shall not be considered for evaluation.
3. Bidder shall indicate Zero (0) in the row where bidder does not recommend spares and the same shall be considered as "Not Quoted"
4. Currency of bid shall be as per Preamble to Schedule of Rates.

Bidder  
Name :

PRICE SCHEDULE (Form SP-6)

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )

2.03	Item 3	INR				
2.04	Item 4	INR				
2.05	Item 5	INR				
2.06	Item 6	INR				
2.07	Item 7	INR				
2.08	Item 8	INR				
2.09	Item 9	INR				
2.10	Item 10	INR				
2.11	Item 11	INR				
2.12	Item 12	INR				
2.13	Item 13	INR				
2.14	Item 14	INR				
2.15	Item 15	INR				
2.16	Item 16	INR				
2.17	Item 17	INR				
2.18	Item 18	INR				
2.19	Item 19	INR				
2.20	Item 20	INR				
2.21	Item 21	INR				
2.22	Item 22	INR				
2.23	Item 23	INR				
2.24	Item 24	INR				
2.25	Item 25	INR				
2.26	Item 26	INR				
2.27	Item 27	INR				
2.28	Item 28	INR				
2.29	Item 29	INR				
2.30	Item 30	INR				

Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

PRICES FOR CPWAMC and O&M (Not to be included in quoted prices in form SP-0)

Note: The bidder shall quote the prices for PWCAMC and O&M exclusive of GST. The GST shall be paid as per prevailing rate against tax invoice and related documents of the contractor. (Only basic cost to be quoted by the bidder & applicable GST shall be paid extra at prevailing rate at the time of payment)

Bidder  
Name :

**PRICE SCHEDULE ((Form SP-7)**

**(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )**

NUMBER	TEXT #	NUMBER #	TEXT #	TEXT #	NUMBER #
Sl. No.	Item Description	Quantity	Units	Quoted Currency in INR / Other Currency	Total lumpsum Price In Figures To be entered by the Bidder
1	2	4	5	12	13
1.00	<b>5 (Five) years Post Warranty Comprehensive Annual Maintenance Contract (PWCAMC) for Package PLC as per technical portion of bidding document &amp; as per preamble to SOP</b>				
1.01	LUMPSUM CHARGES FOR 5 YEARS PWCAMC FOR SL.NO.1.00	1.00	Lumpsum	INR	
2.00	<b>5 (Five) years Post Warranty Comprehensive Annual Maintenance Contract (PWCAMC) for ANALYZERS (except density, moisture, PH/conductivity), as per technical portion of bidding document &amp; as per preamble to SOP</b>				
2.01	LUMPSUM CHARGES FOR 5 YEARS PWCAMC FOR SL.NO.2.00	1.00	Lumpsum	INR	
3.01	Yearly Operation & Maintenance Charges for Operation & Maintenance of RWTP, RO-DMP, CPU & ZLD Plant for FIRST YEAR	1.00	Lumpsum	INR	
4.01	Yearly Operation & Maintenance Charges for Operation & Maintenance of RWTP, RO-DMP, CPU & ZLD Plant for SECOND YEAR	1.00	Lumpsum	INR	

Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL

Bidding Document No: SG/B269-475-PA-T-8701/23

**GUARANTEE POWER CONSUMPTION**

Bidder  
Name :

**PRICE SCHEDULE ((Form SP-8)**

**(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )**

NUMBER	TEXT #	TEXT #	NUMBER #
Sl. No.	Item Description	Units	Quantity In Figures per Pump To be entered by the Bidder
1	<b>GUARANTEED UTILITIES FOR RWTP, RO-DMP, CPU &amp; ZLD Plant PACKAGE AS PER BIDDING DOCUMENT AND SUBSEQUENT AMENDMENT, IF ANY</b>		
1.01	Power Consumption per Pump for Filter Feed Pumps-I identified in Loading Criteria Chapter of Tender.	BKW	
1.02	Power Consumption per Pump for RO-I Cartridge Filter Feed Pumps identified in Loading Criteria Chapter of Tender.	BKW	
1.03	Power Consumption per Pump for RO-I Feed Pumps (VFD Driven) identified in Loading Criteria Chapter of Tender.	BKW	
1.04	Power Consumption per Pump for RO-II Feed Pumps (VFD Driven) identified in Loading Criteria Chapter of Tender.	BKW	
1.05	Power Consumption per Pump for RO-III Feed Pumps (VFD Driven) identified in Loading Criteria Chapter of Tender.	BKW	
1.06	Power Consumption per Pump for RO-IV Feed Pumps (VFD Driven) identified in Loading Criteria Chapter of Tender.	BKW	
1.07	Power Consumption per Pump for MB Feed Pumps identified in Loading Criteria Chapter of Tender.	BKW	
	<b>NOTE:</b>		
	i)Refer Loading & Guarantee Criteria [Document No.B269-472/475/476-17-44-LC-8701) attached as Annexure-A-X of SCC of the Bidding document and its Amendment (if any).		
	ii)The guarantee values as above should be quoted in Priced Bid. Guaranteed values should not be quoted/ mentioned in the Un-priced Bid.		
	iii)The guarantees as quoted by bidder in this format shall be considered for price loading purpose for evaluation and award. (Refer Loading and Guarantee Chapter of tender for details).		

<b>FURTHER BREAK-UP OF LUMP SUM PRICE FOR SUPPLY PORTION</b>					
<b>(AS QUOTED IN FORM SP-01A and SP-01B)</b>					
<b>Name of Work: RWTP, RO-DMP, CPU &amp; ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL</b>					
<b>Bidding Document No: SG/B269-475-PA-T-8701/23</b>					
<b>Bidder Name:</b>					
<b>Notes:</b>					
1) Bidder to furnish breakup of Form SP-01A & SP-01B price in this Form SP-4 in terms of % of Form SP-1 prices.					
2) Bidder to ensure that total of percentage indicated against all the items below respectively for foreign currency and Indian Currency shall be total 100% each for Foreign Currency and Indian Currency quoted in Form SP-1.					
3) This duly filled in form SP-4 with % is required to be submitted in Unpriced Bid only.					
<b>PRICE SCHEDULE (FORM SP-4)</b>					
SL. NO.	DESCRIPTION	Foreign Currency (in %)		Indian Currency (in %)	
		Sole Bidder/ Leader of Consortium/JV	Member of Consortium/JV	Sole Bidder/ Leader of Consortium/JV	Member of Consortium/JV
	<b>BREAK UP OF SUPPLY PRICE</b>				
A	<b>Supply of All equipments/materials</b>				
A-1	<b>Mechanical Equipment other than Piping</b>				
a	All Pumps with Divers and all associated				
b	Auxiliaries and accessories as required				
c	All Packages				
d	All Vessels including internals				
e	All Exchangers				
f	Chain Pulley, EOT Crane and Handling Equipment				
g	ANY OTHER ITEM NOT MENTIONED ABOVE BUT REQUIRED FOR COMPLETION OF WORK (BIDDERS TO SPECIFY)				
A-2	<b>Piping</b>				
a	A/G Piping Material along with all valves. Fittings, flanges, fasteners, ect. Including firefighting system				
b	A/G Piping Material along with all valves. Fittings, flanges, fasteners, ect. excluding firefighting system				
A-3	<b>Electrical</b>				
a	All Electrical equipment, lighting, earthing & Lighting protection equipment with all associated auxiliaries and all other requirement as per bidding document				
b	All cable, cable trays, supports etc.				
c	Distribution transformer, PCC and MCC in sub station				
A-4	<b>Instrumentation</b>				
a	Analysers (Except Density, Moisture, pH and Conductivity)				
b	Package PLC				
c	All field mounted instruments				
d	All instrument cable, cable trays, Junction box, supports etc.				
e	All Flow Meter, Control valve and any other item require as per the bidding document				
A-5	Mandatory & other Spares including spares for pre- commissioning and commissioning				
A-6	Supply, Unloading, handling and storage of all chemicals and consumables (including provision of necessary facilities)				
A-7	Special Tools and Tackles				
A-8	Construction Material (Steel, Cement, Rebars, aggregate, sand, gravels etc.)				
A-9	<b>Any other material / item required for completion of the package works but not specifically identified and covered above for completion of Units. (BIDDER TO SPECIFY).</b>				
	<b>TOTAL SUPPLY PRICE</b>	<b>100%</b>		<b>100%</b>	

BREAKUP OF TOTAL LUMP SUM SERVICE PRICE - ENGINEERING, CONSTRUCTION / INSTALLATION, START-UP, PRE-COMMISSIONING, COMMISSIONING, PGTR, TRAINING (AS QUOTED IN FORM SP2)					
Name of Work: RWTP, RO-DMP, CPU & ZLD Plant of PANIPAT REFINERY EXPANSION (P-25) PROJECT OF M/s IOCL					
Bidding Document No: SG/B269-475-PA-T-8701/23					
Bidder Name:					
Notes:					
1) Bidder to furnish breakup of Form SP-2 in Form SP-5 in terms of % of total Service Price quoted in Form SP-2.					
2) Bidder to ensure that total of percentage indicated against all the items below respectively for foreign currency and Indian Currency shall be total 100% each for Foreign Currency and Indian Currency quoted in Form SP-2.					
3) This duly filled in form SP-5 with % is required to be submitted in Unpriced Bid only.					
PRICE SCHEDULE (FORM SP-5)					
SL. NO.	DESCRIPTION	Foreign Currency (in %)		Indian Currency (in %)	
		Sole Bidder/ Leader of Consortium/JV	Member of Consortium/JV	Sole Bidder/ Leader of Consortium/JV	Member of Consortium/JV
B-1	Design and Detailed Engineering of RWTP, RO-DMP, CPU & ZLD Plant tender, Break up of FORM SP-2 Price.				
B-1.1	Residual Design & Basic Engineering				
B-1.2	Detailed Engineering & Document Approval				
B-1.3	Vendors final documents for supply items duly certified				
B-1.4	As -Built Documentation				
B-1.5	3D model				
B-1.6	HAZOP				
B-2	CONSTRUCTION / FABRICATION & ERECTION / INSTALLATION AS DETAILED IN FORM SP-2				
B-2.1	Civil / Structure work/ Building works				
a	All Civil work as mentioned else ware in bid document				
b	All Structural work as mentioned else ware in bid document				
c	Civil Work for Building				
B-2.2	Mechanical Equipment other than Piping				
a	All Pumps with Divers and all associated				
b	Auxiliaries and accessories as required				
c	All Packages				
d	All Vessels including internals				
e	All Exchangers				
f	Chain Pulley, EOT Crane and Handling Equipment				
g	ANY OTHER ITEM NOT MENTIONED ABOVE BUT REQUIRED FOR COMPLETION OF WORK (BIDDERS TO SPECIFY)				
B-2.3	Piping				
a	A/G Piping Material along with all valves. Fittings, flanges, fasteners, ect. Including firefighting system				
b	A/G Piping Material along with all valves. Fittings, flanges, fasteners, ect. excluding firefighting system				
B-2.4	Electrical				
a	All Electrical equipment, lighting, earthing & Lighting protection equipment with all associated auxiliaries and all other requirement as per bidding document				
b	All cable, cable trays, supports etc.				
c	Distribution transformer, PCC and MCC in sub station				
B-2.5	Instrumentation				
a	Analysers (Except Density, Moisture, pH and Conductivity)				
b	Package PLC				
c	All field mounted instruments				
d	All instrument cable, cable trays, Junction box, supports etc.				
e	All Flow Meter, Control valve and any other item require as per the bidding document				
B-3	Pre-commissioning & commissioning as per bidding document				
B-4	Conducting training to Owner personals and Performance Guarantee Test Runs as per Bid requirements				
B-5	MISCELLANEOUS - Any other item not covered above but required for the completion of work.				
	TOTAL SERVICE PRICE	100%		100%	

**PROFORMA OF DECLARATION OF BLACKLISTING / HOLIDAY LISTING**

**In the case of a Proprietary Concern:**

I hereby declare that neither I, in my personal name nor in the name of my Proprietary concern, M/s\_\_\_\_\_ which is submitting the accompanying Bid/Tender nor any other concern in which I am proprietor nor any partnership firm in which I am involved as a Partner are presently on any blacklist or holiday list declared by Indian Oil Corporation Ltd. or by Ministry of Petroleum & Natural Gas (MOPNG), nor any inquiry is pending by Indian Oil Corporation Ltd. or MOPNG, in respect of any corrupt or fraudulent practice(s) against me or any other of my proprietorship concern(s) or against any partnership firm(s) in which I am or was at the relevant time involved as a partner, except as indicated below:

**(Here give particulars of blacklisting or holiday listing, and /or inquiry and in absence thereof state "NIL")**

**In the case of a Partnership Firm:**

We hereby declare that neither we, M/s \_\_\_\_\_, which is submitting the accompanying Bid/Tender, nor any partner involved in the said firm either in his individual capacity or as proprietor or partner of any other firm or concern presently, are placed on any blacklist or holiday list declared by Indian Oil Corporation Ltd. or by Ministry of Petroleum & Natural Gas (MOPNG), nor any inquiry is pending by Indian Oil Corporation Ltd. or MOPNG, in respect of corrupt or fraudulent practice(s) against us or any partner or any other concern or firm of which he is proprietor or partner, except as indicated below:

**(Here give particulars of blacklisting or holiday listing and/or inquiry and in the absence thereof state "NIL")**



**In the case of Company:**

We hereby declare that we are presently neither placed on any holiday list or blacklist declared by Indian Oil Corporation Ltd. Or by Ministry of Petroleum & Natural Gas (MOPNG), nor any inquiry is pending by Indian Oil Corporation Ltd. or MOPNG, in respect of corrupt or fraudulent practice(s), except as indicated below:

**(Here give particulars of blacklisting or holiday listing and/or inquiry and in the absence thereof state "NIL")**

**In the case of Consortium:**

We hereby declare that none of the members of the Consortium are presently placed on any holiday list or blacklist declared by Indian Oil Corporation Ltd. Or by Ministry of Petroleum & Natural Gas (MOPNG), nor any inquiry is pending by Indian Oil Corporation Ltd. or MOPNG, in respect of corrupt or fraudulent practice(s), except as indicated below:

**(Here give particulars of blacklisting or holiday listing and/or inquiry and in the absence thereof state "NIL")**

It is understood that if this declaration is found to be false in any particular, Indian Oil Corporation Ltd. shall have the right to reject my/our bid, and if the bid has resulted in a contract, the contract is liable to be terminated without prejudice to any other right or remedy (including blacklisting or holiday listing) available to Indian Oil Corporation Ltd.

**Place:**

**Signature of Bidder**

**Date:**

**Name of Signatory**

**COMMERCIAL AMENDMENT NO. 2**

TO

TENDER DOC. NO.: SG/B269-475-PA-T-8701/23 (RWTP, RO-DMP, CPU & ZLD PLANT)

FOR

PANIPAT REFINERY EXPANSION PROJECT (P25) (CLIENT: M/S IOCL)

## COMMERCIAL AMENDMENT NO. 2

RFQ No. /Tender No. SG/B269-475-PA-T-8701/23  
 Item /Name of work RWTP, RO-DMP, CPU & ZLD PLANT  
 Project PANIPAT REFINERY EXPANSION PROJECT (P25) (Client: M/s IOCL)

The terms, conditions and specifications of Bidding Document stand modified to the extent indicated under column “MODIFICATIONS/ ADDITIONS/ DELETIONS”. All other terms & conditions, stipulations, specifications etc. of Bidding Document including Amendments, if any, issued earlier shall remain unaltered.

Sl. No.	Part of Bidding Document	Document Reference	Clause / Item No.	Subject	Modifications/Additions/Deletions
1.	Part-I: Techno-Commercial-Unpriced	Notice Inviting e-Tender (NIT) / Instructions to Bidder (ITB) / Bid Data Sheet (BDS)	10 of NIT / 10.1.2, 19, 23 of ITB / 9 of BDS	Earnest Money Deposit / Bid Security	<p>The requirement for submission of Earnest Money Deposit (EMD)/ Bid Security has been waived. Accordingly all corresponding clauses pertaining to submission of Earnest Money Deposit (EMD)/ Bid Security including provisions applicable for MSEs &amp; CPSE's appearing anywhere in the Bidding Document stands deleted.</p> <p>In lieu of submission of Earnest Money Deposit (EMD)/ Bid Security bidder to submit Bid Security Declaration on their company Letterhead duly filled-in, signed &amp; stamped as per the format attached herewith <b>as Appendix-I</b>.</p> <p>Bid Security Declaration shall be applicable for all Bidders irrespective of their status as MSE / CPSE / Start-up / any exempted bidder category.</p> <p>Submission of Bid Security Declaration at the designated place in IOCL e-procurement portal is a mandatory requirement [bidder to upload Bid Security Declaration in the same folder created for submission of EMD (i.e., “Fee” folder) on IOCL eprocurement portal <a href="https://iocletenders.nic.in">https://iocletenders.nic.in</a> ].</p>
2.	Part-I: Techno-Commercial-Unpriced	Special Conditions of Contract (SCC)- Part A	42.2	Bank Guarantee for Additional Life of UF and RO membrane	<p><b>The following Clauses are added under Clause No. 42.2:</b></p> <p>In addition to the Security Deposit / Contract Performance Bank Guarantee to be submitted by the bidder as mentioned above, Bidder is also required to submit a separate Security Deposit / Performance Bank Guarantee equivalent to an amount of <b>0.135% of Lumpsum Price (SP-0)</b> for guaranteed life of Membrane for a period of 4 Years beyond the Defect Liability period for UF membrane and 2 Years beyond the Defect Liability period for RO membrane as per Technical section of Tender document. The Performance Bank Guarantee towards Guaranteed Life of Membrane shall be submitted One month prior to the completion of Defect liability period in the format enclosed with the Bidding Document. The original CPBG / Security Deposit submitted as per provisions of GCC Cl.No. 2.1.0.0 shall be returned to the Contractor upon submission &amp; acceptance of this separate Bank</p>

Sl. No.	Part of Bidding Document	Document Reference	Clause / Item No.	Subject	Modifications/Additions/Deletions
					<p>Guarantee and as per the provisions of GCC.</p> <p>After the expiry of Guaranteed Life for RO Membrane, the CONTRACTOR may opt to replace the above Bank Guarantee submitted for <b>0.135% of Lumpsum Price (SP-0)</b> with similar unconditional Bank Guarantee for a sum equivalent to <b>0.075% of the Lumpsum Price [SP-0]</b> to guarantee the balance life of UF membrane. Such replacement Bank Guarantee shall be valid for the balance period of 2 (Two) Years for UF membrane as per provisions mentioned in Technical Section of Tender Document. The original CPBG / Security Deposit submitted towards Guaranteed Life for UF &amp; RO Membrane shall be returned upon submission &amp; acceptance of this separate Bank Guarantee.</p> <p>However, in case UNIT / Unit(s) cannot be commissioned for a cause attributable to the OWNER within 12 (Twelve) months from the Mechanical Completion, the above Security Deposit / BG submitted towards guaranteed life of Membrane shall be suitably extended by the Contractor to provide the guaranteed life of membrane for the balance period as defined in Technical Section of Tender Document and its amendment, if any.</p>
3.	Part-I: Techno-Commercial-Unpriced	Annexure A-XIII to Special Conditions of Contract (SCC)		Purchase Preference (Linked With Local Content) (PP-LC)	Purchase Preference Policy & Undertaking as per Annexure A-XIII to SCC stands replaced with Annexure A-XIII to SCC Rev.1 attached herewith <b>as Appendix-II.</b>

**Note:** Bidder to submit a copy of this Amendment along with enclosures, if any, duly signed & stamped along with Un-Priced Techno-Commercial Bid, as a token of acceptance.

(Signature & Stamp of the Bidder)

Enclosures:

Appendix-I: Bid Security Declaration (1 page)

Appendix-II: Purchase Preference Policy & Undertaking (14 Pages)

**(on Company Letterhead)**

**Format of Bid Security Declaration from bidders in lieu of Earnest Money  
Deposit / Bid Security (On Bidders' Letter Head)**

I /We, the authorized signatory of M/s\_\_\_\_\_, participating in the subject  
Tender No: \_\_\_\_\_, for the job of \_\_\_\_\_, do hereby declare that in the event:

I / We withdraw / modify our bid during the period of bid validity

OR

I/We commit any other breach of tender conditions/ contract which would have otherwise  
attracted forfeiture of EMD



OR

I / We fail to / refuse to initiate the execution of the awarded Contract as per the terms of  
the Contract

then I / We could be debarred from being eligible for bidding / award of all future tender(s)  
of Indian Oil Corporation Limited for a period of SIX Months from the date of  
communication of such debarment.

Signature and seal of authorized signatory of bidder

Name of authorized signatory:

 <b>IndianOil</b>	<b>SPECIAL CONDITIONS OF CONTRACT (SCC)</b> <b>ANNEXURE A-XIII (PPLC POLICY) REV.1</b>						
		Rev	<b>00</b>	Page	<b>1</b>	of	<b>16</b>

## ANNEXURE A-XIII REV.1 TO SCC

**PURCHASE PREFERENCE (LINKED WITH LOCAL CONTENT) 2020-21  
(PP-LC)**

**No: FP-20013/2/2017-FP-PNG-Part(1) (E-36682)**

**Government of India  
Ministry of Petroleum and Natural Gas  
(Flagship Programme Section)**

\*\*\*

Shastri Bhawan, New Delhi  
Dated the 23<sup>rd</sup> February, 2022

To,

1. Chairman, IOCL
2. C&MD, BPCL/ HPCL/ ONGC/ OIL/ GAIL/ EIL/ Balmer Lawrie
3. Managing Director, CPCL/ NRL/ MRPL/ BCPL/ OVL
4. DG, DGH
5. DG, PPAC
6. Secretary, OIDB
7. ED, PCRA
8. ED, OISD
9. ED, CHT
10. Director, RGIPT
11. Member (BM), PNGRB
12. CEO & MD, ISPRL

**Subject: Policy to Provide Purchase Preference (linked with local content) (PP-LC) in all Public Sector Undertakings under the M/o P&NG- Amended- regarding**

Sir/ Madam,

I am directed to refer this Ministry's letter No. FP-20013/2/2017-FP/PNG dated 17<sup>th</sup> November, 2020 on the above mentioned subject and to say that some provisions of the PP-LC Policy have been amended as per the recommendations of the Steering Committee meeting held on 26.11.2021 constituted under PP-LC Policy by MoPNG. The amended PP-LC Policy is enclosed herewith for necessary compliance which shall continue till 31.03.2022.

Yours faithfully



(Kapil Verma)  
Director

Tel.: 011-23070688

Email: kapilv315-cgo@gov.in

Encl.: As above

Copy to:

- a. PS to Minister, PNG
- b. PS to MoS, PNG
- c. PPS/ PS to Secretary/ AS&FA/ AS (E)/ Sr. Economic Advisor, MoPNG
- d. PPS/ PS to JS (R)/ JS(M)/ JS (GP)/ JS (IC)/ JS (G)/ EA/ DDG, MoPNG
- e. US (Admin.), MoPNG
- f. Ms. Neelam Naval, Technical Director (NIC): with request to upload the letter on website of MoPNG.

**Subject: Policy to provide Purchase preference (linked with local content) (PP – LC) in all Public Sector Undertakings under Ministry of Petroleum and Natural Gas- Amended**

**1 Preamble**

- 1.1 In tune with Make in India (MII) campaign in oil and gas sector, the Government has decided to incentivise the growth in local content in goods and services while implementing oil and gas projects in India, and
- 1.2 Whereas the Public procurement policy rests upon the core principles of competitiveness, adhering to sound procurement practices and execution of orders for supply of goods or services in accordance with a system which is fair, equitable, transparent, competitive and cost effective, and
- 1.3 Whereas, the local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them etc.
- 1.4 Whereas incentivising enhanced local content in the procurement of goods and/or services in oil and gas business activities would lead to increased local industry content;
- 1.5 Therefore, the Ministry of Petroleum and Natural Gas (MoPNG) has decided to stipulate the following policy for providing Purchase Preference to the manufacturers/ service providers having the capability of meeting/ exceeding the local content targets in oil and gas business activities;
- 1.6 This policy considers the Local Content (LC) as the added value brought to India through the activities of the oil and gas industry. This may be measured (by project, affiliate, and/or country aggregate) and undertaken through Workforce development and investments in supplier development through developing and procuring supplies and services locally.

**2 Definitions**

- 2.1 **Oil and Gas Business Activity** shall comprise of Upstream, Midstream and Downstream business activities.



- 2.2 **Domestic products** shall be goods and/or service (including design and engineering), produced by companies, investing and producing in India.
- 2.3 **Local Content** hereinafter abbreviated to LC means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- 2.4 **Domestic Manufacturer** shall be business entity or individual having business activity established under Indian law and producing products domestically.
- 2.5 **Supplier** of goods and/or provider of service shall be a business entity having capability of providing goods and/or service in accordance with the business line and qualification thereof and classified as under:
- ‘Class-I local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50% as defined under this Policy.
- ‘Class-II local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than or equal to 20% but less than 50%, as defined under this Policy.
- ‘Non-local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%, as defined under this Policy.
- 2.6 **Steering Committee** means the committee to be constituted by MoPNG to provide effective guidance and to oversee the implementation of the Policy on a regular and continuing basis.
- 2.7 **Verification** shall be an activity to verify the accomplishment of LC by domestic manufacturers and/or suppliers of goods and/or providers of service with the data obtained or collected from respective business activities.
- 2.8 **Purchase preference:** Where the quoted price is within the margin of purchase preference of the lowest price, other things being equal, purchase preference may be granted to the bidder concerned, at the lowest valid price bid.

- 2.9 **Local Content (LC)** in Goods shall be the use of raw materials, design and engineering towards manufacturing, fabrication and finishing of work carried out within the country.
- 2.10 **Local Content (LC)** in Services shall be the use of services up to the final delivery by utilizing manpower (including specialist), working appliance (including software) and supporting facilities carried out within in the country.
- 2.11 **Local Content (LC)** in EPC contracts shall be the use of materials, design and engineering comprising of manufacturing, fabrication, assembly and finishing as well as the use of services by utilizing manpower (including specialist), working appliance (including software) and supporting facility up to the final delivery, carried out within the country.
- 2.12 **Factory overhead cost** shall be indirect costs of manpower, machine/working appliance/facility and the whole other fabrication costs needed to produce a unit of product with the cost not chargeable directly to specified product.
- 2.13 **Company overhead cost** shall be costs related to the marketing, administration and general affairs cost of the company.
- 2.14 **Indian Company** means a company formed and registered under the Companies Act, 2013.
- 2.15 **Foreign company** means any company or body corporate incorporated outside India which— (a) has a place of business in India whether by itself or through an agent, physically or through electronic mode; and (b) conducts any business activity in India in any other manner.
- 3. Scope**
- 3.1 The regulation shall be intended to:
- 3.1.1 Support and boost the growth of domestic manufacturing sector so as to be able to support oil and natural gas business activities and contribute added value to economy, absorb manpower as well as have national, regional and international competitiveness;

- 3.1.2 Support and boost the growth of innovation/technology of domestic manufacturing sector.
- 3.2 This policy shall apply to all the Public Sector Undertakings and their wholly owned subsidiaries under the Ministry of Petroleum and Natural Gas; Joint Ventures that have 51% or more equity by one or more Public Sector Undertakings under the Ministry of Petroleum and Natural Gas; attached and subordinate offices of MoPNG.
- 3.3 This policy shall not include goods/ services falling under Micro Small and Medium Enterprises (MSME) or Domestically Manufactured Electronic Products (DMEP), as those products/ services are already covered under specific policy. However, an option would be given in the tender for the bidder to declare preference for seeking benefit under PP-LC/MSME or DMEP.
- 3.4 The policy is not applicable for HP-HT operations for the time being. The Charter Hiring of offshore vessels shall continue to be governed by DG, Shipping Guidelines. Indian Flag Vessels shall be considered as having 100% LC.
- 3.5 The prescribed local content in the Policy shall be applicable on the date of Notice inviting Tender.

#### **4. Procurement**

- 4.1 The procuring companies shall follow their own procurement procedures. Aggregation of annual requirements and such other procurement practices, which facilitate the implementation of this policy, may be adopted by procuring companies.
- 4.2 In respect of Global Tender Enquiry (GTE) the guidelines as issued by Government of India from time to time shall be applicable on the procuring entities.
- 4.3 **Margin of Purchase preference:** The margin of purchase preference shall be 20%.
- 4.4 (a) In respect of all goods, services or works in respect of which the Nodal Ministry/ Department under DPIIT's Public Procurement (Preference to Make in India) Order, 2017 has communicated that there is sufficient local capacity and local competition, only Class-I local supplier shall be eligible to bid irrespective of purchase value.

- 4.4 (b) For all other local tenders, Class-I local supplier and Class-II local supplier shall be eligible to bid irrespective of purchase value, but preference to be given as per PP-LC to the Class-I local supplier.
- 4.4 (c) Only Class-I local supplier and Class-II local supplier, as defined under the Order, shall be eligible to bid in procurements undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, Non-local suppliers shall also be eligible to bid along with Class-I local suppliers and Class-II local suppliers.
- 4.4 (d) Class-II local supplier will not get purchase preference in any procurement, undertaken by procuring entities.
- 4.5 In National Competitive Bid procurements of all items not covered by para 4.4 (a) and where the estimated value to be procured i.e. total value of enquiry/ tender, is less than Rs. 1 Crore shall be exempt from this Policy. In case of International Competitive Bids, the policy shall be applicable irrespective of the tender estimate. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Policy.
- 4.6 The producers of goods and/or providers of services shall be obliged to fulfil the requirements of quality and delivery time in accordance with the provisions of the respective contracts of goods and services.
- 4.7 If the Ministry is satisfied that Indian suppliers of an item are not allowed to participate and/or compete in procurement by any foreign government, it may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and/or other items relating to the Ministry.
- 4.8 For the purpose of para 4.7 above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or (ii) a majority of its shareholding or effective control of the entity is exercised from that country, or (iii) more than 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meets any of these tests with respect to India.

**5. Purchase Preference- Linked with Local Content (LC)**

- 5.1 In procurement of all items not covered by para 4.4 (a), the following provisions may be considered for LC linked Purchase Preference:

- 5.1.1 The manufacturers/ service providers having the capability of meeting/ exceeding the local content targets shall be eligible for purchase preference under the policy, i.e. LC manufacturers/ LC service providers respectively as described below.
- 5.1.2 Wherever the goods/ services are procured under this policy, eligible (techno-commercially qualified) Class I Local supplier may be granted a purchase preference where the quoted price is within the margin of purchase preference of the lowest price, other things being equal, purchase preference may be granted to the eligible (techno-commercially qualified) Class I Local supplier concerned, at the lowest valid price bid.
- 5.1.3 Goods:** The tender for procuring goods would specify that the contract for 50% of the procured quantity would be awarded to the lowest techno-commercially qualified Class I Local supplier, subject to matching with L1, if such bidders are available. The remaining will be awarded to L1.
- 5.1.3.1 However, if L1 bidder happens to be a Class I Local supplier, the entire procurement value shall be awarded to such bidder;
- 5.1.3.2 If in the opinion of the procuring company, the tenders (procured quantity) cannot be divided in the prescribed ratio of 50:50, then they shall have the right to award contract to the eligible Class I Local supplier for quantity not less than 50%, as may be divisible.
- 5.1.3.3 In continuation to 5.1.3.2 above, if the tendered item is non divisible, (to be included in the tender document by procuring company) the contract can be awarded to the eligible Class I Local supplier for the entire quantity.
- 5.1.4 Services/ EPC Contracts:** The tender for oil and gas services/ EPC contracts shall not normally be split. For such procurement the tender would specify that the entire contract would be awarded to the lowest techno-commercially qualified Class I Local supplier, subject to matching with L1, if such bidders are available. However, tender for certain oil & gas services can normally be split, in such cases, splitting shall be allowed and specified in tender document. Such services shall follow the procedure outlined for goods as described in para 5.1.3. The procuring company should clearly specify in the tender document whether the tender shall be split or not.

- 5.1.5 For para 5.1.3 and 5.1.4 above, only those LC manufacturers/ service providers whose bids are within the margin of purchase preference would be allowed an opportunity to match L1 bid.
- 5.1.6 The tender conditions would ensure that local content in oil & gas products is encouraged. However, the procuring company may incorporate such stipulations as may be considered necessary to satisfy themselves of the production capability and product quality of the manufacturer.
- 5.1.7 The procedure for award under the policy is at **Enclosure-I**.

## **6. Determination of LC**

### **6.1 LC of goods**

- 6.1.1 LC of goods shall be computed on the basis of the cost of domestic components in goods, compared to the whole cost of product.
- 6.1.2 The criteria for determination of the local content cost in the goods shall be as follows:
- a) in the case of direct component (material), based on country of origin;
  - b) in the case of manpower, based on INR component.
- 6.1.3 The calculation of LC of the combination of several kinds of goods shall be based on the ratio of the sum of the multiplication of LC of each of the goods with the acquisition price of each goods to the acquisition price of the combination of goods.

### **6.2 LC of service**

- 6.2.1 LC of Service shall be calculated on the basis of the ratio of service cost of domestic component in service to the total cost of service.
- 6.2.2 The total cost of service shall be constituted of the cost spent for rendering of service, covering:
- a) cost of component (material) which is used;
  - b) manpower and consultant cost; cost of working equipment/ facility; and
  - c) general service cost.

6.2.3 The criteria for determination of cost of local content in the service shall be as follows:

- a) in the case of material being used to help the provision of service, based on country of origin;
- b) in the case of manpower and consultant based on INR component of the services contract;
- c) in the case of working equipment/facility, based on country of origin; and
- d) in the case of general service cost, based on the criteria as mentioned in clauses a, b, and c above.
- e) Indian flag vessels in operation as on date.

### **6.3 LC of the EPC Contracts:**

6.3.1 LC of EPC contracts shall be the ratio of the whole cost of domestic components in the combination of goods and services to the whole combined cost of goods and services.

6.3.2 The whole combined cost of goods and services shall be the cost spent to produce the combination of goods and services, which is incurred on work site. LC of the combination of goods and services shall be counted in every activity of the combination work of goods and services.

6.3.3 The spent cost as mentioned in paragraph 6.3.2 shall include production cost in the calculation of LC of goods as mentioned in clause 6.1.1 and service cost in the calculation of LC of services as mentioned in clause 6.2.2.

### **6.4 Calculation of LC and Reporting**

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

## **7 Certification and Verification**

7.1 Class I/Class II Local suppliers are eligible to bid only if they meet the local content norms, therefore whether or not they want to avail PP-LC benefit, it will still be mandatory for them to give adequate documentation as follows to establish their status as class-I or class-II local supplier:

7.1.2 At bidding stage:

- a) Price Break-up:
  - The bidder shall provide the percentage of local content in the bid.



b)

- The bidder shall submit an undertaking from the authorised signatory of bidder having the power of Attorney alongwith the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
- In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall be supported by a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practising chartered accountant (in respect of other than companies) giving the percentage of local content.
- However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practising cost accountant or practising chartered accountant giving the percentage of local content is also acceptable.

7.1.3 After Contract Award:

- The bidder shall submit an undertaking from the authorised signatory of bidder having the power of Attorney alongwith the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
- In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall be supported by a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practising chartered accountant (in respect of other than companies) giving the percentage of local content.
- However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practising cost accountant or practising chartered accountant giving the percentage of local content is also acceptable.



- 7.2 Each supplier shall provide the necessary local-content documentation to the statutory auditor, which shall review and determine that local content requirements have been met, and issue a local content certificate to that effect on behalf of the bidder, stating the percentage of local content in the good or service measured. The Auditor shall keep all necessary information obtained from suppliers for measurement of Local Content confidential.
- 7.3 The Local Content certificate shall be submitted along with each invoice raised. However, the % of local content may vary with each invoice while maintaining the overall % of local content for the total work/purchase of the pro-rata local content requirement. In case, it is not satisfied cumulatively in the invoices raised up to that stage, the supplier shall indicate how the local content requirement would be met in the subsequent stages.
- 7.4 As regards cases where currency quoted by the bidder is other than Indian Rupee, exchange rate prevailing on the date of notice inviting tender (NIT) shall be considered for the calculation of Local Content.
- 7.5 The Procuring Company shall also have the authority to audit as well as witness production processes to certify the achievement of the requisite local content.

## **8 Governance and Supervision**

- 8.1 A Steering Committee will be constituted by MoPNG to provide effective guidance and to oversee the effective implementation of the Policy including review and amendments required therein. The Steering Committee may consider representations on target Local Content in goods, services and EPC and modify the policy accordingly.
- 8.2 The Steering Committee shall annually conduct a review of the policy implementation which shall specifically cover the issue of whether there has been adequate competition, and whether the policy has resulted in any reduction in competition/ exclusion of non-local bidders or any cost increase to the purchasing PSU, particularly in respect of services & works contracts.

## **9 Sanctions**

- 9.1 The Procuring companies shall impose sanction on manufacturers/ service providers not fulfilling LC of goods/ services in accordance with the value mentioned in certificate of LC.

- 9.2 The sanctions may be in the form of written warning, financial penalty and blacklisting.
- 9.3 In the event that a manufacturer or supplier of goods and/or provider of services does not fulfil his obligation after the expiration of the period specified in such warning, the procuring company can initiate action for blacklisting such manufacturer/supplier/service provider.
- 9.4 A manufacturer and/or supplier of goods and/or provider of services who has been awarded the contract after availing Purchase Preference is found to have violated the LC provision, in the execution of the procurement contract of goods and/or services shall be subject to financial penalty specified in clause 9.4.1.
- 9.4.1 The financial penalty shall be over and above the PBG value prescribed in the contract and shall not be more than an amount equal to 10% of the Contract Price.
10. **Clarification on Goods/ Services:** Any issue regarding the coverage of a particular good/ service under the proposed policy would be referred to the Steering Committee for clarification.
11. **Powers to grant exemption and to reduce minimum local content:** Wherever proper justification exists, Ministry of Petroleum and Natural Gas may by written order, for reasons to be recorded in writing,  
a) Reduce the minimum local content below the prescribed level; or  
b) Reduce the margin of purchase preference below 20%; or  
c) Exempt any particular item or supplying entities from the operation of this Order or any part of the Order.
12. **Time Period:** The Policy shall be applicable for 5 years. Except for 2017-18, the Policy shall not be continued unless, the Steering Committee by September 30th of each year, concludes a review as per para 8.2 of the Policy and recommends continuation of the Purchase Preference.

## **PROCEDURE FOR AWARD OF CONTRACTS**

### **Procedure for award of contracts under this policy shall be as follows:**

1.1. In procurement of all items which are divisible in nature, the 'Class I local supplier' shall get purchase preference over 'Class II local supplier' as well as 'Non Local Supplier' as per following procedure:

- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class I local supplier', the contract for full quantity will be awarded to L1.
- ii. If L1 bid is not a 'Class I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, lowest bidder among the 'Class I Local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

1.2. In the procurement of all items which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.
- ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.
- iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

## UNDERTAKING (to be submitted on Company's Letterhead)

E-tender ID - .....

Certification by the bidder

I \_\_\_\_\_, Son/ Daughter of \_\_\_\_\_, do solemnly affirm and state as under:

1. I am the \_\_\_\_\_ <<Designation of the authorized signatory>> of \_\_\_\_\_ and I am duly authorized to furnish this undertaking declaration on behalf of \_\_\_\_\_.
2. That \_\_\_\_\_ has submitted its bid no \_\_\_\_\_ dated \_\_\_\_\_ against bidding document no \_\_\_\_\_ dated \_\_\_\_\_ for \_\_\_\_\_ item / works for \_\_\_\_\_ Project / Refinery of IOCL.
3. That the Company is fully aware of the provisions of Policy to Provide Purchase Preference (linked with local content) (PP-LC) dated 17.11.2020 and amendments thereof, enclosed in the above bidding document.
4. We hereby confirm that our offer is achieving the local content (LC) of
  - a. minimum 50% ☐
  - b. 20% <= LC < 50% ☐
  - c. LC < 20% ☐

**(Tick whichever is applicable.)**

5. I confirm that I am aware of the implication of the above undertaking and our liability on account of wrong declaration.

**(Authorized signatory of Supplier)**

### **Certification by the statutory auditor / Chartered Accountant of the bidder**

We, \_\_\_\_\_, a CA firm having our registered office address \_\_\_\_\_ and certificate number \_\_\_\_\_ certify that we are statutory auditor of the Company M/s \_\_\_\_\_, having its registered office at \_\_\_\_\_.

OR

We, \_\_\_\_\_, a CA firm having our registered office address \_\_\_\_\_ and certificate number \_\_\_\_\_ certify that statutory auditor is not mandatory for the company M/s \_\_\_\_\_, having its registered office at \_\_\_\_\_ as per prevailing law and we are practicing Chartered Accountant, not being an employee / Director and not having any interest in the company.

We have understood the provisions of Policy to Provide Purchase Preference (linked with local content) (PP-LC) dated 17.11.2020, enclosed in the above bidding document.

We hereby confirm that our offer is achieving the local content of

- a. minimum 50% ☐
- b. 20% <= LC < 50% ☐
- c. LC < 20% ☐

**(Tick whichever is applicable.)**

**(Statutory auditor / Chartered Accountant of the bidder)**

**E-tender ID - .....**

**Note:** - This undertaking shall be certified by the authorized signatory of the bidder, signing the bid. Preference is applicable only for suppliers claiming minimum 50 % Local Content.

- i. The Proprietor and an independent Chartered Accountant, not being an employee of the firm, in case of a proprietorship firm.
- ii. Any one of the partners and an independent Chartered Accountant, not being an employee of the firm, in case of a partnership firm.
- iii. Statutory auditors in case of a company (as stated in said Policy in this Tender Document)



## FORM -I

### REPLIES TO PRE-BID QUERIES-Lot-2

<b>TO</b>		M/s. INDIAN OIL CORPORATION LTD				
<b>SUB</b>		PRE-BID QUERIES FOR RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India				
<b>WORK DETAILS</b>		RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India				
<b>TENDER NO.</b>		BIDDING DOCUMENT : SG/B269-475-PA-T-8701/23				
<b>NAME OF BIDDER</b>						
SR. NO	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY-dated-19-04-2022	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
<b>COMMERCIAL</b>						
1	PART-4, B269-00-475-19-41-0001 Rev 0	Page 14 of 24	15.0 CONSTRUCTION MANPOWER	CONSTRUCTION MANPOWER	With reference to the mentioned clause no. , kindly furnish the minimum no of manpower required for contruction purpose along with their qualification and experience details also requesting you to provide the Document No. 7-82-0003 for construction manpower as it is not enclosed with the tender.	Manpower requirement to be accessed by bidder and indicate the same in Form R (DEPLOYMENT SCHEDULE FOR SUPERVISORY PERSONNEL). and For Document No. 7-82-0003 (QUALIFICATION AND EXPERIENCE OF KEY SUPERVISORY PERSONNEL AND PENALTY FOR THEIR NON-MOBILISATION), please refer Annexure-A-VII to Special condition of contract.
2	Engineering Design Basis (Instrumentation) Doc. No. B269-999-16-51-EDB-1001 Rev No. 3	3062/7166	4.5.4	Type of Valve	As per Tender P&ID, we have considered on/off gate valves for size ranging from 1" to 20". We would like to follow this philosophy for valve selection as these valve are process isolation valves and not shutdown valves. Also referring to tender P&ID, Gate valves are shown for instrument isolation and in some places instrument isolation valves are missing, hence kindly confirm the type of valves used for instrument isolation.	FOR PROCESS AUTO ON-OFF VALVES EDB B269-999-16-51-EDB-1001 SHALL BE FOLLOWED. ISOLATION VALVE SHALL BE GATE TYPE. THE P&IDS GIVEN IN TENDER ARE INDICATIVE P&IDs. VENDOR TO FURTHER DEVELOP THESE P&IDs IN THE LINE WITH TENDER DOCUMENT REQUIREMENTS. INSTRUMENT ISOLATION VALVES SHALL BE PROVIDED BY THE BIDDER AS PER THE TENDER REQUIREMENT DURING DETAILED ENGINEERING.

**Name of Work** : RWTP, RO-DMP, CPU & ZLD Plant for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
**Bidding Document**: SG/B269-475-PA-T-8701/23  
**Bidder-1**

### **PRE-BID QUERIES (COMMERCIAL)**

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	NOTICE INVITING e-TENDER	Page 34 of 7166	11.1.3	Technical Criteria – Minimum Capacity for Multi Effect Evaporator unit	<p>You are aware that the large capacity MEE are being tendered by various refineries in recent past only and not a single MEE plant is commissioned in refineries till the date.</p> <p>The references of various contractors who are qualifying in Oil &amp; Gas EPC water &amp; waste water projects can be only in Chemical/ Pharma/ Textile etc industries where capacities of MEE are 150 m3/ day or less.</p> <p>Paramount, to its credit have, on its own designed, engineered, manufactured, supplied, erected &amp; commissioned successfully following largest capacity MEE project in last 12 years:</p> <p><b>For Mazda Colours Limited:</b> We have executed an order of MEE System for 150 m3/ day and the said plant was commissioned in May 2016.</p> <p>Therefore, we have our own eligible experience for execution of MEE in last 12 years if capacity is allowed as 150 m3/ day in PQ criteria in place of 180 m3/ day.</p> <p>Kindly be informed that if 150 m3/ day capacity is not granted in PQ criteria, other suppliers who would have executed MEE orders of required capacity would have no experience of stringent design, engineering &amp; specifications including design safety factors, approved vendors &amp; manufacturing/ testing standards viz. end to end executions and comfort of system integration with guarantees would both become limitation with these vendors.</p> <p>Hence, kindly allow PQ criteria of 150 m3/ day for MEE in place of 180 m3/ day.</p>	Shall be replied separately.
2	PROPOSAL FORMS	Page 169, 171 of 7166 and	Sr. no. 22 & 50 (Form-M) and	Technical Information Required for	Subject clauses require Bidder to provide details of quantum of work in Form-T.	Follow instructions mentioned in Form-T.

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
		Page 186 of 7166	Form T	Assessing Quantum of Work	We understand that this Form-T is Not Applicable and bidder need not submit the same. Kindly confirm.	
3	Notice Inviting Tender	Page 32 of 7166	Sr. no. 5.0	Time Schedule	<p>Time Schedule specified for subject works is 22 Months for Mechanical Completion + 2 Months for Commissioning from the date of issue of Fax of Acceptance / Letter of Acceptance.</p> <p>The quantum of Engineering, Procurement and Civil Construction &amp; Piping works apart from other Electro-Mechanical &amp; Instrumentation job is huge and it is impossible to complete these works in 24 months.</p> <p>Further due to COVID-19 induced epidemic, the deliveries of various equipment have increased from 4 - 6 months to 9 - 12 months. Imported materials also will have long transit times considering COVID consequences. For our recent project orders, even Pipe manufacturers have quoted deliveries of 5-6 months</p> <p>Therefore, we request that realistic completion period of at least 28 months (26 months for Mechanical Completion plus 2 months for Commissioning) may please be considered.</p>	Bidder to follow bid document
4	SCC (Part-B)	Page 459 of 7166	Sr. no. 8	Price Variation	Subject Clause specifies that "The price variation shall be applicable on basic supply price of bulk steel material for <b>site fabrication/ construction for permanent incorporation in work e.g. Structural steel, Reinforcement bars, Steel Gratings, CS Plates, MS anchor bolts, MS insert plates and chequered plate only.</b> " We understand that the subject clause on Price Variation shall also be applicable for CS plates for shop fabricated vessels and tanks. Kindly confirm our understanding.	Not Acceptable. Bidder to follow the provisions of Tender Document.
5	INSTRUCTIONS TO BIDDERS (ITB)	Page 84 of 7166	42	Project Specific Account	<p>With reference to requirement of Project Specific Account we want to bring to your kind notice that RBI circular no DOR.No.BP.BC.30/21.04.048/2020-21 December 14, 2020 (copy of this RBI circular attached herewith as Annexure_Sr.no.1a)</p> <p>With reference to above circular a bank cannot open a current account if a company is enjoying credit facilities with one bank.</p> <p>As we are enjoying credit facilities with our banker so no other bank will open current account and opening of project specific account clause will not</p>	Bidder to follow the provisions of Tender Document.



SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					be feasible.  Hence we request you to kindly confirm that requirement of Project Specific Account is not mandatory.	
6	General Conditions of Contract	Page 20 of 192	2.6.7.0 (B)(i)	Calculation of Price implications of a Change Order	Subject clause specifies that "For Civil and Structural works involved in the works to which the Change Order Proposal relates, on basis of the CPWD rates then prevailing for the location of the works"  Kindly confirm that if CPWD rates are old then applicable rates shall be increased by 10% per year for considering inflation.	Not Acceptable. Bidder to follow the provisions of Tender Document.
7	General			Change in Law	In the eventuality of a change in the laws of the country, you are requested to kindly include a relevant clause in the Tender to protect the contractor from the Time & Cost implications on account of such changes in laws.	Not Acceptable. Bidder to follow the provisions of Tender Document.
8	SCC (Part-B)	Page 461 of 7166	9.1.1	Construction Power	Referred clause specifies that " <i>Subject to availability, construction power shall be provided by the OWNER from the nearest Substation / tapping point on chargeable basis.</i> "  Kindly confirm whether Construction Power will be provided by OWNER. This is required by us for correct estimation of costs involved.	Follow the provisions of SCC (Part-B) and Tender Document.
9	SCC (Part-B)	Page 462 of 7166	9.2	Construction Water	Referred clause specifies that " <i>Subject to availability, Construction water shall be provided by OWNER on chargeable basis</i> "  Kindly confirm whether Construction Water will be provided by OWNER. This is required by us for correct estimation of costs involved.	Follow the provisions of SCC (Part-B) and Tender Document.
10	SCC (Part-B), Land for Construction	Page 462 of 7166	9.3	Land for Batching plant	Kindly confirm that Land for Batching Plant shall be provided <u>within Refinery Premises</u> for speedy progress of the project.	Follow the provisions of SCC (Part-B) and Tender Document.
11	SCC (Part-B), Land for Construction	Page 462 of 7166	9.3	Land for Warehouse	Kindly confirm that Land for Warehouse shall be provided <u>within Refinery Premises</u> since we shall be dispatching various equipments to site and receive payment for same and so all equipments are required to be stored within Refinery Premises till its erection.	Follow the provisions of SCC (Part-B) and Tender Document.
12	SCC (Part-B)	Page 442 of	4	BOCW cess	Kindly confirm that BOCW cess shall be applicable only on Construction	Follow the

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
		7166			Services price quoted by bidder in Form SP-2 and that it shall not be applicable on Design & Engineering and Supply portion of the contract.	provisions of SCC (Part-B) and Tender Document.
13	SCOPE OF WORK & SUPPLY (UG CIVIL-STRUCTURAL & ARCHITECTURAL)	Page 946 of 7166	3.6.2 (b)	Dismantling of existing works if required	Kindly note that, it is not possible to find out presence of all underground hindrances during a Pre-bid Site Visit or any activity allowed by IOCL during Pre-bid stage. Hence we request that either the underground hindrances should be quantified during bidding stage OR bidder should be compensated for removal of such hindrances during execution stage under provisions of GCC Clauses 2.5.0.0 (Alteration in the scope of work or supply) and 2.6.0.0 (Change Orders). Kindly confirm.	Not Acceptable. Bidder to follow the provisions of Tender Document.
14	B269-475-81-41-GTD-0022	Page 1636 of 7166		Geotechnical Data	Kindly note that our estimates shall be based on Geotechnical Data as provided in the Tender. If discrepancies are found in Site Investigation data furnished by you when we carry out Soil Investigation after the award of work, the Time & Cost consequences shall be reimbursed by you because Geotechnical data provided in Tender cannot be misguiding to the contractor during bidding stage. Further, there is no time and opportunity for bidder to carry out Soil Investigation at bidding stage. Therefore, please confirm that the time & cost consequences due to change in soil data shall be paid for as extra works. Kindly confirm.	Not Acceptable. Bidder to follow the provisions of Tender Document.
15	Annexure A-IX to SCC	Page 627 of 7166	Sr. nos. 2, 3, 8, 14	List of critical tagged items	<p>Among items listed under "List of Critical Tagged Items" there are number of items which are fabricated at our works e.g. Dual Media Filters, Activated Carbon Filters, Degasser Tower, Mixed Bed Exchanger, etc.</p> <p>Please confirm that CS Plate material purchased for these items shall be considered as major critical tagged item for enabling release of 10% milestone payment "on placement of Purchase Order for major critical tagged items" as per Clause 6.2.1 (i), SCC Part-B, Page 13 (Page 434 of 5335).</p>	The same shall be discussed and finalized with the successful bidder
16	Price Schedule	Form SP-3	Column 13	Rate of Customs duty on Foreign Component	As the rate of Customs duty varies for various components, a flat rate cannot be quoted. Please provide more number of rows for quoting rates of Customs duty because there will be multiple items with different rates of Custom duty.	Not Acceptable. Bidder to follow the provisions of Tender Document.
17	Price Schedule	Form SP-6	Column 2	Item Description	The number of rows provided is limited compared to number of spares to be quoted. Hence, please allow provision for adding more rows as required.	Refer SOP Rev.1 with Commercial Amendment-1

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						being issued separately.
18	SCC, Part-B	Page 437 of 7166	Clause 3.1 (f)	Bank Guarantee against amount of Price Adjustment for Delay	<p>Subject clause specifies that: "f) Where a GST Invoice is issued by the Owner, the amount of price reduction (excluding GST), on a written request made by the Contractor, may be released under a cover of Bank Guarantee of equivalent amount issued in favour of the owner. In case GST Invoice is not issued, amount withheld (including GST), on a written request made by the contractor may be released under a cover of Bank guarantee of equivalent amount issued in favor of the owner. The format and other requirement of Bank Guarantee shall be same as defined in Clause 6.4.7.3 of GCC. Amount to be withheld as per clause no 6.4.7.3 of GCC shall be withheld after including applicable GST on the amount withheld. <u>This Bank Guarantee shall be valid for a period so that same may remain in force till the invocation of Price Reduction is finally settled and accepted by the Owner.</u>"</p> <p>Since most of the disputes related to delay in completion do not get settled by Owner and are normally led towards Arbitration, we submit that the underlined portion of above clause may please be modified as: "This Bank Guarantee shall be kept valid till the final settlement is arrived mutually or through Conciliation/ Arbitration/ Court."</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.
19	GCC	Page 118 of 192	9.0.1.0	Claims Disputes & Arbitration	We request ammendment to provisions of Sole Arbitrator as under. The number of Arbitrators shall be THREE. Each party shall nominate their respective Arbitrators & both the nominated Arbitrators shall appoint the 3rd Arbitrator who shall act as Presiding Arbitrator.	Not Acceptable. Bidder to follow the provisions of Tender Document.
20	ANNEXURE TO SPECIAL CONDITIONS OF CONTRACT (SCC)- Part B	Page 468 of 7166	Sr. no. 4, New Clause 7.13	MARINE COVER AND ERECTION ALL RISK COVER INSURANCE	<p>New added clause 7.13 states that "The proposed coverage under IOCL MCE policy is enclosed as <u>Appendix-I ( 4 pages )</u> to this ANNEXURE TO SPECIAL CONDITIONS OF CONTRACT (SCC) Part-B."</p> <p>Please help by providing the mentioned Appendix-I (4 pages) as the same could not be found enclosed.</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.

Work Details		: RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India				
Bidding Document No		: SG/B269-475-PA-T-8701/23				
Name of Bidder		BIDDER-2				
Sl. No.	Reference of Bidding Document				Bidder's Query	Consultant Reply
	Part / Vol.	Page No.	Clause No.	Subject		
	Special Condition of Contract- Part-A					
1	SCC/part-A	4 of 33	1	Effective Date	The effective date of Contract shall be the date of receipt of technically & commercially clear Notification of Award of Contract and disbursement of first instalment of 5% of interest free advance. In case of delay in receipt of advance, the actual date of receipt of advance will be effective date (Zero date) of Contract. Kindly Accept	Not Acceptable. Bidder to follow the provisions of Tender Document.
2	SCC/part-A	7 of 33	8	Time Schedule	In the event of delayed input as part of Owner as per agreed schedule viz. Utilities, hook-up/ interface etc. suitable time extension shall be provided. 'In case there is a delay in providing Utilities and Feedstock, inputs required for completion of project by Owner/ Consultant and concurrently Contractor has delayed the completion of project, then in this case delay analysis will be done and Net delays attributable to Contractor/ Owner shall be calculated from the agreed & approved schedule.	Not Acceptable. Bidder to follow the provisions of Tender Document.
3	SCC/part-A	16 of 33	24	Additional Works/ Extra Works	a) The provision of this clause shall be applicable only after contractor has been intimated the concern through a written notice with a request to augment the site work. 'b) In case contractors failure to initiate necessary remedial action within reasonable time, owner may resort to provision of this clause. 'c) However, contractor shall not be responsible for quality of any work done by third party and/ or its impact on the performance of the plant.	Bidder to follow the provisions of Tender Document.
4	SCC/part-A	32 of 33	32	Sub-Contracting	a) BIDDER-2 is an ISO 9001 company with an elaborate system for vendor evaluation. As is the practice with all International contractors, BIDDER-2 prefers to operate based on its standard approved vendor list. This is based on the following: 'i) BIDDER-2's approved vendors have knowledge of BIDDER-2's quality systems. 'ii) BIDDER-2 has knowledge on the actual site working of these vendors. 'iii) Interface engineering shall be smooth. 'Our own experience is such that we have very few vendors for most of the items and if some of them are eliminated, we may not get sufficient response/ competitive offers. It is with this background that BIDDER-2 suggested going predominantly based on BIDDER-2's vendors list. 'b) Further, any other equipment manufactured by BIDDER-2 including DCS system shall be deemed to be accepted irrespective of the same not being considered specifically vendor list. 'c) For site works BIDDER-2 shall invite open tender. The shortlisted subcontractors list shall be forwarded to Owner for information 'Kindly Confirm	a) Bidder to follow bid documents b): Bidder to follow bid documents c): Follow clause no. 32 of SCC Part-A.
	Special Condition of Contract- Part-B					

5	SCC/Part-B	3	2	Firm and Fixed Prices	In view of very high current fluctuations in the prices due to Covid-19, we would request you to kindly consider the Price Variation. As per tender Price variation is applicable is on bulk Steel Material only. Kindly Accept	Not Acceptable. Bidder to follow the provisions of Tender Document.
6	SCC/Part-B	5-9	3	Taxes & Duties- General	<b>We request you to consider</b> 1) Statutory Variation in existing taxes/ duties i.e. Basic Custom Duty, E. Cess, BOCW, SWS etc. as well as introduction of New taxes/ duties / levies/ Cess to Owner's account extra at actuals for the entire duration of Contract. 2) Foreign exchange rates variation w.r.t taxes/duties i.e. Custom Duty, GST etc. during the Contract execution period shall be to Owner's account.	Not Acceptable. Bidder to follow the provisions of Tender Document.
8	SCC/Part-B	10 of 34	4	Building and other construction worker's welfare cess	Also, as per provision BOCW Cess shall be deducted at Source on declared Construction portion i.e. SP-2 shall be applicable. Request IOCL to intimate the present rate of BOCW applicable for this project. Please confirm. 'In case of BOCW Cess shall be deducted at Source other than Construction portion i.e. Supply and D&E Prices same shall be additionally paid/ reimbursed by IOCL in the Bill.	Not Acceptable. Bidder to follow the provisions of Tender Document.
9	SCC/Part-B	11-13	6.1	Mobilization Advance	We request Owner to release 10% of total contract price as interest free initial advance against completion of following milestones: '(a) 5 % of total contract price against holding Kick off meeting and finalisation of contract coordination procedure and Drawing & Documents submission schedule. '(b) 5 % of total contract price against submission of detailed L1 network. against submission of BG of equal value valid upto commissioning period. 'GST as applicable shall be reimbursed by Owner extra at actuals. Bank Guarantee towards initial mobilization advance shall be reduced on quarterly basis duly adjusting the advance.	Not Acceptable. Bidder to follow the provisions of Tender Document.
10	SCC/Part-B	13	6.2	Inland Transportation within India	Inland Transportation Prices are to be quoted as part of SP-1(Supply Price). However, there is no Terms of Payment defined in the tender. We propose that 10% of transportation amount shall be paid on placement of PO on pro rata basis and 90% transportation amount including applicable GST amount shall be payable on prorata basis on dispatch of material.	Not Acceptable. Bidder to follow the provisions of Tender Document.


11	SCC/Part-B	23-26 of 34	7	Marine cover and erection all risk cover insurance	<p>As per Bid provision, Owner shall arrange the Marine Cover Insurance and Erection All Risk Cover Insurance for the project. However, the proposed deductibles are very high. As insurance is being arranged by Owner, no deductibles shall be borne by Contractor.</p> <p>In case of any loss or damage during transit/ storage/ Erection &amp; commissioning, contractor shall intimate the Owner to raise insurance claim. Contractor shall not be responsible for raising such claims and/ or settlement of claim. In the event of any loss or damage, Owner shall issue open order on Contractor for replacement/ rectification of defective equipment/ goods/ works. For such replacement/ rectification full (100% value along with taxes and duties) prices for the respective goods/ works shall be paid by Owner to Contractor in addition to the balance payments for respective damaged goods/ works.</p> <p>'Payment to contractor shall not be linked to Owner's settlement of claim with insurance agency. Delays in placement of open order for damaged items shall constitute valid reason for extension of time schedule.</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.
12	SCC/Part-B	30	9.3	Land use for construction site offices and resident accommodation	<p>We would request customer / Consultant to provided Levelled and consolidated land free from all encumbrances and access roads for the UBs, storage area (covered/ uncovered), fabrication and contractors site office adjacent to package site within plant without licence fee.</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.
13	SCC/Part-B	32	13,  '13.b.ii	Surplus Material  'Surplus material shall be allowed to be taken out only after completion of the Commissioning activities for the project.	<p>There will be many instances wherein many of the surplus material would never be utilized as they may not required for the commissioning of any sub system and having low self life. Such surplus material may please be allowed to taken back by Contractor and may not be linked to Commissioning.</p> <p>Please modify this clause to the extent of following: "Contractor will be allowed to take back Surplus material earlier also subject to prior acceptance by Owner."</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.
Notice Inviting Tender						
14	NIT	18 of 24  '19 of 35	13.2 & 13.3 of NIT  ^16.6 & 16.7 of ITB	PF (PROVIDENT FUND) REGISTRATION & ESI (Employees State Insurance) Code	<p>Bidder is exempted for Employees Provident Fund &amp; ESI. Details shall be furnished along with our Bid.</p> <p>'For Site activities i.e. E&amp;C and Civil Works, Bidder execute the same by engaging subcontractor. PF &amp; ESI for the workman deployed by Subcontractors are maintained by them. Bidder provide compliance and undertaking w.r.t PF&amp;ESI for labour engaged by Bidder subcontractor's.</p>	Noted.Bidder to follow the provisions of Tender Document.
Instruction to Bidders						
15	ITB		Attch VIII to ITB	Self certification and declaration by CEO/CFO/Company Secretary	<p>we wish to submit that Bids including Self certification and decalaration by CEO / CFO / Company secretary are submitted by Authorised person in whose favour Power of Attorney has been issued to sign and submit the Bid.</p>	Bidder to follow the provisions of Tender Document.
16	ITB		Attc-XIII of ITB	Certification by CEO/CFO	<p>We understand that this attachement is not to be submitted. Kindly Confirm</p>	Not applicable.

17	ITB		Attch IX to ITB	Letter from Statutory Auditor /CA	We understand that this format is not applicable where Bidder is already submitting, duly audited and published Annual Reports and balance sheet, etc. shall be furnished by Bidder.	Please recheck Annexure No. and query.
<b>General Condition of Contract</b>						
18	GCC	1-2/ 192	1.0.10.0 & 1.0.11.0	Commissioning Definition	Please delete following provision " and as the requirement of process licensor"	Not Acceptable. Bidder to follow the provisions of Tender Document.
19	GCC	3/192	1.0.26	Foreign Currency	Some currencies are different in both the clauses kindly specify which foreign currencies are to be considered in this tender.	Bidder to follow ITB, SOP Preamble.
	ITB	15/35	15.2	CURRENCIES OF BID AND PAYMENT		
20	GCC	3/192	1.0.03.0	Conversion of Foreign Currency to Indian Rupees	As per GCC Clause foreign currency to be converted to Indian rupees at the mean rate of exchange between the two arrived at on the basis of the notified mean rate or of the average between the buying rate and the selling rates if the mean rate is not separately notified, as the case may be, by the State Bank of India for the day immediately preceding the date of conversion, however as per ITB Clauses foreign currency to be converted to Indian rupees at at the Bill selling rate of State Bank of India. Kindly Clarify	Bidder to follow ITB, SOP Preamble.
	ITB	16/35	15.2, 15.3, 15.4			
21	GCC	12/192	2.2.1.1	Plans and Drawings and other information forming part of the bid documents has been provided by the OWNER in good faith with a view to assist the CONTRACTOR, and shall constitute only a general guidance to enable the CONTRACTOR to visualise the work and/or supplies contemplated under the contract. The OWNER assumes no responsibility as to the correctness thereof, and the CONTRACTOR is expected prior to bidding, to have undertaken a complete and independent survey and to have made its own study and assessment of all factors relevant to the performance of the work or making the supplies.	Kindly note that competitive bid is prepared considering the design, plan, technical specifications, drawings provided in the tender and in tendering stage it is not possible to check the correctness of each of the document provided in the tender. Hence any changes in design, plan, technical specifications, drawings during execution stage will leads to the price and time implication which will be discussed and settled mutually. In view of above, kindly delete the referred provision in the tender. Kindly accept.	Not Acceptable. Bidder to follow the provisions of Tender Document.

21	GCC	12 / 192	2.2.0.0	PLANS, DRAWINGS AND APPROVALS FURNISHED BY OWNER	We would request Customer/PMC to accord the approvals for the Drawings and documents within 7 working days of submission of drawings and any failure on account of customer / PMC to accord the approval within 7 days will constitute the ground for extension of time. kindly accept	Not Acceptable. Bidder to follow the provisions of Tender Document.
22	GCC	28/192	3.0.3.1 (VII)	The CONTRACTOR shall take out, at his own cost and keep in force at all times, during transit, handling, storage, and erection upto completion in all respect of the work, policy(ies) with Insurance Company(ies) approved by the OWNER for the full replacement value of the materials at site against the risks hereinafter specified.	Insurance (Transit, storage, E&C) is excluded from Bidder scope as per Cl. No. 7 SCC Part-B. Kindly modify these clauses accordingly.	Bidder to follow SCC.
	GCC	26/192	3.0.2.4(v)	Materials		
23	GCC	31/ 192	3.0.5.9	Supply of Material	Timely availability of funds by way of timely release of payments by Owner is very important for achievement of progress of the project. Delay in release of payments by Owner, therefore, will be treated as valid ground for extension in completion schedule.	Bidder to follow the provisions of Tender Document.
24	GCC	33/ 192	3.0.5.13	Make of Material	Considering the short cycle nature of the project, we request Owner/ Consultant to consider Bidders approved vendor list in addition to approved vendor list as per tender.	Bidder to follow bid documents
25	GCC	58-59/ 192	4.4.0.0	PRICE ADJUSTMENT FOR SLIPPAGE IN COMPLETION	<p>a) For delays beyond contractual commissioning schedule due to reasons solely attributable to Contractor, we agree for levy of Liquidated Damages for delay in lieu of Price Discount. No LD shall be applicable for delay in Mechanical completion or any intermediate milestone.</p> <p>'b) If the commissioning of the plant is delayed beyond contractual commissioning schedule due to reasons solely attributable to contractor, we agree for levy of LD @0.25% of the contract value per week of delay for first 8 weeks and 0.5% per week thereafter subject to max 5% of the value of delayed equipment.</p> <p>'c) For completed part of the work within the scheduled completion date/ equipment taken over by Owner whichever is earlier, LD shall not be leviable.</p> <p>'d) LD shall be applicable on the contract price excluding taxes and duties i.e GST.</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.



26	GCC	71/ 192	5.3.2.0 (vi)	Surplus material '5.3.2.0 (vi) -Item-wise list of surplus materials including the quantity & estimated value of each surplus item (out of the materials issued by the OWNER or brought at site by the CONTRACTOR) returned to the OWNER's Store or otherwise disposed of, duly signed by the Engineer-in-Charge.	This clause is contrary to the SCC provision Cl. No. 13.0 for Surplus material. Kindly clarify	Bidder to follow SCC.
27	GCC	92-93/192	6.6.1.0 & 6.6.3.1	Claims by the Contractor	In view of nature of the contract being on LSTK basis it may not be feasible to lodge all claims by the contractor on piece meal basis. Any leftover claim for all the additional works/ supplies shall be raised by the contractor at the time of submission of final bill along with all the justifications and supporting documents for such claims. It will help in smooth and expeditious execution of the project. 'However, the contractor shall endeavour to lodge all such claims as and when they arise and Owner/ Engineer in charge, after satisfying themselves about the reasonability of such claims, will issue amendment to the contract document towards acceptance of such claim of contractor. Further, Contractor shall commence the extra work only after settlement of time and cost implication.	Bidder to follow the provisions of Tender Document.
28	GCC	95/192	6.9.1.0	Claim of Owner	All claims of Owner shall be deemed to be extinguished upon issue of Final Certificate and discharge of security deposit. Kindly Accept	Not Acceptable. Bidder to follow the provisions of Tender Document.
29	GCC	110-111/192	Cl 8.6.0.0	Limitation of liability	We agree for overall aggregate liability arising out of this contract not exceeding 10% of the contract price.	Not Acceptable. Bidder to follow the provisions of Tender Document.

		FORM -I				
PRE-BID QUERIES-Lot-2						
TO			M/s. INDIAN OIL CORPORATION LTD			
SUB			PRE-BID QUERIES FOR RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India			
WORK DETAILS			RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India			
TENDER NO.			BIDDING DOCUMENT : SG/B269-475-PA-T-8701/23			
NAME OF BIDDER			BIDDER-3			
SR. NO	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY-dated-10.02.2022	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
TECHNICAL						
MECHANICAL						
1	General	-	-	Pipe Class-A93A, A3A, A19A, A1A,A93M, A3Y, A9A, B1K, SDSS, A21V, B1N &A1K	Request you to provide valve Datasheet for Class A93A, A3A, A19A, A1A, A93M, A3Y, A9A, B1K, SDSS, A21V, B1N & A1K Request tyou to provide Pipe specification for Class A21V & SDSS	Shall be replied separately.
COMMERCIAL						
1	Special Cndions of contract( part-B)	page 2 of 3	6.1.4 & 6.1.5	Interest Rate	Request you to consider interest free advance for Mobolization	Not Acceptable. Bidder to follow the provisions of Tender Document.
2	Annexure V to SCC	644 of 7166		Penalty account;s. The Maximum cumulative Penalty on account of all the parameters indicated above shall be limited to 25% of the Monthly Operation & Maintenance charges (for Operation & Maintenance of RWTP/RODMP/CPU/ZLDP) for the particular year/month as quoted by the bidder in the Schedule of Price (SP-07).	Please consider 5% instead of 25%..	Bidder to follow bid document
3	BG for Security & Advance	399 of 7166	VII	Without prejudice to any other mode of service, a demand or claim or other communication may be transmitted by the Corporation to the Bank either by post or by fax. If transmitted by fax, the transmission shall be complete as soon as acknowledged by the Bank.	This is subject to banks approvals.	Not Acceptable. Bidder to follow the provisions of Tender Document.
4	Notice Inviting E- tender	33 of 7166	Sr.5	Last date of submission of tender	Considering the scope of work, please extend the proposal submission date for 6 weeks from the current due date	extension already given
5	Notice Inviting E- tender	32 of 7166	Sr.5	Time Schedule	Please consider Mechanical completion as 30 Months	Bidder to follow bid document
6	Generat Conditions of Contract	218 of 7166	2.7.1.0	Cancellation of Contract	In event of cancellation of order, Buyer to ensure to pay the money to the contractor for the material ordered to its subvender if any	Not Acceptable. Bidder to follow the provisions of Tender Document.

**RWTP, RO-DMP, CPU & ZLD PLANT for PANIPAT REFINERY EXPANSION PROJECT (P25) of M/s IOCL**

**Bidding Document No.: SG/B269-487-PC-T-8701/23**

**BIDDER-4**

REFERENCE OF ENQUIRY DOCUMENT						
Sl.No.	PART/VOL	PAGE NO.	CLAUSE NO.	SUBJECT	BIDDER'S QUERY	EIL/IOCL REPLY
1	TENDERDOCUMENT_PART_1	Pg. 110 of 192	8.6.0.0	Limitation of Liability	The limitation of liability clause presently in the tender is very restrictive and has several open ends resulting into an unlimited liability for the contractor. This will be very difficult for all the contracting firms to accept. We propose and request you to replace the Limitation of Liability clause with relevant FIDIC Clauses as they are balanced to protect interests of both employer and contractor.	Not Acceptable. Bidder to follow the provisions of Tender Document.
	Section 8 Miscellaneous-8.6.0.0					
2	Part 1-NOTICE INVITING e-TENDER	4-5 of 24 /32-33 of 757		Extension of the Bid and Site visit date and pre bid clarifications	Due to Covid restrictions and to prepare a detailed Offer we request you to extend the bid submission date by One month and Site visit date upto February 15th. We also request you to extend the pre bid clarification submission date upto 5th February	Extension already provided.
3	Part 1	Page 27/ 459 of 756	8	Price adjustment	As per the referred clause price adjustment is allowed only for Steel component and hence we request you to allow price adjustment for all other materials.	Not Acceptable. Bidder to follow the provisions of Tender Document.
#REF!	Drawings B269-000-17-44-00001 & B269-000-16-51-0080-Rev E	-	-	Plot plan	Please furnish dimensional details of OVERALL PLOT PLAN IN ACAD	ACAD documents shall not be provided

Balance queries of Bidder-4 shall be replied separately.

**FORMAT FOR BIDDERS' QUERIES (Commercial)**

**WORK DETAILS** : RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India

**BIDDING DOCUMENT** : SG/B269-475-PA-T-8701/23

**NAME OF BIDDER** : BIDDER-5

Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	TENDERDOCUMENT_PART_1	Page No. 32 of 756	NIT 5	Time Schedule	Considering the quantum of work comprising of various plants, complex engineering and large portion of supply from Sub-Vendors and local issues, we request you to provide at least 26 months for project execution. Kindly confirm the same.	Not Acceptable. Bidder to follow the provisions of Tender Document.
2	TENDERDOCUMENT_PART_1	Page No. 290 of 756	GCC 6.4.2.0.e	Mobilisation Advance	We request you to kindly provide interest free mobilization advance.	Not Acceptable. Bidder to follow the provisions of Tender Document.
3	TENDERDOCUMENT_PART_1	Page No. 459 of 756	SCC - Part B 8	Price Variation	As stated in the Price Variation clause, the Price Variation shall only be applicable to Bulk Steel Materials.  Considering the highly volatile market which shall directly impact the Bidder and also for enabling the Bidder to submit a competitive quote, the Bidder requests to kindly incorporate Price Variation for the following: - •Cement •Labour • POL (Petroleum, Oil and Lubricants)	Not Acceptable. Bidder to follow the provisions of Tender Document.
4	TENDERDOCUMENT_PART_1	Page No. 33 of 756	NIT 8	Bid Submission	Considering the quantum of work and current covid situation we request for an extension for bid submission upto 25-03-2022	Extension already provided
5	TENDERDOCUMENT_PART_1	General	General	Change In Law	We request that Contractor shall be entitled to due extension of time and adjustment in Lumpsum Contract Price in the event of any change in applicable laws which affect the time for completion or agreed contract price. Kindly Confirm	Bidder to follow the provisions of Tender Document.
6	TENDERDOCUMENT_PART_1	General	General	Indemnity	All instances of Indemnity provided by the Contractor shall be subject to the following: a) limited to the actually incurred direct costs due to the event indemnified; b) the event must be fully attributable to the Contractor and the Owner notifies immediately upon receipt of the claim; c) the indemnities shall be defended solely by the Contractor. Kindly Confirm	Bidder to follow the provisions of Tender Document.
8	TENDERDOCUMENT_PART_1	General	General	Statutory variation	We are understanding that, Statutory variation shall be paid during O&M period. Kindly confirm	Refer Note 22.4 of Preamble to Price Schedule.

9	SPECIAL CONDITIONS OF CONTRACT (SCC) PART-A	33 of 33 (421/5335)	58.3	58 TERMS AND CONDITIONS FOR OPERATION & MAINTENANCE CONTRACT Payment	The Monthly Payment during O&M period shall be paid to the contractor within 30days from the date of Invoice. Please confirm.	Not Acceptable. Bidder to follow the provisions of Tender Document.
---	---	------------------------	------	--	--	--

10	ANNEXURE A-Xa TO SCC GUARANTEES & PENALTIES FOR OPERATION & MAINTENANCE	6 of 9 (626/5335)	5.3 (1)	Penalty clause for short fall in performance during Operation & Maintenance period due to any fault on the part of the Operation & Maintenance Contractor	Any deviation in Raw effluent quality will effect the performance of plant, process equipment / system. If any such occasions, bidder not to be penalized for not meeting the quality of treated effluent water untill the plant restore the performance. Kindly confirm	Shall be replied separately.
11	ANNEXURE A-Xa TO SCC GUARANTEES & PENALTIES FOR OPERATION & MAINTENANCE	7 of 9 (627/5335)	Note 1	Maximum cumulative Penalty on account of all the parameters	Bidder requesting to consider maximum penalty shall be limited to 5% of monthly O&M Charges instead of 25% of monthly O&M Charges	Shall be replied separately.
12	PREAMBLE TO SCHEDULE OF PRICES	12 of 14 (737/855)	22.9	The Operation & Maintenance Charges shall not be payable in case the Effluent Treatment Plant (ETP) is not under operation for the reason(s) attributable to the Contractor. Pro-rata deduction of Operation & Maintenance Charges will be made in the event of nonoperation/ shut down of the Effluent Treatment Plant (ETP) for reason(s) attributable to the Contractor	O&M is a service contract it comprises majorly on fixed charges (Manpower & maintenance). Such occasions Contractor will take necessary action to resolve the issues to restore plant In operation. So request to consider to pay the fixed component during such occasions. please confirm	Bidder to follow the provisions of Tender Document.
13	TENDERDOCUMENT_PART_1	65 of 5335 (65/855)	21.1	21.0 GOODS AND SERVICE TAX (GST)	SP-07 O&M charges is exclusive of taxes, duties & GST. The taxes for O&M charges need not to fill in any schedules, please confirm	Confirmed.

**SIGNATURE OF THE BIDDER :**

**WITH SEAL/STAMP**

**Name of Work** : RWTP, RO-DMP, CPU & ZLD Plant for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
**Bidding Document**: SG/B269-475-PA-T-8701/23  
**Bidder-1**

### **PRE-BID QUERIES (COMMERCIAL)**

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	NOTICE INVITING e-TENDER	Page 34 of 7166	11.1.3	Technical Criteria – Minimum Capacity for Multi Effect Evaporator unit	<p>You are aware that the large capacity MEE are being tendered by various refineries in recent past only and not a single MEE plant is commissioned in refineries till the date.</p> <p>The references of various contractors who are qualifying in Oil &amp; Gas EPC water &amp; waste water projects can be only in Chemical/ Pharma/ Textile etc industries where capacities of MEE are 150 m3/ day or less.</p> <p>Paramount, to its credit have, on its own designed, engineered, manufactured, supplied, erected &amp; commissioned successfully following largest capacity MEE project in last 12 years:</p> <p><b>For Mazda Colours Limited:</b> We have executed an order of MEE System for 150 m3/ day and the said plant was commissioned in May 2016.</p> <p>Therefore, we have our own eligible experience for execution of MEE in last 12 years if capacity is allowed as 150 m3/ day in PQ criteria in place of 180 m3/ day.</p> <p>Kindly be informed that if 150 m3/ day capacity is not granted in PQ criteria, other suppliers who would have executed MEE orders of required capacity would have no experience of stringent design, engineering &amp; specifications including design safety factors, approved vendors &amp; manufacturing/ testing standards viz. end to end executions and comfort of system integration with guarantees would both become limitation with these vendors.</p> <p>Hence, kindly allow PQ criteria of 150 m3/ day for MEE in place of 180 m3/ day.</p>	Shall be replied separately.
2	PROPOSAL FORMS	Page 169, 171 of 7166 and	Sr. no. 22 & 50 (Form-M) and	Technical Information Required for	Subject clauses require Bidder to provide details of quantum of work in Form-T.	Follow instructions mentioned in Form-T.

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
		Page 186 of 7166	Form T	Assessing Quantum of Work	We understand that this Form-T is Not Applicable and bidder need not submit the same. Kindly confirm.	
3	Notice Inviting Tender	Page 32 of 7166	Sr. no. 5.0	Time Schedule	<p>Time Schedule specified for subject works is 22 Months for Mechanical Completion + 2 Months for Commissioning from the date of issue of Fax of Acceptance / Letter of Acceptance.</p> <p>The quantum of Engineering, Procurement and Civil Construction &amp; Piping works apart from other Electro-Mechanical &amp; Instrumentation job is huge and it is impossible to complete these works in 24 months.</p> <p>Further due to COVID-19 induced epidemic, the deliveries of various equipment have increased from 4 - 6 months to 9 - 12 months. Imported materials also will have long transit times considering COVID consequences. For our recent project orders, even Pipe manufacturers have quoted deliveries of 5-6 months</p> <p>Therefore, we request that realistic completion period of at least 28 months (26 months for Mechanical Completion plus 2 months for Commissioning) may please be considered.</p>	Bidder to follow bid document
4	SCC (Part-B)	Page 459 of 7166	Sr. no. 8	Price Variation	Subject Clause specifies that "The price variation shall be applicable on basic supply price of bulk steel material for <b>site fabrication/ construction for permanent incorporation in work e.g. Structural steel, Reinforcement bars, Steel Gratings, CS Plates, MS anchor bolts, MS insert plates and chequered plate only.</b> " We understand that the subject clause on Price Variation shall also be applicable for CS plates for shop fabricated vessels and tanks. Kindly confirm our understanding.	Not Acceptable. Bidder to follow the provisions of Tender Document.
5	INSTRUCTIONS TO BIDDERS (ITB)	Page 84 of 7166	42	Project Specific Account	<p>With reference to requirement of Project Specific Account we want to bring to your kind notice that RBI circular no DOR.No.BP.BC.30/21.04.048/2020-21 December 14, 2020 (copy of this RBI circular attached herewith as Annexure_Sr.no.1a)</p> <p>With reference to above circular a bank cannot open a current account if a company is enjoying credit facilities with one bank.</p> <p>As we are enjoying credit facilities with our banker so no other bank will open current account and opening of project specific account clause will not</p>	Bidder to follow the provisions of Tender Document.



SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					be feasible.  Hence we request you to kindly confirm that requirement of Project Specific Account is not mandatory.	
6	General Conditions of Contract	Page 20 of 192	2.6.7.0 (B)(i)	Calculation of Price implications of a Change Order	Subject clause specifies that "For Civil and Structural works involved in the works to which the Change Order Proposal relates, on basis of the CPWD rates then prevailing for the location of the works"  Kindly confirm that if CPWD rates are old then applicable rates shall be increased by 10% per year for considering inflation.	Not Acceptable. Bidder to follow the provisions of Tender Document.
7	General			Change in Law	In the eventuality of a change in the laws of the country, you are requested to kindly include a relevant clause in the Tender to protect the contractor from the Time & Cost implications on account of such changes in laws.	Not Acceptable. Bidder to follow the provisions of Tender Document.
8	SCC (Part-B)	Page 461 of 7166	9.1.1	Construction Power	Referred clause specifies that " <i>Subject to availability, construction power shall be provided by the OWNER from the nearest Substation / tapping point on chargeable basis.</i> "  Kindly confirm whether Construction Power will be provided by OWNER. This is required by us for correct estimation of costs involved.	Follow the provisions of SCC (Part-B) and Tender Document.
9	SCC (Part-B)	Page 462 of 7166	9.2	Construction Water	Referred clause specifies that " <i>Subject to availability, Construction water shall be provided by OWNER on chargeable basis</i> "  Kindly confirm whether Construction Water will be provided by OWNER. This is required by us for correct estimation of costs involved.	Follow the provisions of SCC (Part-B) and Tender Document.
10	SCC (Part-B), Land for Construction	Page 462 of 7166	9.3	Land for Batching plant	Kindly confirm that Land for Batching Plant shall be provided <u>within Refinery Premises</u> for speedy progress of the project.	Follow the provisions of SCC (Part-B) and Tender Document.
11	SCC (Part-B), Land for Construction	Page 462 of 7166	9.3	Land for Warehouse	Kindly confirm that Land for Warehouse shall be provided <u>within Refinery Premises</u> since we shall be dispatching various equipments to site and receive payment for same and so all equipments are required to be stored within Refinery Premises till its erection.	Follow the provisions of SCC (Part-B) and Tender Document.
12	SCC (Part-B)	Page 442 of	4	BOCW cess	Kindly confirm that BOCW cess shall be applicable only on Construction	Follow the

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
		7166			Services price quoted by bidder in Form SP-2 and that it shall not be applicable on Design & Engineering and Supply portion of the contract.	provisions of SCC (Part-B) and Tender Document.
13	SCOPE OF WORK & SUPPLY (UG CIVIL-STRUCTURAL & ARCHITECTURAL)	Page 946 of 7166	3.6.2 (b)	Dismantling of existing works if required	Kindly note that, it is not possible to find out presence of all underground hindrances during a Pre-bid Site Visit or any activity allowed by IOCL during Pre-bid stage. Hence we request that either the underground hindrances should be quantified during bidding stage OR bidder should be compensated for removal of such hindrances during execution stage under provisions of GCC Clauses 2.5.0.0 (Alteration in the scope of work or supply) and 2.6.0.0 (Change Orders). Kindly confirm.	Not Acceptable. Bidder to follow the provisions of Tender Document.
14	B269-475-81-41-GTD-0022	Page 1636 of 7166		Geotechnical Data	Kindly note that our estimates shall be based on Geotechnical Data as provided in the Tender. If discrepancies are found in Site Investigation data furnished by you when we carry out Soil Investigation after the award of work, the Time & Cost consequences shall be reimbursed by you because Geotechnical data provided in Tender cannot be misguiding to the contractor during bidding stage. Further, there is no time and opportunity for bidder to carry out Soil Investigation at bidding stage. Therefore, please confirm that the time & cost consequences due to change in soil data shall be paid for as extra works. Kindly confirm.	Not Acceptable. Bidder to follow the provisions of Tender Document.
15	Annexure A-IX to SCC	Page 627 of 7166	Sr. nos. 2, 3, 8, 14	List of critical tagged items	<p>Among items listed under "List of Critical Tagged Items" there are number of items which are fabricated at our works e.g. Dual Media Filters, Activated Carbon Filters, Degasser Tower, Mixed Bed Exchanger, etc.</p> <p>Please confirm that CS Plate material purchased for these items shall be considered as major critical tagged item for enabling release of 10% milestone payment "on placement of Purchase Order for major critical tagged items" as per Clause 6.2.1 (i), SCC Part-B, Page 13 (Page 434 of 5335).</p>	The same shall be discussed and finalized with the successful bidder
16	Price Schedule	Form SP-3	Column 13	Rate of Customs duty on Foreign Component	As the rate of Customs duty varies for various components, a flat rate cannot be quoted. Please provide more number of rows for quoting rates of Customs duty because there will be multiple items with different rates of Custom duty.	Not Acceptable. Bidder to follow the provisions of Tender Document.
17	Price Schedule	Form SP-6	Column 2	Item Description	The number of rows provided is limited compared to number of spares to be quoted. Hence, please allow provision for adding more rows as required.	Refer SOP Rev.1 with Commercial Amendment-1

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						being issued separately.
18	SCC, Part-B	Page 437 of 7166	Clause 3.1 (f)	Bank Guarantee against amount of Price Adjustment for Delay	<p>Subject clause specifies that: "f) Where a GST Invoice is issued by the Owner, the amount of price reduction (excluding GST), on a written request made by the Contractor, may be released under a cover of Bank Guarantee of equivalent amount issued in favour of the owner. In case GST Invoice is not issued, amount withheld (including GST), on a written request made by the contractor may be released under a cover of Bank guarantee of equivalent amount issued in favor of the owner. The format and other requirement of Bank Guarantee shall be same as defined in Clause 6.4.7.3 of GCC. Amount to be withheld as per clause no 6.4.7.3 of GCC shall be withheld after including applicable GST on the amount withheld. <u>This Bank Guarantee shall be valid for a period so that same may remain in force till the invocation of Price Reduction is finally settled and accepted by the Owner.</u>"</p> <p>Since most of the disputes related to delay in completion do not get settled by Owner and are normally led towards Arbitration, we submit that the underlined portion of above clause may please be modified as: "This Bank Guarantee shall be kept valid till the final settlement is arrived mutually or through Conciliation/ Arbitration/ Court."</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.
19	GCC	Page 118 of 192	9.0.1.0	Claims Disputes & Arbitration	We request ammendment to provisions of Sole Arbitrator as under. The number of Arbitrators shall be THREE. Each party shall nominate their respective Arbitrators & both the nominated Arbitrators shall appoint the 3rd Arbitrator who shall act as Presiding Arbitrator.	Not Acceptable. Bidder to follow the provisions of Tender Document.
20	ANNEXURE TO SPECIAL CONDITIONS OF CONTRACT (SCC)- Part B	Page 468 of 7166	Sr. no. 4, New Clause 7.13	MARINE COVER AND ERECTION ALL RISK COVER INSURANCE	<p>New added clause 7.13 states that "The proposed coverage under IOCL MCE policy is enclosed as <u>Appendix-I ( 4 pages )</u> to this ANNEXURE TO SPECIAL CONDITIONS OF CONTRACT (SCC) Part-B."</p> <p>Please help by providing the mentioned Appendix-I (4 pages) as the same could not be found enclosed.</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.

Work Details		: RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India				
Bidding Document No		: SG/B269-475-PA-T-8701/23				
Name of Bidder		BIDDER-2				
Sl. No.	Reference of Bidding Document				Bidder's Query	Consultant Reply
	Part / Vol.	Page No.	Clause No.	Subject		
	<b>Special Condition of Contract- Part-A</b>					
1	SCC/part-A	4 of 33	1	Effective Date	The effective date of Contract shall be the date of receipt of technically & commercially clear Notification of Award of Contract and disbursement of first instalment of 5% of interest free advance. In case of delay in receipt of advance, the actual date of receipt of advance will be effective date (Zero date) of Contract. Kindly Accept	Not Acceptable. Bidder to follow the provisions of Tender Document.
2	SCC/part-A	7 of 33	8	Time Schedule	In the event of delayed input as part of Owner as per agreed schedule viz. Utilities, hook-up/ interface etc. suitable time extension shall be provided. 'In case there is a delay in providing Utilities and Feedstock, inputs required for completion of project by Owner/ Consultant and concurrently Contractor has delayed the completion of project, then in this case delay analysis will be done and Net delays attributable to Contractor/ Owner shall be calculated from the agreed & approved schedule.	Not Acceptable. Bidder to follow the provisions of Tender Document.
3	SCC/part-A	16 of 33	24	Additional Works/ Extra Works	a) The provision of this clause shall be applicable only after contractor has been intimated the concern through a written notice with a request to augment the site work. 'b) In case contractors failure to initiate necessary remedial action within reasonable time, owner may resort to provision of this clause. 'c) However, contractor shall not be responsible for quality of any work done by third party and/ or its impact on the performance of the plant.	Bidder to follow the provisions of Tender Document.
4	SCC/part-A	32 of 33	32	Sub-Contracting	a) BIDDER-2 is an ISO 9001 company with an elaborate system for vendor evaluation. As is the practice with all International contractors, BIDDER-2 prefers to operate based on its standard approved vendor list. This is based on the following: 'i) BIDDER-2's approved vendors have knowledge of BIDDER-2's quality systems. 'ii) BIDDER-2 has knowledge on the actual site working of these vendors. 'iii) Interface engineering shall be smooth. 'Our own experience is such that we have very few vendors for most of the items and if some of them are eliminated, we may not get sufficient response/ competitive offers. It is with this background that BIDDER-2 suggested going predominantly based on BIDDER-2's vendors list. 'b) Further, any other equipment manufactured by BIDDER-2 including DCS system shall be deemed to be accepted irrespective of the same not being considered specifically vendor list. 'c) For site works BIDDER-2 shall invite open tender. The shortlisted subcontractors list shall be forwarded to Owner for information 'Kindly Confirm	a) Bidder to follow bid documents b): Bidder to follow bid documents c): Follow clause no. 32 of SCC Part-A.
	<b>Special Condition of Contract- Part-B</b>					

5	SCC/Part-B	3	2	Firm and Fixed Prices	In view of very high current fluctuations in the prices due to Covid-19, we would request you to kindly consider the Price Variation. As per tender Price variation is applicable is on bulk Steel Material only. Kindly Accept	Not Acceptable. Bidder to follow the provisions of Tender Document.
6	SCC/Part-B	5-9	3	Taxes & Duties- General	<b>We request you to consider</b> 1) Statutory Variation in existing taxes/ duties i.e. Basic Custom Duty, E. Cess, BOCW, SWS etc. as well as introduction of New taxes/ duties / levies/ Cess to Owner's account extra at actuals for the entire duration of Contract. 2) Foreign exchange rates variation w.r.t taxes/duties i.e. Custom Duty, GST etc. during the Contract execution period shall be to Owner's account.	Not Acceptable. Bidder to follow the provisions of Tender Document.
8	SCC/Part-B	10 of 34	4	Building and other construction worker's welfare cess	Also, as per provision BOCW Cess shall be deducted at Source on declared Construction portion i.e. SP-2 shall be applicable. Request IOCL to intimate the present rate of BOCW applicable for this project. Please confirm. 'In case of BOCW Cess shall be deducted at Source other than Construction portion i.e. Supply and D&E Prices same shall be additionally paid/ reimbursed by IOCL in the Bill.	Not Acceptable. Bidder to follow the provisions of Tender Document.
9	SCC/Part-B	11-13	6.1	Mobilization Advance	We request Owner to release 10% of total contract price as interest free initial advance against completion of following milestones: '(a) 5 % of total contract price against holding Kick off meeting and finalisation of contract coordination procedure and Drawing & Documents submission schedule. '(b) 5 % of total contract price against submission of detailed L1 network. against submission of BG of equal value valid upto commissioning period. 'GST as applicable shall be reimbursed by Owner extra at actuals. Bank Guarantee towards initial mobilization advance shall be reduced on quarterly basis duly adjusting the advance.	Not Acceptable. Bidder to follow the provisions of Tender Document.
10	SCC/Part-B	13	6.2	Inland Transportation within India	Inland Transportation Prices are to be quoted as part of SP-1(Supply Price). However, there is no Terms of Payment defined in the tender. We propose that 10% of transportation amount shall be paid on placement of PO on pro rata basis and 90% transportation amount including applicable GST amount shall be payable on prorata basis on dispatch of material.	Not Acceptable. Bidder to follow the provisions of Tender Document.


11	SCC/Part-B	23-26 of 34	7	Marine cover and erection all risk cover insurance	<p>As per Bid provision, Owner shall arrange the Marine Cover Insurance and Erection All Risk Cover Insurance for the project. However, the proposed deductibles are very high. As insurance is being arranged by Owner, no deductibles shall be borne by Contractor.</p> <p>In case of any loss or damage during transit/ storage/ Erection &amp; commissioning, contractor shall intimate the Owner to raise insurance claim. Contractor shall not be responsible for raising such claims and/ or settlement of claim. In the event of any loss or damage, Owner shall issue open order on Contractor for replacement/ rectification of defective equipment/ goods/ works. For such replacement/ rectification full (100% value along with taxes and duties) prices for the respective goods/ works shall be paid by Owner to Contractor in addition to the balance payments for respective damaged goods/ works.</p> <p>'Payment to contractor shall not be linked to Owner's settlement of claim with insurance agency. Delays in placement of open order for damaged items shall constitute valid reason for extension of time schedule.</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.
12	SCC/Part-B	30	9.3	Land use for construction site offices and resident accommodation	<p>We would request customer / Consultant to provided Levelled and consolidated land free from all encumbrances and access roads for the UBs, storage area (covered/ uncovered), fabrication and contractors site office adjacent to package site within plant without licence fee.</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.
13	SCC/Part-B	32	13,  '13.b.ii	Surplus Material  'Surplus material shall be allowed to be taken out only after completion of the Commissioning activities for the project.	<p>There will be many instances wherein many of the surplus material would never be utilized as they may not required for the commissioning of any sub system and having low self life. Such surplus material may please be allowed to taken back by Contractor and may not be linked to Commissioning.</p> <p>Please modify this clause to the extent of following: "Contractor will be allowed to take back Surplus material earlier also subject to prior acceptance by Owner."</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.
Notice Inviting Tender						
14	NIT	18 of 24  '19 of 35	13.2 & 13.3 of NIT  ^16.6 & 16.7 of ITB	PF (PROVIDENT FUND) REGISTRATION & ESI (Employees State Insurance) Code	<p>Bidder is exempted for Employees Provident Fund &amp; ESI. Details shall be furnished along with our Bid.</p> <p>'For Site activities i.e. E&amp;C and Civil Works, Bidder execute the same by engaging subcontractor. PF &amp; ESI for the workman deployed by Subcontractors are maintained by them. Bidder provide compliance and undertaking w.r.t PF&amp;ESI for labour engaged by Bidder subcontractor's.</p>	Noted.Bidder to follow the provisions of Tender Document.
Instruction to Bidders						
15	ITB		Attch VIII to ITB	Self certification and declaration by CEO/CFO/Company Secretary	<p>we wish to submit that Bids including Self certification and decalaration by CEO / CFO / Company secretary are submitted by Authorised person in whose favour Power of Attorney has been issued to sign and submit the Bid.</p>	Bidder to follow the provisions of Tender Document.
16	ITB		Attc-XIII of ITB	Certification by CEO/CFO	<p>We understand that this attachement is not to be submitted. Kindly Confirm</p>	Not applicable.

17	ITB		Attch IX to ITB	Letter from Statutory Auditor /CA	We understand that this format is not applicable where Bidder is already submitting, duly audited and published Annual Reports and balance sheet, etc. shall be furnished by Bidder.	Please recheck Annexure No. and query.
<b>General Condition of Contract</b>						
18	GCC	1-2/ 192	1.0.10.0 & 1.0.11.0	Commissioning Definition	Please delete following provision " and as the requirement of process licensor"	Not Acceptable. Bidder to follow the provisions of Tender Document.
19	GCC	3/192	1.0.26	Foreign Currency	Some currencies are different in both the clauses kindly specify which foreign currencies are to be considered in this tender.	Bidder to follow ITB, SOP Preamble.
	ITB	15/35	15.2	CURRENCIES OF BID AND PAYMENT		
20	GCC	3/192	1.0.03.0	Conversion of Foreign Currency to Indian Rupees	As per GCC Clause foreign currency to be converted to Indian rupees at the mean rate of exchange between the two arrived at on the basis of the notified mean rate or of the average between the buying rate and the selling rates if the mean rate is not separately notified, as the case may be, by the State Bank of India for the day immediately preceding the date of conversion, however as per ITB Clauses foreign currency to be converted to Indian rupees at at the Bill selling rate of State Bank of India. Kindly Clarify	Bidder to follow ITB, SOP Preamble.
	ITB	16/35	15.2, 15.3, 15.4			
21	GCC	12/192	2.2.1.1	Plans and Drawings and other information forming part of the bid documents has been provided by the OWNER in good faith with a view to assist the CONTRACTOR, and shall constitute only a general guidance to enable the CONTRACTOR to visualise the work and/or supplies contemplated under the contract. The OWNER assumes no responsibility as to the correctness thereof, and the CONTRACTOR is expected prior to bidding, to have undertaken a complete and independent survey and to have made its own study and assessment of all factors relevant to the performance of the work or making the supplies.	Kindly note that competitive bid is prepared considering the design, plan, technical specifications, drawings provided in the tender and in tendering stage it is not possible to check the correctness of each of the document provided in the tender. Hence any changes in design, plan, technical specifications, drawings during execution stage will leads to the price and time implication which will be discussed and settled mutually. In view of above, kindly delete the referred provision in the tender. Kindly accept.	Not Acceptable. Bidder to follow the provisions of Tender Document.

21	GCC	12 / 192	2.2.0.0	PLANS, DRAWINGS AND APPROVALS FURNISHED BY OWNER	We would request Customer/PMC to accord the approvals for the Drawings and documents within 7 working days of submission of drawings and any failure on account of customer / PMC to accord the approval within 7 days will constitute the ground for extension of time. kindly accept	Not Acceptable. Bidder to follow the provisions of Tender Document.
22	GCC	28/192	3.0.3.1 (VII)	The CONTRACTOR shall take out, at his own cost and keep in force at all times, during transit, handling, storage, and erection upto completion in all respect of the work, policy(ies) with Insurance Company(ies) approved by the OWNER for the full replacement value of the materials at site against the risks hereinafter specified.	Insurance (Transit, storage, E&C) is excluded from Bidder scope as per Cl. No. 7 SCC Part-B. Kindly modify these clauses accordingly.	Bidder to follow SCC.
	GCC	26/192	3.0.2.4(v)	Materials		
23	GCC	31/ 192	3.0.5.9	Supply of Material	Timely availability of funds by way of timely release of payments by Owner is very important for achievement of progress of the project. Delay in release of payments by Owner, therefore, will be treated as valid ground for extension in completion schedule.	Bidder to follow the provisions of Tender Document.
24	GCC	33/ 192	3.0.5.13	Make of Material	Considering the short cycle nature of the project, we request Owner/ Consultant to consider Bidders approved vendor list in addition to approved vendor list as per tender.	Bidder to follow bid documents
25	GCC	58-59/ 192	4.4.0.0	PRICE ADJUSTMENT FOR SLIPPAGE IN COMPLETION	<p>a) For delays beyond contractual commissioning schedule due to reasons solely attributable to Contractor, we agree for levy of Liquidated Damages for delay in lieu of Price Discount. No LD shall be applicable for delay in Mechanical completion or any intermediate milestone.</p> <p>'b) If the commissioning of the plant is delayed beyond contractual commissioning schedule due to reasons solely attributable to contractor, we agree for levy of LD @0.25% of the contract value per week of delay for first 8 weeks and 0.5% per week thereafter subject to max 5% of the value of delayed equipment.</p> <p>'c) For completed part of the work within the scheduled completion date/ equipment taken over by Owner whichever is earlier, LD shall not be leviable.</p> <p>'d) LD shall be applicable on the contract price excluding taxes and duties i.e GST.</p>	Not Acceptable. Bidder to follow the provisions of Tender Document.



26	GCC	71/ 192	5.3.2.0 (vi)	Surplus material '5.3.2.0 (vi) -Item-wise list of surplus materials including the quantity & estimated value of each surplus item (out of the materials issued by the OWNER or brought at site by the CONTRACTOR) returned to the OWNER's Store or otherwise disposed of, duly signed by the Engineer-in-Charge.	This clause is contrary to the SCC provision Cl. No. 13.0 for Surplus material. Kindly clarify	Bidder to follow SCC.
27	GCC	92-93/192	6.6.1.0 & 6.6.3.1	Claims by the Contractor	In view of nature of the contract being on LSTK basis it may not be feasible to lodge all claims by the contractor on piece meal basis. Any leftover claim for all the additional works/ supplies shall be raised by the contractor at the time of submission of final bill along with all the justifications and supporting documents for such claims. It will help in smooth and expeditious execution of the project. 'However, the contractor shall endeavour to lodge all such claims as and when they arise and Owner/ Engineer in charge, after satisfying themselves about the reasonability of such claims, will issue amendment to the contract document towards acceptance of such claim of contractor. Further, Contractor shall commence the extra work only after settlement of time and cost implication.	Bidder to follow the provisions of Tender Document.
28	GCC	95/192	6.9.1.0	Claim of Owner	All claims of Owner shall be deemed to be extinguished upon issue of Final Certificate and discharge of security deposit. Kindly Accept	Not Acceptable. Bidder to follow the provisions of Tender Document.
29	GCC	110-111/192	Cl 8.6.0.0	Limitation of liability	We agree for overall aggregate liability arising out of this contract not exceeding 10% of the contract price.	Not Acceptable. Bidder to follow the provisions of Tender Document.

		<b>FORM -I</b>				
<b>PRE-BID QUERIES-Lot-2</b>						
TO		M/s. INDIAN OIL CORPORATION LTD				
SUB		PRE-BID QUERIES FOR RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India				
WORK DETAILS		RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India				
TENDER NO.		BIDDING DOCUMENT : SG/B269-475-PA-T-8701/23				
NAME OF BIDDER		BIDDER-3				
SR. NO	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY-dated-10.02.2022	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
<b>TECHNICAL</b>						
<b>MECHANICAL</b>						
1	General	-	-	Pipe Class-A93A, A3A, A19A, A1A,A93M, A3Y, A9A, B1K, SDSS, A21V, B1N &A1K	Request you to provide valve Datasheet for Class A93A, A3A, A19A, A1A, A93M, A3Y, A9A, B1K, SDSS, A21V, B1N & A1K Request tyou to provide Pipe specification for Class A21V & SDSS	Shall be replied separately.
<b>COMMERCIAL</b>						
1	Special Cndions of contract( part-B)	page 2 of 3	6.1.4 & 6.1.5	Interest Rate	Request you to consider interest free advance for Mobolization	Not Acceptable. Bidder to follow the provisions of Tender Document.
2	Annexure V to SCC	644 of 7166		Penalty account;s. The Maximum cumulative Penalty on account of all the parameters indicated above shall be limited to 25% of the Monthly Operation & Maintenance charges (for Operation & Maintenance of RWTP/RODMP/CPU/ZLDP) for the particular year/month as quoted by the bidder in the Schedule of Price (SP-07).	Please consider 5% instead of 25%..	Bidder to follow bid document
3	BG for Security & Advance	399 of 7166	VII	Without prejudice to any other mode of service, a demand or claim or other communication may be transmitted by the Corporation to the Bank either by post or by fax. If transmitted by fax, the transmission shall be complete as soon as acknowledged by the Bank.	This is subject to banks approvals.	Not Acceptable. Bidder to follow the provisions of Tender Document.
4	Notice Inviting E- tender	33 of 7166	Sr.5	Last date of submission of tender	Considering the scope of work, please extend the proposal submission date for 6 weeks from the current due date	extension already given
5	Notice Inviting E- tender	32 of 7166	Sr.5	Time Schedule	Please consider Mechanical completion as 30 Months	Bidder to follow bid document
6	Generat Conditions of Contract	218 of 7166	2.7.1.0	Cancellation of Contract	In event of cancellation of order, Buyer to ensure to pay the money to the contractor for the material ordered to its subvender if any	Not Acceptable. Bidder to follow the provisions of Tender Document.

**RWTP, RO-DMP, CPU & ZLD PLANT for PANIPAT REFINERY EXPANSION PROJECT (P25) of M/s IOCL**

**Bidding Document No.: SG/B269-487-PC-T-8701/23**

**BIDDER-4**

Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL	PAGE NO.	CLAUSE NO.	SUBJECT		
1	TENDERDOCUMENT_PART_1	Pg. 110 of 192	8.6.0.0	Limitation of Liability	The limitation of liability clause presently in the tender is very restrictive and has several open ends resulting into an unlimited liability for the contractor. This will be very difficult for all the contracting firms to accept. We propose and request you to replace the Limitation of Liability clause with relevant FIDIC Clauses as they are balanced to protect interests of both employer and contractor.	Not Acceptable. Bidder to follow the provisions of Tender Document.
	Section 8 Miscellaneous-8.6.0.0					
2	Part 1-NOTICE INVITING e-TENDER	4-5 of 24 /32-33 of 757		Extension of the Bid and Site visit date and pre bid clarifications	Due to Covid restrictions and to prepare a detailed Offer we request you to extend the bid submission date by One month and Site visit date upto February 15th. We also request you to extend the pre bid clarification submission date upto 5th February	Extension already provided.
3	Part 1	Page 27/ 459 of 756	8	Price adjustment	As per the referred clause price adjustment is allowed only for Steel component and hence we request you to allow price adjustment for all other materials.	Not Acceptable. Bidder to follow the provisions of Tender Document.
#REF!	Drawings B269-000-17-44-00001 & B269-000-16-51-0080-Rev E	-	-	Plot plan	Please furnish dimensional details of OVERALL PLOT PLAN IN ACAD	ACAD documents shall not be provided

Balance queries of Bidder-4 shall be replied separately.

**FORMAT FOR BIDDERS' QUERIES (Commercial)**

**WORK DETAILS** : RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India

**BIDDING DOCUMENT** : SG/B269-475-PA-T-8701/23

**NAME OF BIDDER** : BIDDER-5

Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	TENDERDOCUMENT_PART_1	Page No. 32 of 756	NIT 5	Time Schedule	Considering the quantum of work comprising of various plants, complex engineering and large portion of supply from Sub-Vendors and local issues, we request you to provide at least 26 months for project execution. Kindly confirm the same.	Not Acceptable. Bidder to follow the provisions of Tender Document.
2	TENDERDOCUMENT_PART_1	Page No. 290 of 756	GCC 6.4.2.0.e	Mobilisation Advance	We request you to kindly provide interest free mobilization advance.	Not Acceptable. Bidder to follow the provisions of Tender Document.
3	TENDERDOCUMENT_PART_1	Page No. 459 of 756	SCC - Part B 8	Price Variation	As stated in the Price Variation clause, the Price Variation shall only be applicable to Bulk Steel Materials.  Considering the highly volatile market which shall directly impact the Bidder and also for enabling the Bidder to submit a competitive quote, the Bidder requests to kindly incorporate Price Variation for the following: - •Cement •Labour • POL (Petroleum, Oil and Lubricants)	Not Acceptable. Bidder to follow the provisions of Tender Document.
4	TENDERDOCUMENT_PART_1	Page No. 33 of 756	NIT 8	Bid Submission	Considering the quantum of work and current covid situation we request for an extension for bid submission upto 25-03-2022	Extension already provided
5	TENDERDOCUMENT_PART_1	General	General	Change In Law	We request that Contractor shall be entitled to due extension of time and adjustment in Lumpsum Contract Price in the event of any change in applicable laws which affect the time for completion or agreed contract price. Kindly Confirm	Bidder to follow the provisions of Tender Document.
6	TENDERDOCUMENT_PART_1	General	General	Indemnity	All instances of Indemnity provided by the Contractor shall be subject to the following: a) limited to the actually incurred direct costs due to the event indemnified; b) the event must be fully attributable to the Contractor and the Owner notifies immediately upon receipt of the claim; c) the indemnities shall be defended solely by the Contractor. Kindly Confirm	Bidder to follow the provisions of Tender Document.
8	TENDERDOCUMENT_PART_1	General	General	Statutory variation	We are understanding that, Statutory variation shall be paid during O&M period. Kindly confirm	Refer Note 22.4 of Preamble to Price Schedule.

9	SPECIAL CONDITIONS OF CONTRACT (SCC) PART-A	33 of 33 (421/5335)	58.3	58 TERMS AND CONDITIONS FOR OPERATION & MAINTENANCE CONTRACT Payment	The Monthly Payment during O&M period shall be paid to the contractor within 30days from the date of Invoice. Please confirm.	Not Acceptable. Bidder to follow the provisions of Tender Document.
---	---	------------------------	------	--	--	--

10	ANNEXURE A-Xa TO SCC GUARANTEES & PENALTIES FOR OPERATION & MAINTENANCE	6 of 9 (626/5335)	5.3 (1)	Penalty clause for short fall in performance during Operation & Maintenance period due to any fault on the part of the Operation & Maintenance Contractor	Any deviation in Raw effluent quality will effect the performance of plant, process equipment / system. If any such occasions, bidder not to be penalized for not meeting the quality of treated effluent water untill the plant restore the performance. Kindly confirm	Shall be replied separately.
11	ANNEXURE A-Xa TO SCC GUARANTEES & PENALTIES FOR OPERATION & MAINTENANCE	7 of 9 (627/5335)	Note 1	Maximum cumulative Penalty on account of all the parameters	Bidder requesting to consider maximum penalty shall be limited to 5% of monthly O&M Charges instead of 25% of monthly O&M Charges	Shall be replied separately.
12	PREAMBLE TO SCHEDULE OF PRICES	12 of 14 (737/855)	22.9	The Operation & Maintenance Charges shall not be payable in case the Effluent Treatment Plant (ETP) is not under operation for the reason(s) attributable to the Contractor. Pro-rata deduction of Operation & Maintenance Charges will be made in the event of nonoperation/ shut down of the Effluent Treatment Plant (ETP) for reason(s) attributable to the Contractor	O&M is a service contract it comprises majorly on fixed charges (Manpower & maintenance). Such occasions Contractor will take necessary action to resolve the issues to restore plant In operation. So request to consider to pay the fixed component during such occasions. please confirm	Bidder to follow the provisions of Tender Document.
13	TENDERDOCUMENT_PART_1	65 of 5335 (65/855)	21.1	21.0 GOODS AND SERVICE TAX (GST)	SP-07 O&M charges is exclusive of taxes, duties & GST. The taxes for O&M charges need not to fill in any schedules, please confirm	Confirmed.

**SIGNATURE OF THE BIDDER :**

**WITH SEAL/STAMP**

**Name of Work** : RWTP, RO-DMP, CPU & ZLD Plant for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
**Bidding Document**: SG/B269-475-PA-T-8701/23

### **PRE-BID QUERIES (Bidder-1)**

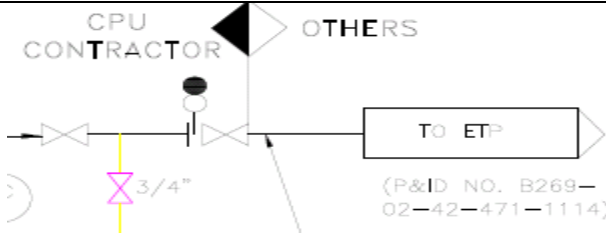
SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	Substation & Control Room (RWTP 122) Drg. No. B269-000-81-41-02506 Rev.A	2556-2558/7166			<p>In the referred drawing Ground floor plan, First floor plan &amp; second floor plan of Substation &amp; Control Room (RWTP-122) has been given.</p> <p>Following has been indicated in the referred drawings.</p> <p>(a) On Ground floor Clean Agent Room &amp; Battery room has been indicated.</p> <p>(b) On First floor UPS room has been indicated</p> <p>(c) On Second floor UPS room &amp; Battery room has been shown again.</p> <p>Please clarify following.</p> <p>(i) Whether we have to consider the UPS &amp; Battery room shown on second floor or UPS room on first floor &amp; Battery room on Ground floor</p> <p>(ii) We understand that the clean agent system should cover (a) Rack room (b) Console room (c) Engineering room (d) UPS room &amp; (e) Battery room. Please confirm our understanding</p>	<p>i) Follow bid dwg. UPS, Battery Room on Second Floor cater to Control Room rooms on same floor. UPS, Battery on lower floors are for the Substation.</p> <p>ii) Bidder's understanding is correct.</p>
2	Substation & Control Room (RO DM) Drg. No. B269-000-81-41-02431 Rev.A	2559-2561/7166			<p>In the referred drawing Ground floor plan, First floor plan &amp; second floor plan of Substation &amp; Control Room (RO DM) has been given.</p> <p>Following has been indicated in the referred drawings.</p> <p>(d) On Ground floor Clean Agent Room &amp; Battery room has been indicated.</p> <p>(e) On First floor UPS room has been indicated</p> <p>(f) On Second floor UPS room &amp; Battery room has been</p>	<p>i) Follow bid dwg. UPS, Battery Room on Second Floor cater to Control Room rooms on same floor. UPS, Battery on lower floors are for the</p>

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					<p>shown again.</p> <p>Please clarify following.</p> <p>(iii) Whether we have to consider the UPS &amp; Battery room shown on second floor or UPS room on first floor &amp; Battery room on Ground floor</p> <p>(iv) We understand that the clean agent system should cover (a) Rack room (b) Console room (c) Engineering room (d) UPS room &amp; (e) Battery room. Please confirm our understanding</p> <p>.</p>	<p>Substation.</p> <p>ii) Bidder's understanding is correct.</p>



**Name of Work** : RWTP, RO-DMP, CPU & ZLD Plant for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
**Bidding Document**: SG/B269-475-PA-T-8701/23

### **PRE-BID QUERIES (Bidder-2)**

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
71.	Part 2	891 of 7166	SOW	Guaranteed value	<p>Guaranteed value of pH, Iron as Fe, KMno4 , Na + K as Na at Polished condensate outlet (CPU plant ) is different in Scope of work and Process datasheet at polished condensate CPU plant.</p> <p>Kindly clarify which document shall be considered for Guaranteed value of CPU plant.</p>	<p>Polished condensate quality shall be as per Process Datasheet B269-476-02-DS-1901, Rev. No.- B.</p> <p>However, Kindly refer updated SOW B269-476-17-44-SS-1001 in Amendment for guarantee parameters of polished condensate quality</p>
72.	Part 5	2511 of 7166	P&ID	Batter Limit Condition	 <p>Kindly provide the battery limit condition of ACF backwash waste (CPU) line.</p> <p>Also provide battery limit condition for cooling water supply</p>	<p>ACF backwash waste line and cooling water supply &amp; return battery limit conditions are provided in tender.</p>

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					and return line.	
73.	Part 5	2511 of 7166	P&ID	Block and bleed valve	<p>Block &amp; bleed valve arrangements shall be provided at backwash inlet and regeneration (acid &amp; alkali) inlet of individual MB.</p> <p>As per P&amp;ID, there is no requirement for block and bleed valve at backwash inlet but requirement given in scope drawing.</p> <p>Kindly confirm the requirement.</p>	Block and bleed arrangement shall be provided.
74.	Part 2	899 of 7166	SOW	Pipe rack / Sleeper	<p>All piping at battery limit shall be left with flange connection. The ISBL piping shall be through pipe racks, pipe sleepers and trenches /underground lines as per the Engineering Specifications. U/G piping shall have a minimum cushion of 1.2 m below</p> <p>As per above clause, We understood that Pipe rack and pipe sleeper both are suitable for piping routing inside plant area for all package.</p>	Beyond the battery limit arrangement, within ISBL ,sleeper arrangement is not preferred and pipe rack arrangement is indicated as The sleeper arrangement restricts the mobility within the unit.
75.	Part 2	891 of 7166	SOW	Provision for Installation of one more chain in	<p>condensate to produce polished condensate. Two chains (1 working + 1 standby) each of 140 m3/h capacity along with provision for installation of one more chain of 140 m3/h in future for Alkylolation Unit shall be provided for the complex. This document constitutes</p> <p>As per above clause, Two Nos of chain (1 Working + 1 standby ) shall be supply by contractor and provision for installation of one more chain for alkylolation unit shall be considered in Equipment layout.</p> <p>Kindly confirm.</p>	Bidder understanding is correct.
76.	Part 5	2163 of 7166	PDS	Discrepancy	<p>MOC of CPU feed pump is different in process datasheet and equipment list.</p> <p>Kindly confirm the MOC of CPU feed pump.</p>	MOC of CPU Feed pumps shall be C: SS304L; I: SS304L
77.	Part 5	2166 of 7166	PDS	Lining requirement	Kindly clarify the requirement of Glass Flake Vinyl Ester Lining for activated carbon filter for CPU plant.	Please follow tender


SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
78.	Part 5	2166 of 7166	PDS	Temperature	Kindly provide operating and design temperature for suspect & pure condensate inlet to the CPU plant.	Operating & design conditions are already available in CPU process data sheet doc B269-476-02-DS-1901.
79.	Part 5	2170 of 7166	PDS	Design flow rate	<div> <div>DESIGN FLOW (m<sup>3</sup>/h)</div> <div>437</div> </div> <p>1) Design flow rate of CPU plant is 140 m3/hr but design flow rate of polished condensate tank is 437 m3/hr. Kindly clarify the same. 2) Design of polished condensate tank shall be as per residence time or shall be considered as given in Equipment list.</p>	1) Inlet flow based on polished and pure condensate flow 2) Polished condensate size is frozen in tender. No change in size to be done.
80.	Part 5	2171 of 7166	PDS	Capacity of pump	Why capacity of polished condensate transfer pump shall be 2 x 160 m3/hr instead of 1 x 140 m3/hr?	Please follow tender
81.	Part 5	2175 of 7166	PDS	Quantity of level transmitter	<div> <div>LEVEL TRANSMITTER (YES / NO) (TYPE)</div> <div>YES, 2 NOS</div> </div> <p>As per Process datasheet, quantity of level transmitter in acid/caustic dilution tank for MB is 2 Nos but as per P&amp;ID, quantity of level transmitter in acid/caustic dilution tank for MB is 1 No.  Kindly confirm the quantity of level transmitter in acid/caustic dilution tank for MB.</p>	2 nos. of level transmitter shall be provided for acid/caustic dilution tanks for MB
82.	Part 5	2175 of 7166	PDS	Morpholine dosing tank	Kindly clarify the requirement of morpholine dosing tank in CPU plant.	Morpholine from Morpholine dosing

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						tank in RODMP shall be dosed in CPU.
83.	Part 5	2511 of 7166	P&ID	On-off valve type	We understood that On-off valve type to be followed as per the P & ID .	For Auto on off valves, EDB B269-999-16-51-EDB-1001 shall be followed.
84.	Part 5	2511 of 7166	P&ID	Quantity of trim cooler for CPU	As per P&ID, Quantity of trim cooler for CPU plant is 2 Nos (1W+1S) But as per process datasheet of heat exchanger, Quantity of trim cooler for CPU plant is 1 No.  Kindly confirm the Quantity of trim cooler for CPU plant .	Please follow as per exchanger PDS.
85.	Part 5	2308 of 7166	PDS	Flow rate	Kindly provide the individual flow rate of Suspect condensate and pure condensate of CPU plant.	The requirement is not clear. Already exchanger PDS shows the normal and max condensate flow for the unit to be designed.
86.	Part 5	2308 of 7166	PDS	Design parameter	We understood that design inlet parameter of feed inlet (i.e. provided in PDS of CPU plant) is combined parameter of suspect condensate and pure condensate.  Kindly confirm our understanding.	Feed condensate properties mentioned in CPU specification is only Suspect condensate properties.
87.	Part 5	2511 of 7166	P&ID	Pipe size of Inlet /	As per P&ID, Line size of unpolished condensate inlet line	Please follow

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
				Outlet	to heat exchanger is 12 " –A1A-IH and outlet line from heat exchanger is 14"-A1A-IH.  Also as per P&ID-476-1117, outlet line from heat exchanger is 16"-A1A-IH.  Kindly clarify the inlet/outlet line size of heat exchanger.	tender. The 16"-A1A line size shall be before TP-02.
88.	Part 5	2511 of 7166	P&ID	Unpolished line	Kindly clarify that why unpolished condensate water line connect to discharge line of ACF backwash waste transfer pump as well as connect to ACF backwash collection sump.	Please follow tender
89.	Part 5	2512 of 7166	P&ID	Line size of discharge header	We understood that line size of common discharge header of CPU feed pump is considered as higher because of flow rate of future installation for alkylation unit is also included in common discharge header.  Kindly confirm our understanding.	Bidder understanding is correct.
90.	Part 5	2512 of 7166	P&ID	Drain from oil coalescer	Drain line from Oil coalecer unit shall be connected to the ACF backwash collection sump or ACF backwash transfer pump discharge header.  Because of in sufficient pressure in drain line of oil coalescer , It should be connect to ACF backwash collection sump.  Kindly clarify the same.	Please follow tender.
91.	Part 5	2514 of 7166	P&ID	Inlet/ Outlet line size	Line size of individual inlet / outlet of actiavted carbon filter is 8" but line size of indivudal inlet/outlet of Mixed bed exchanger is 6 " .  Kindly clarify the same.	Inlet/outlet line size of MB exchanger shall be 8".
92.	Part 5	2512 of 7166	P&ID	Line size of Off spec	As per P&ID-476-1112 , Line size of off spec. MB is 10" – A1K. But as per P&ID-476-1114, Line size of off spec. MB is 8" –A1K.  Kindly confirm the Line size of off spec. MB.	Line size of off spec. MB shall be 10"-A3A

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
93.	Part 5	2512 of 7166	P&ID	Inlet line to Unpolished tank	As per P&ID-476-1115, Polished condensate transfer pump discharge line is connect to Unpolished condensate tank but as per P&ID-476-1112, there is no inlet line from Polished condensate transfer pump discharge.  Kindly clarify the same.	Polished condensate transfer pump off spec to be routed to Unpolished condensate tank
94.	Part 5	2517 of 7166	P&ID	Bypass line of Heat exchanger	We understood that by pass line of heat exchnager is 12" instead of 14" as inlet line size of polished condensate water is 12"  Kindly confirm our understanding.	Bidder understanding is correct.
95.	Part 5	2309 of 7166	PDS	Requirement of future installation pump	<div> <div>d) TWO UNPOLISHED CONDENSATE FEED PUMPS (1 OPERATING + 1 STAND-BY) EACH OF 140 M3/HR</div> <div>RATED CAPACITY. ONE OPERATING PUMP OF SIMILAR CAPACITY TO BE INSTALLED FOR ALKYLATION UNIT IN FUT</div> </div> Kindly clarify the scope of supply ,installation, piping and fitting of one operating feed pump of CPU plant which shall be require for alkylaton unit in future.	Necessary stub connection shall be provided for future installation of Feed Pump.
96.	Part 5	2309 of 7166	PDS	Off spec from MB	<div> <div>PROVISION SHALL BE PROVIDED FOR ROUTING OFFSPEC. CONDENSATE FROM CPU TO UNPOLISHED</div> <div>CONDENSATE TANKS AS WELL AS TO OWS.</div> </div> As per above clause, provision shall be provided ofor routing off spec from MB system to OWS.  But as per P&ID, there is no provision for routing off spec from MB system to OWS.  Kindly clarify the same.	Bidder to develop during detail engineering.
97.	Part 5	2311 of 7166	PDS	Scope Clarity	<div> <div>26. FUTURE PIPING CONNECTIONS, FLANGES AND SPACE FOR THE FUTURE EQUIPMENTS, PIPING, INSTRUMENTS, PIPING</div> <div>FITTINGS ETC SHALL BE PROVIDED TO INSTALL THE CHAIN (OIL COALSCER, ACTIVATED CARBON FILTERS AND MIXED</div> <div>BED) FOR FUTURE ALKYLATON UNIT.</div> </div> Kindly clarify the scope of equipment, Piping , instrument	Necessary stub connections shall be provided for future installation of CPU

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					and piping fitting of installation of chain ( Oil coalscer, ACF and MB) for future alkylation unit.	Chain.
98.	Part 2	983 of 7166	PDB	Note 2	ETP Treated Water (Note-2) Detail of Note-2 is missing in Process design basis of RO-DM.	Note-2 stands deleted
99.	Part 2	983 of 7166	PDB	Document Missing	Below listed document is not found in tender . 1)DM Plant Process Datasheet No.: B269-475-02-42-DS-1601	Refer Page no 2306 of 7166
100.	Part 5	2516 of 7166	P&ID	Location OF acid & caustic tank	Kindly clarify that Location of acid & caustic measuring/dilution tank of CPU plant shall be considered in Chemical house of RO-DM plant or shall be considered near CPU area.	Shall be considered near CPU area.
101.	Part 2	983 of 7166	PDB	Design flow rate	As per process design basis, Design flow rate inlet to Blow down storage tank is equal to the combined design flow rate Cooling Tower Blow down from CT-1 & CT – 2, Blow Down from Process Units & Blow down from Utility Boiler.  Design flow rate for BD storage tank = 434 + 35 + 32 = 501 m3/hr  But as per process datasheet, Design flow rate for BD storage tank is 617 m3/hr.  It means that provided design flow rate for BD storage tank in process datasheet is including internal recycle backwash water/ Supernatant water ( i.e. approx. 116 m3/h)  Kindly clarify the same for proper mass balance of effluent stream inlet to BD storage tank.	Bidder understanding is correct.  However, mass balance to be developed by the bidder during detailed engg.
102.	Part 2	983 of 7166	PDB	Effluent stream	As per Process design basis , Total three Nos. of effluent streams are inlet to Blow down storage tank .  1) Cooling Tower Blow down from CT-1& CT – 2 2) Blow Down from Process Units	Design temp = 75 deg C, Design Pr = 15 kg/cm2.g

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					<p>3) Blow down from Utility Boiler</p> <p>But as per P&amp;ID-475-1111, Combined effluent line shall be provided for all above streams.</p> <p>Hence Kindly provide combined design parameter inlet to the Blow down storage tank.</p>	
103.	Part 2	2459 of 7166	PFD	RWTP HRSCC Clarified Water	 <p>As per PFD, RWTP clarified water shall be routed to UF-I feed collection tank.</p> <p>But there is no line available at battery limit from RWTP package.</p> <p>Kindly clarify the same.</p>	The clarified water line from RWTP stands deleted.
104.	Part 2	789 of 7166	Scope of work	Design Flow rate	<p>As per Scope of work and PFD,</p> <p>Design flow rate of RO-II skid = Design flow rate of RO-I permeate + Design flow rate of RO-III permeate + Design flow rate of RO-IV permeate</p> <p>Design flow rate of RO-II skid = <math>750 + 164 + 59.5 = 973.5</math> m<sup>3</sup>/h</p> <p>But as per process datasheet and equipment list, Design flow rate of RO-II skid is 964 m<sup>3</sup>/hr .</p> <p>Kindly confirm design flow rate of RO-II skid.</p>	Please follow tender. However, mass balance to be developed by the bidder during detailed engg.
105.	Part 2	789 of 7166	Scope of work	Design Flow rate	<p>As per Scope of work and PFD,</p> <p>Design flow rate of MB system = Design permeate flow rate of RO-II system = 868 m<sup>3</sup>/hr</p> <p>But as per process datasheet and equipment list, Design</p>	Please follow tender.

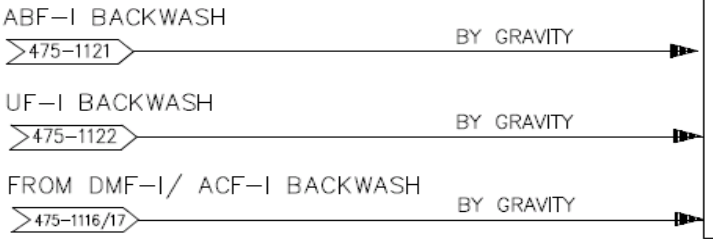
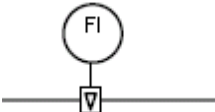


SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY														
					<p>flow rate of MB system is 850 m3/hr .</p> <p>So kindly clarify about balance flow rate ( i.e.18 m3/hr ) which will be continuous stored in degassed water tank.</p>															
106.	Part 2	795 of 7166	Scope of work	Cooling water	<p>Cooling water supply for the compressed air system shall be in scope of the contractor.</p> <p>Shall we taken cooling water from available battery limit line for compressed air system?</p> <p>If not then please clarify from where we shall get required cooling water for compressed air system.</p>	Raw water shall be made available to the bidder at plant battery limit. Its usage as cooling water (including treatment if required) and further recycling shall be in the scope of the bidder.														
107.	Part 2	2464 of 7166	P&ID	Provision for chemical waste	<p>24. PROVISION OF ROUTING UF CHEMICAL WASTE TO OWS SHALL BE PROVIDED.</p> <p>There is no provision is provided for routing UF chemical waste to OWS in P&amp;ID of UF system.</p> <p>Kindly clarify the requirement of routing chemical waste from UF system to OWS.</p>	The Note stands deleted.														
108.	Part 2	792 of 7166	Scope of work	Battery limit condition	<table border="1"> <tr> <td>RO-I Permeate to Treated</td><td>Pressure</td><td>Kg/cm2g</td><td></td><td>6</td><td>-</td><td>8</td></tr> <tr> <td>Raw Water make-up line</td><td>Temperature</td><td>°C</td><td>-</td><td>Amb.</td><td>-</td><td>-</td></tr> </table> <p>RO-I permeate line is combined with treated raw water make up line and going to RO-I feed collection tank.</p> <p>So kindly clarify why battery limit condition is provided RO-I permeate line as this line is not going to the outside battery limit.</p>	RO-I Permeate to Treated	Pressure	Kg/cm2g		6	-	8	Raw Water make-up line	Temperature	°C	-	Amb.	-	-	RO-I permeate line is routed to OSBL via bidirectional flow line. The battery limit conditions shall be updated in amendment.
RO-I Permeate to Treated	Pressure	Kg/cm2g		6	-	8														
Raw Water make-up line	Temperature	°C	-	Amb.	-	-														

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
109.	Part 5	2466 of 7166	P&ID	Pipe class	Kindly clarify pipe class of backwash waste from backwash waste holding sump-I is A93A or A3A?	Shall be A93A
110.	Part 5	2466 of 7166	P&ID	Line size	Kindly provide the line size of drain from blow down collection tank to ACF backwash sump(CPU).	Provided in tender
111.	Part 5	2468 of 7166	P&ID	Line size	If quantity of HRSCC-I and Flash mixing tank – I are 2 W then inlet line size to Flash mixing tank – I and HRSCC-I is 10"-A93A instead of 14"-A93A.  Kindly confirm the same.	Please follow tender
112.	Part 4	1998 of 7166	PDS	MOC of HRSCC –I	MOC of HRSCC – I is RCC Epoxy coated or Epoxy lined ?  Kindly confirm.	HRSCC-I shall be RCC Epoxy coating
113.	Part 4	2000 of 7166	PDS	Head of Filter feed pump – I	Head of filter feed pump – I is different in Equipment list and process datasheet.  Kindly confirm the head of filter feed pump – I.	Head of filter feed pump shall be 45 m
114.	Part 4	1998 of 7166	PDS	Flow rate of HRSCC –I	Flow rate of HRSCC –I is different in Equipment list and process datasheet.  Kindly confirm the Flow rate of HRSCC –I.	Flow Rate of HRSCC-I shall be 308 m3/h. Capacity of HRSCC-I shall be 370 m3/h.
115.	Part 4	2006 of 7166	PDS	Flow rate of Filter air blower- I	Flow rate of Filter air blower- I is different in Equipment list and process datasheet. Kindly confirm the Flow rate of Filter air blower- I.	Flow rate of Filter air blower- I shall be 630 Nm3/h
116.	Part 4	2000 of 7166	PDS	Head of Filter feed pump – I	Hydraulic calculation for Head of head of filter feed pump – I shall be design as per routing treated water line to UF-I feed collection tank or shall be as per routing treated water line to ABF-I.  Kindly clarify the same.	Please follow tender
117.	Part 5	2476 of 7166	P&ID	Auto Backwash filter	If backwash system of auto backwash filter is timer based or based on differential pressure across the filter then why manual valve provided instead of auto valve at inlet/outlet	Please follow tender.

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY												
					of auto backwash filter.													
118.	Part 4	2021 of 7166	PDS	Pressure requirement	<div><div>4 THE RO-I FEED PUMP MOTOR &amp; HEAD SHALL BE DESIGNED FOR PRESSURE REQUIREMENT OF ATLEAST ? APPROVED MAKES OF RO-I MEMBRANES AT THE END OF THIRD YEAR AT 15 DEG C DESIGN WATER TEMPERATURE AND 2.0 KG/CM2.G RO-I PERMEATE PRESSURE</div><p>If requirement of head(Differential &amp; Discharge) for RO-I feed pump shall be less as compare to the provided minimum head (Differential &amp; Discharge) in datasheet then shall we considered minimum head as per tender requirement or shall we considered as per requirement of head as per RO projection.</p><p>This is applicable for all the RO system.</p><p>Kindly clarify.</p></div>	Minimum head as per tender datasheet shall be considered.												
119.	Part 4	2021 of 7166	PDS	Discharge Pressure requirement	<div><table><tr><td>SUCTION PRESSURE (kg/cm2 a)</td><td>3.0 (NOTE-4)</td></tr><tr><td>MAXIMUM SUCTION PRESSURE (kg/cm2.g)</td><td>NOTE-1</td></tr><tr><td>DISCHARGE PRESSURE (kg/cm2 a)</td><td>17 (NOTE-4) (MINIMUM)</td></tr><tr><td>DIFFERENTIAL PRESSURE (kg/cm2.g)</td><td>20 (NOTE-4) (MINIMUM)</td></tr></table><p>Kindly check the minimum requirement of discharge pressure of RO-I feed pump. It shall be higher than differential pressure of RO-I feed pump.</p></div>	SUCTION PRESSURE (kg/cm2 a)	3.0 (NOTE-4)	MAXIMUM SUCTION PRESSURE (kg/cm2.g)	NOTE-1	DISCHARGE PRESSURE (kg/cm2 a)	17 (NOTE-4) (MINIMUM)	DIFFERENTIAL PRESSURE (kg/cm2.g)	20 (NOTE-4) (MINIMUM)	Shall be updated In amendment				
SUCTION PRESSURE (kg/cm2 a)	3.0 (NOTE-4)																	
MAXIMUM SUCTION PRESSURE (kg/cm2.g)	NOTE-1																	
DISCHARGE PRESSURE (kg/cm2 a)	17 (NOTE-4) (MINIMUM)																	
DIFFERENTIAL PRESSURE (kg/cm2.g)	20 (NOTE-4) (MINIMUM)																	
120.	Part 2	790 of 7166	Scope of Work	Design temperature	<div><table><tr><th>System/Parameter</th><th>Value (Hold)</th></tr><tr><td>SDI at each UF Outlet</td><td>≤ 3</td></tr><tr><td>Total Dissolved Solids in RO-I permeate</td><td>≤ 100 mg/l</td></tr><tr><td>Total Dissolved Solids in RO-II permeate</td><td>≤ 10 mg/l</td></tr><tr><td>Total Dissolved Solids in RO-III permeate</td><td>≤250 mg/l</td></tr><tr><td>Total Dissolved Solids in RO-IV permeate</td><td>≤350 mg/l</td></tr></table><p>We understood that guaranteed value of all RO permeate water shall be considered at design temperature given in respective datasheet of RO system skid.</p><p>Kindly confirm our understanding.</p></div>	System/Parameter	Value (Hold)	SDI at each UF Outlet	≤ 3	Total Dissolved Solids in RO-I permeate	≤ 100 mg/l	Total Dissolved Solids in RO-II permeate	≤ 10 mg/l	Total Dissolved Solids in RO-III permeate	≤250 mg/l	Total Dissolved Solids in RO-IV permeate	≤350 mg/l	Bidder understanding is correct.
System/Parameter	Value (Hold)																	
SDI at each UF Outlet	≤ 3																	
Total Dissolved Solids in RO-I permeate	≤ 100 mg/l																	
Total Dissolved Solids in RO-II permeate	≤ 10 mg/l																	
Total Dissolved Solids in RO-III permeate	≤250 mg/l																	
Total Dissolved Solids in RO-IV permeate	≤350 mg/l																	

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
121.	Part 4	2032 of 7166	PDS	Diameter of DG tower	As per surface flow rate , calculate diameter of degasser tower is higher than provided diameter of degasser tower in process datasheet .  Kindly check and confirm.	Provided diameter is minimum requirement. Same shall be updated by bidder as per requirement.
122.	Part 5	2485 of 7166	P&ID	Document Missing	P&ID of DM water Storage tank is missing in tender document  P&ID no. : B269-02-42-475-1111  And also process datasheet of DM water storage tank is missing.	Refer Page 2518 of 7166
123.	Part 4	2039 of 7166	PDS	MOC of MB Blower	Kindly note that MOC of MB air scouring blower shall be C: CI Gr. 260 ,I: CI Gr. 260 , S: EN-8 instead of CS.  Kindly check and confirm	Please follow tender
124.	Part 4	2046 of 7166	PDS	Quantity of HRSCC – II sludge sump agitator	As per process datasheet , Quantity of HRSCC – II sludge sump agitator are 2 Nos. But as per Equipment list, Quantity of HRSCC – II sludge sump agitator is 1 No.  Kindly confirm the quantity of HRSCC – II sludge sump agitator.	Quantity of HRSCC – II sludge sump agitator shall be 2 nos.
125.	Part 5	2464 of 7166	P&ID	Drain destination	11. OVER FLOW AND DRAIN CONNECTION 'D' SHALL BE PROVIDED FOR ALL ABOVE GROUND SUMP & TANKS WITH DRAIN DESTINATION TO BETWEEN WASTE COLLECTION SUMP-1.  We understood that overflow and drain from all sump & tanks (connection 'D') shall be routed to backwash waste collection sump – I.  Kindly confirm our understanding.	Bidder understanding is correct.

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
126.	Part 5	2495 of 7166	P&ID	Routing of Piping	 <p>As per P&amp;ID, Separate line from ABF-I backwash , UF-I backwash and DMF-I/ ACF-I backwash shall be backwash waste collection sump – I.</p> <p>Shall we combine all backwash waste water line and provide common inlet to backwash waste collection sump-I.</p> <p>Kindly confirm.</p> <p>This is applicable for backwash waste collection sump-II.</p>	Please follow tender. Drain network to be developed by bidder.
127.	Part 4	2065 of 7166	PDS	Flow rate	Kindly check and confirm the flow rate of RO-IV feed pump. It should be 108 m3/hr.	Please follow tender.
128.	Part 5	2505 of 7166	P&ID	Requirement of Bypass arrangement	 <p>Kindly clarify requirement of bypass arrangement on flow indicator (rotameter) or else we shall provide spool piece during maintenance of flow indicator.</p>	Please follow tender
129.	Part 4	2072 of 7166	PDS	Capacity of Dosing pump	<p>As per process datasheet, capacity of Antiscalant Solution Dosing Pumps for RO-III &amp; IV is 25 LPH ,</p> <p>But as per Equipment list, capacity of Antiscalant Solution Dosing Pumps for RO-III &amp; IV is 100LPH.</p> <p>Kindly confirm the capacity of Antiscalant Solution</p>	Capacity of Antiscalant Solution Dosing Pumps for RO-III & IV is 25 LPH

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					Dosing Pumps for RO-III & IV.	
130.	Part 4	2073 of 7166	PDS	Capacity of Dosing pump	<p>As per process datasheet, capacity of Antiscalant Solution Dosing Pumps for ZLD Evaporator is 100 LPH ,</p> <p>But as per Equipment list, capacity of Antiscalant Solution Dosing Pumps for ZLD Evaporator is 25 LPH.</p> <p>Kindly confirm the capacity of Antiscalant Solution Dosing Pumps for ZLD Evaporator.</p>	Capacity of Antiscalant Solution Dosing Pumps for ZLD Evaporator is 100 LPH
131.	Part 4	2073 of 7166	PDS	Quantity of Dosing pump	<p>As per process datasheet, quantity of Antiscalant Solution Dosing Pumps for ZLD Evaporator are 2 Nos (1W+1S) ,</p> <p>But as per Equipment list, quantity of Antiscalant Solution Dosing Pumps for ZLD Evaporator are 3 Nos (2W+1S).</p> <p>Kindly confirm the quantity of Antiscalant Solution Dosing Pumps for ZLD Evaporator.</p>	Quantity of Antiscalant Solution Dosing Pumps for ZLD Evaporator shall be 2 Nos (1W+1S)
132.	Part 4	2073 of 7166	PDS	Recirculation line	<p><u>2 RECIRCULATION LINE SHALL BE PROVIDED FOR THE PUMP SYSTEM</u></p> <p>Kindly clarify the requirement of recirculation line in dosing pump system as there is no recirculation line shall be provided in p&amp;id of dosing system.</p>	Recirculation line shall be provided for chemical dosing tanks and centrifugal pumps
133.	Part 4	2081 of 7166	PDS	Quantity of centrifuge	<p><u>ONE DEDICATED CENTRIFUGE EACH FOR HRSCC-I, HRSCC-II AND LIME SODA CLARIFIER SLUDGE.</u></p> <p>If one dedicated centrifuge shall be require for HRSCC-I, HRSCC-II and Lime Soda clarifier sludge then qunatity of centrifuge shall be 3W + 0S instead of 2W + 1S.</p> <p>Kindly clairfy the same.</p>	Noted
134.	Part 4	2083 of 7166	PDS	CIP system for UF system	<p>If we require CPI system for both UF system then shall we taken tapping from RO - cip system or shall we need to provide separate CIP system for UF system.</p>	CIP system for UF-I & II shall be common. CIP for

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY					EIL/IOCL REPLY										
					Kindly confirm.					RO-I/II/III/IV shall be common. No connection between CIP of UF & RO systems.										
135.	Part 4	2087 of 7166	PDS	Bulk storage tank	We understood that bulk storage tank and unloading pump for Fecl3 dosing system has been removed from scope of supply.  Kindly confirm our udnerstanding.					Bidder understanding is correct										
136.	Part 4	2094 of 7166	PDS	Quantity of Dosing pump	As per process datasheet, quantity of Lime Solution Dosing Pumps for RODM HRSCC-I& II are 2 Nos (1W+1S) ,  But as per Equipment list, quantity of Lime Solution Dosing Pumps for RODM HRSCC-I& II are 3 Nos (2W+1S).  Kindly confirm the quantity of Lime Solution Dosing Pumps for RODM HRSCC-I& II.					Quantity of Lime Solution Dosing Pumps for RODM HRSCC-I & II shall be 2 Nos (1W+1S)										
137.	Part 4	1909 of 7166	Equipment list	Dosing system	<table><tr><td>2(1W+1S)</td><td>475-T-130 A/B</td><td>Chemical Dosing Tank</td><td>Effective Capacity: 1 m<sup>3</sup> Size: 1.0 m dia x 1.3 m LD + 0.3 m FB each + 0.2 m DVD</td><td>Solid FRP</td></tr><tr><td>2(1W+1S)</td><td>475-P-154 A/B</td><td>Chemical Dosing Pump</td><td>Capacity: DDE Head : DDE</td><td>C: PP/PVDF, D:TEFLON</td></tr></table> Kindly provide the destination of above dosing tank and pump.					2(1W+1S)	475-T-130 A/B	Chemical Dosing Tank	Effective Capacity: 1 m <sup>3</sup> Size: 1.0 m dia x 1.3 m LD + 0.3 m FB each + 0.2 m DVD	Solid FRP	2(1W+1S)	475-P-154 A/B	Chemical Dosing Pump	Capacity: DDE Head : DDE	C: PP/PVDF, D:TEFLON	The Tank and pump set stands deleted
2(1W+1S)	475-T-130 A/B	Chemical Dosing Tank	Effective Capacity: 1 m <sup>3</sup> Size: 1.0 m dia x 1.3 m LD + 0.3 m FB each + 0.2 m DVD	Solid FRP																
2(1W+1S)	475-P-154 A/B	Chemical Dosing Pump	Capacity: DDE Head : DDE	C: PP/PVDF, D:TEFLON																
138.	Part 4	797 of 7166	Scope of Work	MOC of piping	<table><tr><td colspan="3">Cleaning Chemicals</td><td colspan="2">CPVC</td></tr></table> As per Scope of work, MOC of Piping for cleaning chemical is CPVC.  But as per P&ID, MOC of piping of RO- CIP chemical line is A1K.  Kindly confirm MOC of piping for RO CIP cleaning.					Cleaning Chemicals			CPVC		Line PMS as per pressure rating and line size shall be determined by the bidder for RO CIP.					
Cleaning Chemicals			CPVC																	

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY			EIL/IOCL REPLY
139.	Part 4	797 of 7166	Scope of Work	MOC of piping	Sodium Bisulphite	A1K		MOC of piping for Sodium bisulphite shall be A1K.
					<p>As per Scope of work, MOC of piping for Sodium bisulphite is A1K.</p> <p>But as per P&amp;ID, MOC of piping of Sodium bisulphite line is A91S.</p> <p>Kindly confirm MOC of piping for Sodium bisulphite.</p>			
140.	Part 4	797 of 7166	Scope of Work	MOC of piping	From inlet isolation valve (manual) of MB up to outlet isolation valve (manual) of MB including all frontal piping for MB and piping on MB. Caustic (up to 5%)	CPVC or Equivalent		MOC of MB frontal piping shall be A1K.
					<p>Kindly confirm that MOC of MB frontal piping shall be considered as per Scope of work or shall be considered as per P&amp;ID of MB system.</p>			
141.	Part 4	2126 of 7166	PDS	Location of Naocl dosing system	<p>16 NaOCl SHALL BE STORED IN UF SHED. STORAGE AREA FOR 20 DAYS TO BE PROVIDED IN UF SHED</p> <p>From above clause, Weudnerstood that NaOCL dosing tank and dosing pump shall be located in UF shed.</p> <p>Kindly confirm our understanding.</p>			Bidder understanding is correct
142.	Part 4	2126 of 7166	PDS	HCL dosing pump	<p>As per P&amp;ID, Some of HCL dosing pumps are diectly taking suction from bulk storage tank.</p> <p>Hence we understood that it shall be located outside chemical house.</p>			Bidder understanding is correct
143.	Part 4	2126 of 7166	PDS	Bulk Storage tank	<p>We understood that shed is not require for Bulk storage tanks.</p> <p>Kindly confirm our understanding.</p>			Please follow tender
144.	Part 4	1909 of 7166	Equipment list	Shed requirement	UF-RO-MB SHED	50 m W x 100 m L X 6 m Clear Height	Precoated galvalume steel sheet roofing and side cladding	Please follow tender.
					<p>We udnerstood that shed shall be required for UF and RO</p>			



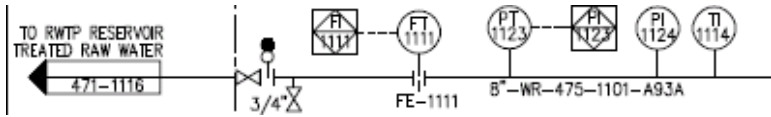
SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					system not for MB system. Kindly confirm our understanding.	
145.	Part 4	1909 of 7166	Equipment list	Dimension of Chemical House	As per Equipment list , height of chemical house (12m) is including ground floor and first floor.	Bidder understanding is correct
146.	Part 4	1909 of 7166	Equipment list	Dimension	We understood that total height (including ground floor and first floor). of centrifuge building is 6m. Kindly confirm our understanding.	Bidder understanding is correct
147.	Part 6	2564 of 7166	Scope drawing of piping B/L	Battery limit	As per scope drawing of Piping, All the incoming/outgoing pipings shall routed on pipe rack at outside the scope battery limit. Also as per scope drawing inside the scope battery limit, all the incoming/outgoing pipings shall be routed on pipe rack.  So shall we route all the incoming/outgoing pipings on Pipe sleeper instead of Pipe rack inside the scope battery limit ? Kindly confirm.	Beyond the battery limit arrangement, within ISBL ,sleeper arrangement is not preferred and pipe rack arrangement is indicated as the sleeper arrangement restricts the mobility within the unit.
148.	Part 6	2564 of 7166	Scope drawing	Storm water drain disposal	Kindly provide bottom level at tie point of storm water drain.	Bed level of storm water drain shall be provided during detailed engineering.
149.	Part 6	2564 of 7166	Scope drawing	Pipe rack width	Kindly note that width of pipe rack located at battery limit is occupied large area of plant. Can bidder change width of pipe rack as per their design philosophy?	The exact width of pipe rack has not been mentioned in the drawing B269-475-16-43-SK-8701. The actual width of the pipe rack shall be

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						decided by the bidder based on the number of lines and the pipe sizes.
150.	Part 6	2550 of 7166	Scope drawing	Pipe rack/Pipe sleeper requirement	We understood that Pipe rack and pipe sleeper both are suitable for piping routing inside plant area.	Beyond the battery limit arrangement, within ISBL ,sleeper arrangement is not preferred and pipe rack arrangement is indicated as the sleeper arrangement restricts the mobility within the unit.
151.	Part 6	2550 of 7166	Scope drawing	Minimum width Road for vehicular movement	Kindly specify the requirement of minimum width of road for vehicular movement.	Bidder to follow Engineering design basis.
152.	Part 6	2550 of 7166	Scope drawing	Cross section of pipe rack at battery limit	Kindly provide cross section of pipe rack/sleeper at battery limit with height of pipe rack.	<p>The tentative coordinates of the OSBL pipe rack interface with RWTP &amp; RO-DM-ZLD-CPU package limit is indicated in B269-487-16-43-SK-8701.</p> <p>The tentative Portal Cross-section Width is 6M /8M. No. of portals in the cross-section shall be finalised during detailed engineering</p>

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						The tentative elevations are 106.250 & 108.750.
153.	Part 6	2550 of 7166	Scope drawing	Design condition at battery limit	Kindly clarify that design conditioned of battery limit lines to be considered at grade level or at pipe rack?	Design conditions of battery limit lines to be considered at grade level.
154.	Part 5	2432 of 7166	Indicative Layout	Relocation of Unit	We understood that equipment allocated in indicative layout is just for the our reference only. We can change the location of any equipments as per our design philosophy except substation building and control room building.  Kindly confirm our understanding.	Please follow tender. OISD norms to be followed for equipment layout and distance from OSBL units to be maintained as per OISD.
155.	Part 5	2432 of 7166	Indicative Layout	Combined RCC unit	Shall we combined RCC tanks/equipment with common wall if require?	Please follow tender
156.	-	-	-	Changes in Tanks	We understand that all the Storage Tank MOC, size and type can be changed as per the space provided in layout.  Please confirm our understanding.	Please follow tender
157.	-	-	-	Scope of Sludge disposal	Please clarify the scope of the sludge disposal during Pre-commissioning, trial run for 30 days before commissioning; commissioning and PGTR.	Sludge disposal during pre-commissioning, trial run, commissioning and PGTR shall be in bidder's scope
158.	-	-	-	Days for Commissioning	Please provide the minimum days to be consider for the commissioning.	Please follow tender
159.	-	-	-	Governing Document	Please provide order of precedence in case of any mismatch found in the documents.	Bidder to follow bid document

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
160.	-	-	-	AC requirement in the Operator Room	Please clarify the requirement of the AC in the operator Room.	Please follow tender
161.	Part 4	2126 of 7166	PDS	CIP system	CIP system shall be located in UF/RO shed or Chemical house.  Kindly clarify.	CIP shall be located in UF/RO shed
162.	Part 4	2783 of 7166	PDS	Operation during trial run	Pre-commissioning, trial run for 30 days before commissioning; commissioning;  Kindly confirm that scope of operation of plant during trial run for 30 days before commissioning .	Shall be in bidder's scope.
163.	Part 1	631 of 7166	-	Loading criteria	We understood that datum value (in BkW) shall be average of the total guaranteed shaft power (in BkW) of all the qualified bidder.  Kindly confirm our understanding.	Bidder understanding is correct
164.	Part 2	868 of 7166	O&M	Scope of work	We understood that O&M of condensate polishing unit (PNCP area) shall be not in bidder scope.	Bidder understanding is correct
165.	Part 2	868 of 7166	O&M	Scope of work	What is PRDS system.	Pressure Reducing and Desuperheating System
166.	Part 2	872 of 7166	O&M	Scope of work	Annexure-I specifies minimum spares to be kept in stock & handed over to IOCL by the Contractor for 2 years Operation & Maintenance contract of the plant. All other spares  We understood that after completion of O&M contract , Minimum spare as per annexure –I to be handed over to IOCL by contactor.  Kindly confirm our understanding.	Bidder understanding is correct


SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY				EIL/IOCL REPLY				
167.	Part 2	872 of 7166	O&M	Scope of work	<div>- Arrangement for Conveyance of the Chemical Sludge generated in the Raw Water Treatment Plant and Chemical Sludge and Dried Salts generated in RO based DM Plant &amp; Condensate Polishing Unit and Zero Liquid Discharge Plant and their Disposal to the Secured Landfill shall be done by M/s IOCL.</div> <div>We understood that transportation and disposal cost of chemical sludge and dried salts from plant area to secured landfill shall be done by M/s IOCL.</div> <div>Kindly confirm our understanding.</div>				Bidder understanding is correct				
168.	Part 5	2518 of 7166	P&ID	Discrepancy	<div>As per P&amp;ID B269 – 02-42-475-1111, Line size of treated effluent from ETP is 10"-A1A.</div> <div>But as per P&amp;ID B269-17-44-475-1111, Line size of treated effluent from ETP is 12"-A1A.</div> <div>Kindly confirm the Line size of treated effluent from ETP at battery limit of RO-DM.</div>				Line size of 12" to be considered.				
169.	Part 5	2518 of 7166	P&ID	Discrepancy	<div>As per P&amp;ID B269 – 02-42-475-1111, Line size of DM water outlet is 16"-A1K.</div> <div>But as per P&amp;ID B269-17-44-475-1111, Line size of DM water outlet is 18"-A1K.</div> <div>Kindly confirm the Line size of DM water outlet at battery limit of RO-DM.</div>				DM Water outlet line already mentioned as 18" in P&ID.				
170.	Part 2	792 of 7166	Scope of Work	Battery limit condition	<table><tr><td>DM Water to OSBL</td><td>Pressure</td><td>Kg/cm2g</td><td>As per Process Datasheet No.: B269-475-02-42-DS-1601</td></tr></table> <div>1)We understood that DM water storage tank and DM water transfer pump shall be in bidder scope. Tie in point at battery limit of DM water outlet is at discharge of DM water transfer pump not at MB outlet header.</div> <div>Kindly confirm our understanding.</div>				DM Water to OSBL	Pressure	Kg/cm2g	As per Process Datasheet No.: B269-475-02-42-DS-1601	1. Bidder understanding is correct 2. Follow as per Pump PDS.
DM Water to OSBL	Pressure	Kg/cm2g	As per Process Datasheet No.: B269-475-02-42-DS-1601										

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					2) As per Process datasheet, required pressure at battery of RO-DM unit is not given. Hence we are considering differential pressure of DM water transfer pump as per process datasheet only. Kindly confirm.	
171.	Part 5	2518 of 7166	P&ID	Battery limit line	 <p>As per P&amp;ID B269 – 02-42-475-1111, there is outgoing line provided from RO-DM plant to RWTP reservoir treated raw water.</p> <p>But in P&amp;ID of RO-DM plant, there is no line going to RWTP from RO-DM plant at battery limit.</p> <p>Kindly clarify about this line.</p>	Treated water line from RODM plant (line no 8"-WR-475-1101-A93A) shall be deleted. 10"-WR-475-1102-A93A shall be considered as two way line. Surplus RO Permeate generated in RODM plant shall be routed to CW makeup header.
172.	Part 5	2518 of 7166	P&ID	Discrepancy	<p>As per P&amp;ID B269 – 02-42-475-1111, Line size of LP steam at battery limit is 2"-A2A-IH.</p> <p>But as per P&amp;ID B269-17-44-475-1111, Line size of LP steam at battery limit is 4"-A2A-IH.</p> <p>Kindly confirm the Line size of LP steam at battery limit of RO-DM.</p>	As per Rev-0 P&ID, 4" LP steam line to be considered.
173.	Part 5	2518 of 7166	P&ID	Discrepancy	<p>As per P&amp;ID B269- 02-42-475-1111 &amp; as per P&amp;ID B269-17-44-475-1111, all battery limit line and instruments are repeated.</p> <p>Kindly clarify that which P&amp;ID shall be consider for Battery limit line and instrument.</p>	In Battery limit P&ID( B269-17-44-475-1111) instrument tag numbers are not mentioned to avoid

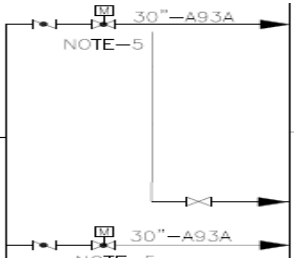
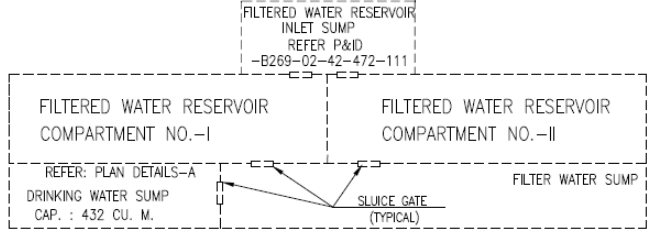
SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						repetition. Please note that instruments mentioned in P&ID are minimum requirement however Vendor to provide new instruments based on their final design.
174.	Part 5	2519 of 7166	P&ID	Document Missing	9. PACKAGE VENDOR TO PROVIDE THE PIPING,INSTRUMENTATION, SAMPLING CONNECTION etc. ON COOLING WATER LINES IN LINE WITH BEDB PART-B SECTION 6.4.2 FOR ALL INDIVIDUAL COOLING WATER CONSUMERS. Document BEDB part-B is missing in tender document.	Refer page 810 of 7166
175.	Part 5	2519 of 7166	P&ID	Discrepancy	As per P&ID B269 – 02-42-476-1111, Line size of Cooling water supply at battery limit is 20"-A93A.  But as per P&ID B269-17-44-476-1111, Line size of Cooling water supply at battery limit is 16"-A93A.  Kindly confirm the Line size of Cooling water supply at battery limit of RO-DM.	i) CWS & CWR header to RODM/CPU/ZLD package B/L shall be 20". ii) Refer P&ID B269-476-17-44-1111, for package interface. Line size shown in this P&ID are preliminary. Vendor to finalize the line size based on their detail

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY																
						engineering requirement.																
176.	Part 5	2263 of 7166	PDS	Heat Exchanger	<table><tr><th colspan="2">SUSPECT CONDENSATE</th><th colspan="2">POLISHED CONDENSATE</th></tr><tr><th>IN</th><th>OUT</th><th>IN</th><th>OUT</th></tr><tr><td>Case-1 / Case-2</td><td>Case-1 / Case-2</td><td>Case-1 / Case-2</td><td>Case-1 / Case-2</td></tr><tr><td>226400 / 351400</td><td>226400 / 351400</td><td>419700 / 294700</td><td>419700 / 294700</td></tr></table> <p>As per datasheet of heat exchanger, Flow rate of suspect condensate + pure largest pure condensate is 351.4 m3/hr. As per datasheet of CPU package, Flow rate of suspect condensate + pure largest pure condensate + flow rate of future alkylation unit is 375 m3/hr.</p> <p>Hence we understood that flow rate of future alkylation unit is 23.6 m3/hr. Kindly confirm.</p>	SUSPECT CONDENSATE		POLISHED CONDENSATE		IN	OUT	IN	OUT	Case-1 / Case-2	Case-1 / Case-2	Case-1 / Case-2	Case-1 / Case-2	226400 / 351400	226400 / 351400	419700 / 294700	419700 / 294700	351.4 m3/hr is including future alkylation requirement (without any margin). Please proceed as per attached data sheet for design.
SUSPECT CONDENSATE		POLISHED CONDENSATE																				
IN	OUT	IN	OUT																			
Case-1 / Case-2	Case-1 / Case-2	Case-1 / Case-2	Case-1 / Case-2																			
226400 / 351400	226400 / 351400	419700 / 294700	419700 / 294700																			
177.	Part 5	2263 of 7166	PDS	Flow rate of Cooling water	<table><tr><th colspan="2">COOLING WATER (NOTE-6, 7)</th></tr><tr><th>IN</th><th>OUT</th></tr><tr><td>Case-1 / Case-2</td><td>Case-1 / Case-2</td></tr><tr><td>647000 / 647000</td><td>647000 / 64700</td></tr></table> <p>As per PID line size of Cooling water inlet to heat exchanger is 8". Which is not suitable for 647 m3/hr flow rate of cooling water.</p> <p>Kindly clarify the same.</p>	COOLING WATER (NOTE-6, 7)		IN	OUT	Case-1 / Case-2	Case-1 / Case-2	647000 / 647000	647000 / 64700	As per Process P&ID (B269-02-41-476-1111) 16" line size shown for CPU unit. Bidder to reconfirm the size based on package hydraulics.								
COOLING WATER (NOTE-6, 7)																						
IN	OUT																					
Case-1 / Case-2	Case-1 / Case-2																					
647000 / 647000	647000 / 64700																					
178.	Part 5	2263 of 7166	PDS	Operating temperature	<p>Why operating temperature of Polished condensate water is different for Case -1 and Case -2 ?</p> <p>As operating temperature of polished condensate water will be same for both the case.</p>	The operating temperature provided in PDS is correct. In Case-2, all condensate are passing through Feed Polish & CW exchanger.																



SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
179.	Part 5	2519 of 7166	P&ID	Discrepancy	Backwash waste from ACF backwash collection sump shall be routed to battery and transfer to ETP system. This line is not provided in P&ID B269 – 02-42-476-1111.  Kindly clarify the same.	Refer P&ID B269-476-17-44-1111
180.	Part 5	2512 of 7166	P&ID	Drain route	 Kindly provide full of ABS and provide the routing overflow rate and drain of CPU feed tank.	ABS: ABF backwash Sump Rest to be calculated by bidder
181.	Part 5	2330 of 7166	PDS	Temperature of polished condensate	As per Process datasheet of polished condensate tank of CPU plant (PNCP) , Operating temperature of Polished condensate is ambient.  But as per datasheet of heat exchanger, Operating temperature of Polished condensate is 68.7 degree c.  Kindly clarify the operating temperature of Polished condensate.	Follow as per Exchanger PDS. Polished condensate temp 68.7 deg C is ok.
182.	Part 4	1933 of 7166	PDS	Retaining wall	<p><u>9 THE LAMELLA CLARIFIER AND UF FEED SUMP &amp; PUMP SHALL BE A SINGLE STRUCTURE</u></p> From above clause, We understood that common wall structure to be provide for lamella clarifier and UF feed sump.  Kindly clarify the same.	Lamella clarifier and UF Feed Sump shall be separate structure
183.	Part 4	1941 of 7166	PDS	Freed board of backwash waste holding sump	Kindly note that 0.5 Freed board of backwash waste holding sump is not sufficient as drain from all units shall be transfer to backwash waste holding sump through process drain network.  Kindly check and revised free board.	Free board of 0.5 m is minimum requirement. Bidder shall increase the same if required during detailed

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL
						REPLY
						engineering.
184.	Part 4	1945 of 7166	PDS	MOC	As per process datasheet, MOC of HRSCC(Backwash) is RCC epoxy lined but as per equipment list MOC of HRSCC(Backwash) is RCC epoxy coated.  Kindly confirm the MOC of HRSCC(backwash) for RWTP.	MOC of HRSCC (backwash) shall be RCC Epoxy coated
185.	Part 4	1948 of 7166	PDS	Flow rate of clarified water transfer pump (RWTP)	As per equipment, Flow rate of HRSCC outlet water is 340 m3/hr and flow rate of clarifier water transfer pump is 200 m3/hr So kindly clarify about the balance flow rate of 140 m3/hr.	Balance of water shall be bypassed to UF Feed Sump.
186.	Part 2	976 of 7166	PDB	Capacity of treated water reservoir	<div> <div>Treated Water Reservoir</div> <div>1 (Two Compartments)</div> <div>8 hrs. retention capacity of treated water</div> </div> Kindly clarify that Capacity of treated water reservoir is consider as per 8 hrs. of retention time or shall be considered as 16400 m3.	Capacity of Treated water reservoir shall be 16400 m3.
187.	Part 4	1982 of 7166	PDS	Cover Requirement for treated water reservoir	Kindly clarify the cover requirement for treated water reservoir (RWTP).	The reservoir is RCC covered.
188.	Part 4	1983 of 7166	PDS	Cover Requirement for treated water sump	Kindly clarify the cover requirement for treated water sump (RWTP).	The sump is RCC covered.
189.	Part 4	1983 of 7166	PDS	Document missing	Kindly note that below listed document is missing in tender document:  - P&ID of RAW water system : B269-02-42-472-1111	Latest Process P&ID for Raw water system shall be attached along with amendment.
190.	Part 6	2551 of 7166	P&ID	P&ID of Drinking water	Kindly provide MOC of Drinking water transfer pump (P-4801A/B/C).	Refer data sheet B269-81-41-DS-44801 attached in

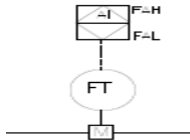
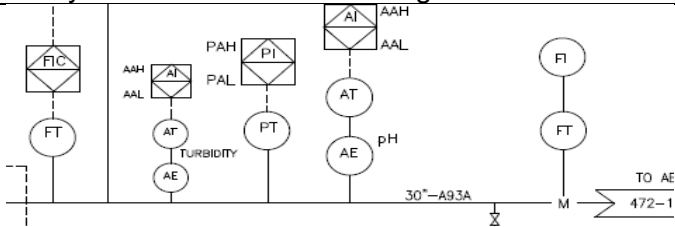
SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						tender. Page no. 2344 of 7166
191.	Part 6	2445 of 7166	P&ID	P&ID of treated water reservoir	 <p>As per P&amp;ID , Two separator header from UF outlet header shall be connected to treated water reservoir compartment-I&amp;II.</p> <p>Kindly clarify reason to provide additional tapping from inlet header of treated water reservoir compartment-I to treated water reservoir compartment-II with gate valve.</p>	additional tapping from inlet header of treated water reservoir compartment-I to treated water reservoir compartment-II with gate valve is not required. Same shall be updated in amendment
192.	Part 6	2445 of 7166	P&ID	Details of filtered water reservoir	 <p>The details of filtered water reservoir in P&amp;ID B269-17-44-472-1111 and P&amp;ID B269-999-81-41-34222 is not matching with each other.</p> <p>Kindly clarify which P&amp;ID to be follow for costing.</p>	Please follow tender
193.	Part 6	2451 of 7166	P&ID	P&ID of Drinking water	Kindly provide the dimension of drinking water sump.	Refer P&ID No. B269-999-81-41-34222 attached with

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						the tender for Drinking water sump capacity, Sizing shall be fix during detail engineering accordingly
194.	Part 6	2451 of 7166	P&ID	P&ID of Drinking water	Scope and details of filter water sump and filtered water reservoir inlet sump is in not clear.  Kindly brief scope of work and details of filter water sump and filtered water reservoir inlet sump.	Refer P&ID B269-02-42-472-1111 for filter water reservoir inlet sump
195.	Part 4	1955 of 7166	PDS	Type of Pump	As per process datasheet, type of pump for Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> /PAC dosing pump is horizontal centrifugal. but as per P&ID, type of pump for Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> /PAC dosing pump is positive displacement diaphragm. Kindly confirm the type of Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> /PAC dosing pump.	Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> /PAC dosing pump is horizontal centrifugal
196.	Part 2	768 of 7166	Scope of work	Utilities at battery limit	The following utilities will be supplied at the common battery limit of the RWTP/RODM/ZLDP . CPU battery limit :  Kindly note that battery limit location of RWTP and RODM/ZLD/CPU plant shall be provided on different location of plant.  Hence utilities of plant for RWTP and RODM/ZLD/CPU plant shall be supplied at individual battery limit of respective plant.  Kindly confirm the same.	Bidder understanding is correct
197.	Part 5	2445 of 7166	P&ID	% Caustic at battery limit	Kindly provide % of caustic available at battery limit of RWTP.	20% caustic
198.	Part 5	2454 of 7166	P&ID	Quantity of Lime slaker pump	As per P&ID, Quantity of lime slaker pump is 3 Nos and as per datasheet and equipment list, Quantity of lime slaker	Quantity of lime slaker pump is 2 Nos.

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY				
					<p>pump is 2Nos.</p> <p>Kindly confirm the quantity of lime slaker pump.</p>	<p>Same shall be updated in amendment.</p>				
199.	Part 2	975 of 7166	PDB	NaOCl dosing facility	<p>water shall be routed to a separate drinking water sump after mixing with NaOCl (Food Grade) for disinfection (Post-Chlorination). The requirement of drinking water for refinery is</p> <p>Kindly clarify the requirement of Naocl dosing system in drinking water system</p>	<p>Please follow tender</p>				
200.	Part 4	1896 of 7166	Equipment list	Quantity of Filter Backwash pump-I	<p>As per process datasheet, Quantity of Filter Backwash pump-I are 3 Nos. But as per Equipment list, Quantity of Filter Backwash pump-I is 2 Nos.</p> <p>Kindly confirm the quantity of Filter Backwash pump-I.</p> <p>Same query is for Filter air scouring blower – I.</p>	<p>Quantity of Filter Backwash pump-I shall be 2 Nos.</p> <p>Quantity of Filter air scouring blower – I shall be 2 nos.</p>				
201.	Part 4	2109 of 7166	Process Datasheet	Holding period of each tank	<table><tr><td>HOLDING PERIOD OF EACH TANK (hrs) (MIN)</td><td>10 DAYS REQUIREMENT IN RWTP/ETP/RODMP/CPU/PROCESS</td></tr></table> <p>As per process datasheet, Holding period of caustic storage tank is 10 days.</p> <table><tr><td>2</td><td>Tank sizes indicated are minimum requirements. Higher tank sizes (equivalent to 20 days requirement) to be provided if required.</td></tr></table> <p>But in note 2 of process datasheet, Holding period of caustic storage tank is 20 days.</p> <p>Kindly confirm the holding period of caustic storage tanks.</p>	HOLDING PERIOD OF EACH TANK (hrs) (MIN)	10 DAYS REQUIREMENT IN RWTP/ETP/RODMP/CPU/PROCESS	2	Tank sizes indicated are minimum requirements. Higher tank sizes (equivalent to 20 days requirement) to be provided if required.	<p>Each tank shall have 10 days storage of 20% caustic. Total 20 days inventory is required.</p>
HOLDING PERIOD OF EACH TANK (hrs) (MIN)	10 DAYS REQUIREMENT IN RWTP/ETP/RODMP/CPU/PROCESS									
2	Tank sizes indicated are minimum requirements. Higher tank sizes (equivalent to 20 days requirement) to be provided if required.									
202.	Part 4	2111 of 7166	Process Datasheet	Agitator for tank	<p>As per process datasheet, Agitator is required for CEB-I HCL dosing tank, CEB-II NaOH tank and CEB-III NaOCL tank.</p> <p>But in P&amp;ID and equipment list, Agitator is not required for CEB-I HCL dosing tank , CEB-II NaOH tank and CEB-III NaOCL tank.</p> <p>Kindly clarify the requirement of agitator for CEB-I HCL dosing tank , CEB-II NaOH tank and CEB-III NaOCL tank.</p>	<p>Agitator is not required for CEB-I/II/III tanks.</p>				

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
203.	Part 4	2079 of 7166	Process Datasheet	Caustic dosing for RO-II	In P&ID, Caustic dosing pump for RO-II system is not provided.  Kindly provide the location of suction pipe of caustic dosing pump for RO-II.	Shall be updated in Amendment
204.	Part 2	801 of 7166	Scope of Work	Drain from chemical area	Chemical drain from RO-DM area should be routed to a neutralization pit and after neutralization shall be routed to the backwash waste holding sump-II in RODM section.  Kindly clarify the same.	Bidder understanding is correct
205.	Part 4	1917 of 7166	Equipment list	Height of MB (CPU)	Height of MB (CPU) Unit is different in process datasheet and equipment list.  Kindly confirm the height of MB (CPU) Unit.	Height of MB (CPU) shall be 2.8 m
206.	Part 5	2162 of 7166	Process Datasheet	Capacity of CPU feed tank	<div>RESIDENCE TIME (hrs) (@ DESIGN FLOW) (MINIMUM)17</div> <p>As per process datasheet, Effective capacity of CPU feed tank is 4553 m3 but as per provided residence time at design flow rate, effective capacity of CPU feed tank is 6375 m3.</p> <p>Hence kindly confirm the effective capacity of CPU feed tank.</p>	The residence time of CPU Feed tank shall be 12 hours
207.	Part 5	2170 of 7166	Process Datasheet	Capacity of Polished condensate tank	<div>RESIDENCE TIME (hrs) (@ DESIGN FLOW) (MINIMUM)16</div> <p>As per process datasheet, Effective capacity of polished condensate tank is 5366 m3 but as per provided residence time at design flow rate, effective capacity of polished condensate tank is 6992 m3.</p> <p>Hence kindly confirm the effective capacity of Polished condensate tank.</p>	The residence time of polished condensate tank shall be ~12 hours
208.	Part 4	1920 of 7166	Equipment list	Existing equipment details	Kindly provide the details of equipment of existing PNCP RO DMP & CPU which shall be utilized for new CPU plant.	Details are already provided in the

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY		
						tender. Further details as required shall be provided during detailed engineering.		
209.	Part 2	983 of 7166	Process Design basis	Design parameter	We understood that Maximum parameter of cooling tower blow down water shall be consider for Design of RO-DM plant.  Kindly confirm our understanding.	Bidder understanding is correct		
210.	Part 5	2459 of 7166	PFD	CIO2 Dosing	As per PFD, CIO2 shall be dose in Blow down collection tank and UF- I feed collection tank.  But in P&ID and SOW, there is no CIO2 dosing connection in blow down collection tank and UF-I feed collection tank.  Kindly clarify the requirement CIO2 dosing system in RO-DM section.	No CIO2 dosing envisaged in RODMP. Latest revision of SFD shall be provided in amendment.		
211.	Part 2	789 of 7166	Scope of work	Design Flow rate	As per Scope of work and PFD,  Design flow rate of UF-I skid = Design flow rate of Filter Outlet + Design Flow rate of ETP treated + Design flow rate of ZLD distillate  Design flow rate of UF-I skid = 600 + 450 + Design flow rate of ZLD distillate.  Hence Design flow rate of UF-I skid is more than 1000 m3/hr (as provided in equipment list and process datasheet).  Kindly confirm design flow rate of UF-I skid.	Please follow tender		
212.	Part 4	1931 of 7166	PDS	Suspended solid	<table><tr><td>SUSPENDED SOLIDS (MAXIMUM) (mg/l)</td><td>500 max at Peak Flow, 200 max at Normal Flow</td></tr></table>	SUSPENDED SOLIDS (MAXIMUM) (mg/l)	500 max at Peak Flow, 200 max at Normal Flow	Maximum suspended solids
SUSPENDED SOLIDS (MAXIMUM) (mg/l)	500 max at Peak Flow, 200 max at Normal Flow							

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					<p>As per process datasheet , Maximum value of suspended solid is 200 ppm at normal flow for RWTP inlet water</p> <p>But as per process design basis Maximum value of suspended solid is 40 ppm at normal flow for RWTP inlet water.</p> <p>Kindly confirm the maximum value of suspended solid at normal flow for RWTP inlet water.</p>	<p>value shall be considered as 200 ppm for design at RWTP inlet.</p> <p>However, 40 ppm shall be considered for design of UF skids.</p>
213.	Part 5	2438 of 7166	P&ID	Bypass arrangement	 <p>As per P&amp;ID 472-1112, Kindly clarify the requirement of By pass arrangement for magnetic flow transmitter or else we shall consider spool piece for the same.</p>	<p>By pass arrangement for FT shall not be required.</p>
214.	Part 6	2555 of 7166	Scope drawing	Road width for RWTP area	<p>8. ALL APPROACH ROADS FROM MAIN ROAD AROUND SCOPE BATTERY UNIT SHALL BE IN PACKAGE CONTRACTOR'S SCOPE. WIDTH OF THE APPROACH ROADS SHALL BE MINIMUM 9.0 M WIDE. THE LOCATION OF APPROACH ROAD</p> <p>We understood that width of approach road inside the RWTP area shall be minimum 9.0 m wide.</p> <p>Kindly confirm our understanding.</p>	<p>Bidder understanding is correct</p>
215.	Part 5	2442 of 7166	P&ID	Flow transmitter	 <p>Kindly specify the reason to provide two nos of flow transmitter on common discharge header of UF feed pump.</p>	<p>Location of FT shall be updated in amendment</p>



SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
216.	Part 4	1942 of 7166	PDS	Flow rate of Backwash waste transfer pump	As per Process datasheet, flow rate of backwash waste transfer pump(RWTP) is 300 m3/hr. While design flow rate of HRSCC (Backwash) is 340 m3/hr.  Hence kindly confirm flow rate of backwash waste transfer pump (RWTP).	Please follow tender
217.	Part 4	1948 of 7166	PDS	Flow rate of Clarified water transfer pump	As per Process datasheet, flow rate of Clarified water transfer pump (RWTP) is 200 m3/hr. While design flow rate of HRSCC (Backwash) outlet is 340 m3/hr.  Hence kindly confirm flow rate of Clarified water transfer pump (RWTP).	Refer response to query 185
218.	Part 4	11899 of 7166	Equipment List	Design flow rate	As per equipment list, Design Flow rate of RO-II permeate system is 868 m3/hr.  While for design Flow rate of MB system is 850 m3/hr.  Kindly let us know about routing of balance flow of 18 m3/hr.	Please follow tender
219.	Part 1	631 of 7166	-	Loading criteria	We understood that design temperature (i.e. 30 c) shall be considered for guaranteed power consumption of RO feed pump.  Kindly confirm our understanding.	Please follow tender
220.	Tenderdocument _Part 2.pdf	836 of 7116	4.0	Evaporator Section – Type of Evaporator	As mentioned in the tender document, <b>“Multiple effects (Minimum FOUR EFFECTS for good steam economy and maximum condensate recovery) falling film cum forced circulation evaporators with thermal vapour recompression (TVR) system are envisaged.”</b>  Also it is mentioned, <b>“the type of evaporator shall be based on bidder’s experience”.</b>  From the above we understand that the type of evaporator shall be bidder’s choice and shall not necessarily be falling film cum forced circulation. Please confirm.	Bidder understanding is correct

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
221.	Tenderdocument _Part 2.pdf	833 of 7166	4.0	Storage of Salt generated from Centrifuge	<p>As mentioned in the tender document, "The dryer unit (ATFD or Pusher Centrifuge) units located at the elevated Technical Structure shall be able to provide for the bottom withdrawal of dried product (salts) into 3 Nos. Salt Storage Sheds."</p> <p>Please confirm the distance of this salt storage sheds from the MEE shed.</p>	Shall be developed by the bidder during detailed engineering.
222.	Tenderdocument _Part 2.pdf	833 of 7166 & 837 of 7166	4.0	Collection of salt generated from Dryer Unit	<p>As mentioned on Pg. 833 of 7166 in the tender document, "The Dryer (ATFD or Pusher Centrifuge) units located at the elevated Technological Structure shall be able to provide for the bottom withdrawal of dried product (salts) into 3 Nos. Salt Storage Sheds. The discharge from each of the Dryer Units shall be conveyed to all Three Storage Sheds through Chutes."</p> <p>Also</p> <p>As mentioned on Pg. 837 of 7166, "The solids shall be discharged to a dumpster of adequate capacity for further disposal".</p> <p>Kindly clarify whether the dried salt collection shall be through chute or in dumpster.</p>	The dried salt collection shall be through chute in salt storage sheds. The details shall be reviewed during detailed engineering.
223.	Tenderdocument _Part 2.pdf	833 of 7166	4.0	Collection of salt generated from Dryer Unit	<p>As mentioned on Pg. 833 of 7166 in the tender document, "The Dryer (ATFD or Pusher Centrifuge) units located at the elevated Technological Structure shall be able to provide for the bottom withdrawal of dried product (salts) into 3 Nos. Salt Storage Sheds. The discharge from each of the Dryer Units shall be conveyed to all Three Storage Sheds through Chutes."</p> <p>From the above we understand that the connection between the Pusher Centrifuge and Salt Storage Shed shall be through Chute. We would like to bring to your</p>	The location of salt storage shed shall be confirmed by the bidder and the details shall be reviewed during detailed engineering.

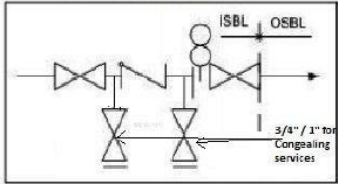
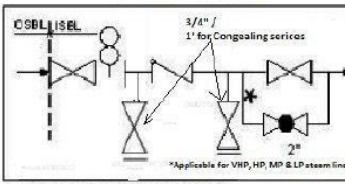
SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					notice that discharge of salt through chute to salt storage shed through such a long distance is not possible. Hence, we propose to first collect the salt in trolley, bag it and then store the bags in salt storage shed. Please confirm on the same.	
224.	Tenderdocument _Part 2.pdf	833 of 7166	4.0	Storage of Salt generated from Centrifuge	<p>As mentioned in the tender document, "The dryer unit (ATFD or Pusher Centrifuge) units located at the elevated Technical Structure shall be able to provide for the bottom withdrawal of dried product (salts) into 3 Nos. Salt Storage Sheds."</p> <p>Also the size of Shed is provided.</p> <p>Please confirm the number of days to be considered for storage of salt.</p>	Please follow tender
225.	Tenderdocument _Part 2.pdf	833 of 7166	4.0	Collection of salt generated from Dryer Unit	<p>As mentioned on Pg. 837 of 7166, "The solids shall be discharged to a dumpster of adequate capacity for further disposal".</p> <p>Kindly clarify:</p> <ol style="list-style-type: none"> <li>1. What kind of dumpster (hand pulled with wheels OR Tractor pulled) is required and how much should be the minimum volume of each dumpster.</li> <li>2. If the dumpster needs to be pulled by tractor then please specify the scope of supply for tractor.</li> <li>3. At what location shall be the dry solids disposed? And what shall be the distance?</li> <li>4. Disposal of dry solids shall be in Contractor's scope or not? If yes, then please provide the location for disposal of dry solids.</li> </ol>	The dried salt collection shall be through chute in salt storage sheds. The details shall be reviewed during detailed engineering. Disposal of dried solids during commissioning, pre-commissioning, trial run and PGTR shall be in the contractor's scope including the location identification for disposal and collection, bagging

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						and transportation.
226.	-	-	-	-	Kindly confirm the operating hours of MEE system shall be 20 hrs or 24 hrs.	Please follow tender
227.	-	-	-	-	LP steam at a Normal pressure of 4.0 kg/cm2g shall be available at the battery limit. Same shall be used for MEE system. Hence, we understand that Pressure Reduction and De-superheating package facilities are not required. Please confirm.	MP steam shall be utilized for ZLD
228.	Tenderdocument _Part 2.pdf	823 of 7166	2.0	Acid/Alkali proof tiling	Please confirm if Acid/Alkali proof tiling shall be applicable in MEE Shed also.	Bidder understanding is correct
229.	Tenderdocument _Part 2.pdf	833 of 7166	4.0	MOC of Technological Structure of MEE	We understand that the MOC of Technological Structure of MEE shall be entirely of Structural Steel, only the ground floor shall be RCC paved. Please confirm on the same.	Bidder understanding is correct
230.	Tenderdocument _Part 2.pdf	833 of 7166	4.0	Requirement of deaerator	Kindly clarify why deaerator is required prior to MEE system.	Please follow tender
231.	Tenderdocument _Part 2.pdf	835 of 7166	4.0	Treatment Philosophy Discharge sludge Clarifier – of from	As mentioned in the tender document, "The sludge generated from the clarifier in the ZLD Unit shall be dewatered through a centrifuge and the solids shall be sent for disposal."  Please confirm if a dedicated centrifuge is required for ZLD section OR the sludge removed from this clarifier can be routed to centrifuge provided for RWTP plant.	Please follow tender
232.	-	-	-	-	Kindly specify the fouling factor to be considered shell side and tube side.	Shall be as per system supplier recommendation.
233.	Tenderdocument _Part 2.pdf	834 of 7166	4.0	Location of storage of dosing chemicals	With reference to chemicals required for MEE system, kindly confirm the following:  1. No. of days to be considered for storage of	Please follow tender

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					<p>Antiscalant, Antifoam and HNO<sub>3</sub>.</p> <p>2. The location of storage of Antiscalant, Antifoam and HNO<sub>3</sub>.</p> <p>3. The dosing tank &amp; dosing pumps required for Antiscalant, Antifoam and HNO<sub>3</sub> shall be placed on first floor of chemical house.</p>	
234.	Tenderdocument_Part 2.pdf	838 of 7166	4.0	Collection of Condensate	<p>As mentioned in the tender document, "The distillate from the plant shall be condensed, stored and pumped for recycle in the UF Feed Tank in RODM Plant. The ZLD plant shall be provided with condensate collection tanks for the Evaporator and Dryer Units Individually. The condensate from both the condensate tanks shall be pumped to the UF Feed Tank in RODMP."</p> <p>Kindly clarify the following:</p> <ol style="list-style-type: none"> <li>1. Condensate is not generated from Pusher Centrifuge hence condensate collection tank for the Evaporator and Dryer Units Individually is not envisaged. Please confirm.</li> <li>2. There are two working and one standby chains of MEE system. The condensate tank and condensate transfer pump to be provided shall be common for all the three chains OR dedicated condensate tank with condensate transfer pump needs to be provided for each chain. Please confirm.</li> </ol>	<ol style="list-style-type: none"> <li>1. Please follow tender</li> <li>2. Common condensate tank and pump shall be provided for ZLD</li> </ol>
235.	P&ID	-	-	P&ID for ZLD Plant	<p>With reference to the tender P&amp;ID provided for ZLD Plant, A line is shown for Distillate/Condensate coming out of the MEE system is routed to UF Feed Collection Tank. AND another line is shown for the recovered condensate that is collected in recovered condensate tank. Along with the recovered condensate, a line from RO-1A permeate header is connected to this tank.</p> <p>Kindly explain the two different types of condensates</p>	The distillate/recovered condensate shall stored in condensate tank and routed to UF Feed Collection

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					<p>(Distillate &amp; Recovered) coming out of the MEE system?</p> <p>Does it mean that steam and process condensate needs to be collected separately from the MEE system? If yes, then we would like to bring to your notice that it is not possible to separate the steam and process condensate as Thermo Vapour Recompressor (TVR) is provided in the system.</p> <p>In view of the above, kindly explain the two different types of condensates mentioned in the P&amp;I Diagram.</p>	Tank.
236.	Tenderdocument _Part 2.pdf	982 of 7166 & 838 of 7166	1.0 & 4.0	Location of discharge of Distillate / Condensate generated from MEE system	<p>As mentioned in tender document, "The reject water from the DM plant shall be routed to the Zero Liquid Discharge Plant which shall process the Waste stream from the RODM Plant to generate Condensate and Distillate equivalent to Treated Raw Water quality which shall be sent to the Treated Raw Water Reservoir and Dried Solids that shall be sent for Disposal."</p> <p>Also</p> <p>As mentioned in the tender document, "The distillate from the plant shall be condensed, stored and pumped for recycle in the UF Feed Tank in RODM Plant. The ZLD plant shall be provided with condensate collection tanks for the Evaporator and Dryer Units Individually. The condensate from both the condensate tanks shall be pumped to the UF Feed Tank in RODMP."</p> <p>From the above, we understand that the condensate/distillate generated from MEE system shall be routed to UF feed tank of RO-DMP. Please confirm if our understanding is correct.</p>	Bidder understanding is correct
237.	Tenderdocument _Part 2.pdf	839 of 7166	4.0	Minimum Instrumentation Required for ZLD	As mentioned in the tender document, "Pressure Reduction and De-superheating System (PRDS) along with the required Flow Transmitter, Pressure and Temperature	MP steam shall be utilized for ZLDP

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
				System	Transmitters and Control Valves. Pressure and Temperature Transmitters at the outlet line of de-superheated Steam from the PRDS shall also be provided.”  We understand that LP steam at Normal Pressure of 4.0 kg/cm2g shall be available at the battery limit of ZLD unit and same shall be used for MEE system. As the available steam pressure is 4.0 kg/cm2g then the requirement of PRDS system is not envisaged. Kindly confirm if our understanding is correct.	
238.	Tenderdocument _Part 2.pdf	840 of 7166	4.0	Type of level instrument	As mentioned in the tender document, “All the tanks shall be provided with two (2) Nos. level measurement instruments. Primary level measurement instrument shall be non-contact Radar type. Secondary Level indication shall be a Level Gauge.”  From the above, kindly confirm if Two numbers of Level Transmitter (Radar Type) and One number of Level Gauge is required on each tank.  OR  One number of Level Transmitter (Radar Type) and One number of Level Gauge is required on each tank.  Please confirm on the above.	2 nos. LTs non contact radar type shall be provided. Loop powered LI from one LT shall be provided. For all Bulk chemical storage tanks, LG shall also be provided.
239.	Tenderdocument _Part 2.pdf	840 of 7166	4.0	Type of level instrument	As mentioned in the tender document, “Pressure and Temperature control valves as required for the smooth operation and Control of the evaporator and Dryer units shall be provided.”  Please clarify the location where these pressure and temperature control valves are required in MEE system.	Shall be finalized by ZLD system supplier
240.	Tenderdocument _Part 2.pdf	841 of 7166	5.0	Velocity Criteria	Kindly provide the velocity criteria for: 1. Steam line 2. Vapour line	velocity criteria 60 m/sec maximum

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
241.	Tenderdocument_Part 2.pdf	842 of 7166	5.0	Valve Selection	Kindly provide the valve type to be used for following services: 1. Steam line 2. Vapour line	Valve type to be considered as per P&ID & PMS
242.	-	-	-	-	Kindly provide P&ID for Multiple Effect Evaporator System.	Shall be developed by ZLD system supplier
243.	-	-	-	-	We understand that the instrumentation for Zero Liquid Discharge Plant provided in this section is the minimum to be followed. Please Confirm.	Bidder understanding is correct
244.	Tenderdocument_Part 2.pdf	813 of 7166	5.4.1	Selection of Tube Diameter and Thickness	Please confirm if it is mandatory to follow the tube diameter and thickness provided in this section for design of heat exchangers.	Please follow tender
245.	Tenderdocument_Part 2.pdf	820 of 7166	9.1	Battery Limit Isolation	<p>As mentioned below in the tender document:</p> <p>... The Battery limit isolation for all the incoming and outgoing Process and Utility lines from Process units shall be configured</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>For outgoing lines</p>  </div> <div style="text-align: center;"> <p>For incoming lines</p>  </div> </div> <p>From the above we understand that, for all the incoming and outgoing Process &amp; Utilities Lines from the Battery Limit, the above shown valve arrangement needs to be provided. Please confirm if our understanding is correct.</p>	Refer Section 9.2 for isolation valve requirement for utility services.
246.	Tenderdocument_Part 2.pdf	986 of 7166	2.2	Quantity of Evaporator and Dryer Units	As mentioned in the tender document, "The Design Capacity of the Zero Liquid Discharge (ZLD) Plant shall be 50m3/hr. The Zero Liquid Discharge Plant shall comprise of a multi-effect Evaporator Unit followed by a Dryer Unit.	Please refer your own query below.



SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					<p>Three (2 working and 1 standby) Multi-Effect Evaporator Units, each with processing capacity of 25 m3/hr Feed Water for and <b>Two Units (1 working and 1 standby) Dryer Unit, each with processing capacity of 5 m3/hr</b> for processing the Concentrated Brine from the Evaporator Outlet envisaged.”</p> <p>From the above, we are unable to understand the quantity of Dryer Units required for ZLD Plant.</p> <p>Two Units (1 working and 1 standby) dryer Units means, “One working for two working chains of MEE system and one standby dedicated for standby chain of MEE system is required?</p> <p>OR</p> <p>Two Units (1 working and 1 standby) dryer unit is required for each chain of MEE system?</p> <p>Please Clarify on the above.</p>	
247.	Tenderdocument _Part 2.pdf	1915 of 7166	-	Equipment List of ZLD Package – Quantity of Dryer unit	<p>As mentioned in the notes of Equipment List, “In case of ATFD dryer, at least two dryers for each chain to be provided. In case of Pusher Centrifuge as dryer, at least one Pusher Centrifuge for each chain to be provided.”</p> <p>We understand that we have to follow above philosophy for considering the quantity of dryer unit. Please confirm if our understanding is correct</p>	Bidder understanding is correct
248.	Tenderdocument _Part 2.pdf	995 of 7166	3.2.1	Quantity of Dryer Unit	<p>In the particular section, it is mentioned, the quantity of Dryer unit shall be 1 working + 1 standby for each chain of MEE system.</p> <p>We understand that the MEE chain shall be 2 working + 1 standby. Hence, 1 working + 1 standby of dryer unit is not</p>	Please refer the query and its response above

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					<p>required for each chain of MEE as the third chain of MEE is itself a complete standby.</p> <p>In view of the above, we request you to kindly confirm us the exact quantity of dryer unit to be considered.</p>	
249.	Tenderdocument _Part 2.pdf	987 of 7166	2.1.1.1	Quality of ZLD Plant Feed	<p>We understand that the table provided in Section 2.1.1.1 is the quality of RO reject to be fed to ZLD Plant.</p> <p>The Hardness mentioned in the table is 2000 mg/l. Also, lime and soda ash dosing is envisaged for reduction of hardness before feeding to MEE system. Hence, kindly confirm the hardness level required before feeding to MEE system. i.e. how much reduction of hardness shall be considered from 2000 mg/l.</p>	Shall be developed by the bidder
250.	Tenderdocument _Part 2.pdf	993 of 7166	6.3	Moisture content in salt generated from Dryer Unit of ZLD Plant	<p>As mentioned in the tender document, "the solids/salts shall be disposed of as solids or crystals (having moisture content less than 8%) from the plant."</p> <p>But Under section 2.13 Performance and Guarantee Page 830 of 7166, it is mentioned 10% of moisture content in dry solids.</p> <p>Hence, we understand that the moisture content required in dry solids generated from Dryer unit shall be 10%. Please confirm if our understanding is correct.</p>	Bidder understanding is correct
251.	Tenderdocument _Part 2.pdf	994 of 7166	-	MOC	<p>Kindly specify Material Of Construction for following:</p> <ol style="list-style-type: none"> <li>1. Pusher Centrifuge (Wetted Parts and Non-Wetted Parts)</li> <li>2. Vacuum pumps</li> </ol>	As per ZLDP system supplier compatible with the process fluid quality
252.	Process Datasheets	2136 of 7166	-	Process Datasheet of ZLD feed tank	<p>The Quantity of ZLD feed tank mentioned in Process datasheet is 1 No.</p> <p>Whereas, the quantity of ZLD feed tank mentioned in Equipment List is 2 Nos. (2W).</p>	The quantity of ZLD Feed tanks shall be 1nos.

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					Please clarify the quantity of ZLD feed tank and capacity of each tank to be considered.	
253.	Process Datasheets	2159 of 7166	-	Process Datasheet of Recovered Condensate Pumps	<p>The Liquid Handled in the Process Datasheet is mentioned as "ZLD Condensate &amp; RO Permeate."</p> <p>The quantity of pumps mentioned is 2(1W + 1S).</p> <p>Please confirm if this pump is to be used for two different purposes i.e. transfer of condensate to UF feed tank and transfer of RO permeate to treated raw water reservoir.</p>	Please follow tender
254.	-	-	-	Spare Philosophy for MEE Recirculation Pumps	<p>As mentioned in the tender document, 3 (2W + 1S) chain each having capacity of 25 m3/hr is required for Evaporator (MEE) system.</p> <p>Please note that it is not advisable to provide bends in the recirculation pump lines of MEE system as it may cause chocking. Also, it is not advisable to provide installed standby for the recirculation pumps as it will also cause chocking over a period of time and would also increase in number of bends leading to uneasy operations.</p> <p>Hence, if one of the recirculation pump goes into maintenance in any one of the working MEE system chain then it would be difficult to isolate that non-working recirculation pump and connect the standby pump provided in complete standby chain of MEE system. Also, the same stands true for vacuum pumps and ML recycle pumps.</p> <p>In view of the above we propose to provide following standby arrangement for recirculation and other pumps:</p> <ol style="list-style-type: none"> <li>1. One common store standby recirculation pump between stage 1 of all the three chains of MEE.</li> <li>2. One common store standby recirculation pump between stages 2, 3 &amp; 4 of all the three chains of</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted</li> <li>2. One common standby for each stage across the 3 MEE units. Total 4 store standby for MEE recirculation pumps.</li> <li>3. Each vacuum pump shall have a hot standby. (1 working + 1 standby) for each MEE chain.</li> <li>4. Noted</li> </ol> <p>These are minimum requirements and shall be confirmed by ZLD system supplier during detailed</p>

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					<p>MEE.</p> <p>3. One common store standby vacuum pump between all the three chains of MEE.</p> <p>4. One common store standby ML recycle pump between all the three chains of MEE.</p> <p>Please confirm if above spares pump arrangement is acceptable.</p>	engineering.
255.	-	-	-	Flushing connection required in fire water network	Please confirm the size of Flushing connection with isolation valve to be provided in fire water network.	<p>i) line size less than 12" header : 4"</p> <p>ii) line size 12" to 18" header : 6" flushing line to nearest drain with valve</p> <p>flushing line to nearest drain .</p>
256.	-	-	-	Size of Riser – Fire water network	Please specify the size of riser to be considered in the Fire Network System.	Refer, as per EDB no B269-999-81-41-EDB-1002 , attached in tender
257.	-	-	-	Restricted Orifice – Fire water network	<p>As mentioned in the tender document, "RO at Landing/Hydrant outlets to reduce the pressure to 7 kg/cm2g."</p> <p>We understand that the RO shall be provided at both the outlets valves of hydrant. Please Confirm.</p>	Bidder understanding is correct.
258.	-	-	-	Pressure at tapping point – Fire water network	Please provide the available pressure to at tapping point for design of Fire Water Network.	Refer document no: B269-475-17-44-SOW-5000. Rev.b , attached in tender
259.	-	-	-	Detail of existing	Kindly provide the layout showing existing fire network	Refer drg no: B269-

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
				fire water network	header around the plant with details (i.e. location, routing, line size) of existing fire water header.	475-81-45-30101, rev.A

PRE-BID QUERIES (Bidder-3)						
NAME OF THE PROJECT			RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India			
Sl. No.	Bid Document Reference	Tender Notice Page No	Section or Clause Ref	Reference as per Tender	Bidder's Query	Client reply
	<b>Technical-A</b>					
1	B269-999-16-50-EDB-1001 Engineering Design Basis- Electrical	29 of 49 1028 of 7166	5.5.4 SPECIFIC EQUIPMENT LOCATIONS	10 Energy saver panel with Lighting transformers - Panel mounted type lighting transformer	All Light fixtures shall be of LED type. Please clarify the requirement of energy saving panel.	Bidder to that Energy Saver panel is not envisaged. Contractor's scope of supply & work is for Panel mounted type lighting transformer.
2	B269-999-16-50-EDB-1001 Engineering Design Basis- Electrical	40 of 49 1039 of 7166	5.9.2 CONTROL PHILOSOPHY	9 ELCB at Incomer of Lighting / Power Panels - Yes(ELCB shall be provided in Outgoing of LDB/ASB) (Refer Note-6)  Note:6. Combined ELCB + MCB for each lighting outgoing circuit at local lighting distribution panel shall be provided and ELCB shall be rated for 30mA in field and 300mA in Indoors.	1) LDB, ELDB & LP Incomer of Lighting /Power panels need not be provided with ELCB as mentioned in 5.9.2 CONTROL PHILOSOPHY. Please confirm our understanding is correct. 2) Incoming and Outgoing Feeders for Lighting Panel shall as mentioned below. <b>a) Indoor Lighting Panels</b> - Incomer shall be MCB and outgoing shall be RCBO instead of MCB+ELCB (RCBO shall be 100mA for Lighting circuits and 30mA for Small power circuits <b>b) Outdoor Lighting Panels</b> - Incomer shall be MCB and outgoing shall be RCBO instead of MCB+ELCB (RCBO shall be 30mA for outdoor Lighting and small power circuits )  <b>2) ASB</b> - Please confirm all single phase small power sockets shall be fed from Lighting panel with separate circuits for small power sockets. Only 3 phase welding receptacles shall be fed from ASB  3)Outgoing feeders for Welding Receptacles need not be provided with ELR, Hence feeders for Welding receptacles shall be SFU. Please confirm our understanding is correct.	1) Bidder's understanding is partly correct for the referred clause 5.9.2 (9) of Eng. Design Basis-Electrical B269-999-16-50-EDB-1001. As per this clause, ELCB shall be provided in outgoing of LDB/ASB and shall be read in conjunction with reply at 2(a & b) below. <b>2) a &amp; b :</b> CONTRACTOR shall provide separate RCBO & MCB or separate ELCB & MCB for each lighting outgoing circuit at local lighting distribution panel. Common RCBO/ ELCB + MCB unit is not acceptable. ELCB/ RCBO shall be rated for 30mA in field and 300mA in Indoors. <b>ASB :</b> Single phase small power sockets shall be fed from Power Panel only. Power Panel shall be fed from ASB and Lighting Panels shall be fed from LDB. 3) Bidder's understanding is correct for Welding receptacles feeding arrangement.
	B269-475-16-50-0001, REV- B KEY SINGLE LINE DIAGRAM	2566 of 7166	RODMP/ZLDP/CPU SUBSTATION (S/-112)	LDB/ELDB - Outgoing - SFU + ELCB  NLP / ELP- Incomer with MCB + Outgoing with MCB+ELCB  ASB - Outgoing - SFU + ELR / SFU		
	6-51-0083, REV 6 SPECIFICATION FOR LIGHTING INSTALLATION	5 of 13 5077 of 7166	3.1 Lighting and Power Panels	3.1.2 The Incomer shall be with MCB and ELCB unit unless otherwise specified.  3.1.4 All MCBs shall be M9 category as per IS 8828 and sensitivity of ELCBs shall be 100mA - 300mA unless otherwise specified.		
3	B269-999-16-50-EDB-1001 Engineering Design Basis- Electrical	38 of 49 1036 of 7166	5.6.16 CABLE SIZES	The Power and Control cables shall have the following minimum cross sectional areas 3 Lighting - 2.5 sqmm (copper) Notes: 1) For lighting inside the building, minimum 1.5 sqmm copper conductor, PVC Insulated wire shall be used in conduit system (for circuit and point wiring), with proper colour coding.  Wires shall be PVC insulated and shall be of 660 Volts grade as per IS694. Conductor shall be of stranded copper and size shall be minimum 1.5 Sq. mm for lighting, 2.5 Sq. mm for 15A power socket circuits and 4 sq. mm for split A/C power socket circuits.	Minimum Wire size for lighting is mentioned as 2.5 sq.mm in Cl. 5.6.16 (EDB-Electrical) whereas in the Cl. 3.9 Wires (Specification for Lighting Installation) it is mentioned as 1.5 Sq. mm. Lighting wires shall be minimum 1.5 Sq. mm for lighting, 2.5 Sq. mm for 15A power socket circuits as mentioned in the Cl. 3.9 WIRES (Specification for Lighting Installation). Please confirm.	Bidder to follow Eng. Design Basis-Electrical B269-999-16-50-EDB-1001 which is Project Design Basis. Also note that 6-51-0083 is the standard specification for other than project specific requirements and shall be read in conjunction.
	6-51-0083, REV 6 SPECIFICATION FOR LIGHTING INSTALLATION	7 of 13 5079 of 7166	3.9 WIRES			
4	B269-999-16-50-EDB-1001 Engineering Design Basis- Electrical	43 of 49 1040 & 1041 of 7166	5.11 ELECTRICAL EQUIPMENT FOR HAZARDOUS AREAS 5.11.1 NOTES	2.3 Irrespective of the area classification (whether zone 1 or zone 2), all lighting fixtures within the storage areas shall be flameproof type.  2.4 Irrespective of the area classification (whether zone 1 or zone 2), all motors and lighting fittings within the pump house/pump station/compressor house/other facilities associated with offsite tank farm and within the loading/unloading gantries shall be of flameproof type.  2.7 Building such as Compressor sheds inside the process area shall be designed to allow adequate ventilation to allow area classification as Zone-2. Lighting equipment, EOT crane etc. in the shed shall be flameproof type. All other electrical equipment shall be suitable for Zone-1 or Zone-2 area depending on extent of hazard.	Since there is no hazardous area in the Water Plant package, all electrical equipment including Light fixtures, socket, JBS, Switchboxes etc. Inside the Water plant area (safe area including Storage, Pump house, Compressor house,etc.) shed shall be non-Flameproof type except Battery Room which shall be provided with Group-IIC Flameproof Fixture. Pl confirm our understanding is correct	Bidder to note that Hazardous Area Classification (HAC) is not applicable as these are Safe Area plants. However, in case any hazardous substance is handled in these packages the requirement of corresponding Hazardous Area Equipments shall be complied by Contractor. Further Wherever Contractor is supplying/ installing any hazardous area equipments in these plant areas, then same shall be supported with necessary statutory certificates and PESO approval.
5	6-51-0083, REV 6 SPECIFICATION FOR LIGHTING INSTALLATION	7 of 13 5084 of 7166	4.4 Building Lighting	4.7 The number of points in a circuit shall not exceed ten and the load in each circuit shall be less than 1000 Watts.	Load in each circuit is mentioned as 1000W & 1500W in Cl. 4.7 (SPECIFICATION FOR LIGHTING INSTALLATION) and in Cl. 7.4.11 (DESIGN PHILOSOPHY FOR ELECTRICAL FACILITIES) respectively.	Bidder to follow clause 4.4.7 of 6-51-0083 for building lighting and clause 7.4.11 of 6-51-0099 for other than building lighting.
	6-51-0099 Rev. 7 DESIGN PHILOSOPHY FOR ELECTRICAL FACILITIES	30 of 32 5169 of 7166	7.4 Lighting System	7.4.11 In general, the load on each circuit shall be limited to 1.5 kW and MCB rating shall not be more than 16A	Load in each circuit shall be limited to 1.5kW as mentioned in Design Philosophy. Please confirm.	
6	B269-475-16-50-SP-8701 JOB SPECIFICATION (Electrical) RWTP / RODMP / ZLDP / CPU PACKAGE	39 of 49 1416 of 7166	3.24 SPECIAL REQUIREMENTS FOR LEDs FIXTURES	3.24.1.1 LED efficacy shall be greater than > 140Lumen/Watt @ 350mA drive current. In respect of LEDs of higher power ratings, drive current greater than 350mA can be accepted if the LED's LM 80 / IS: 16105 test reports support the same.	Most of the Light fixture manufacturers Providing LED efficacy which is normally be 110 Lumen/watt only. Please confirm your acceptance for 110 Lumen/watts	Bidder to follow Tender Documents.
7	6-51-0099 Rev. 7 DESIGN PHILOSOPHY FOR ELECTRICAL FACILITIES	32 of 32 5171 of 7166	7.4 Lighting System	7.4.22 LED solar lighting system shall be provided for street lighting purpose, if specified in project design data sheet.	Please confirm the requirement of Solar lighting for Street light fixtures, as there is no specific requirement in Project design data sheet.	Bidder to note that Solar Street lighting is not envisaged.
8	6-51-0083, REV 6 SPECIFICATION FOR LIGHTING INSTALLATION	10 of 13 5082 of 7166	4.2 Conduit System	4.2.2 Conduit shall be minimum 25mm dia.	Minimum of 25mm dia conduit is provided in the Cl. 4.2.2. 20mm dia conduit shall be sufficient for short distances. Conduit fill requirement shall be in line with IS 732. Please confirm your acceptance.	Bidder to follow Tender Documents.
9	-	-	EARTHING SYSTEM	-	Please arrange to provide Soil Resistivity value nearer to RWTP & RODM Package area in the existing plant	Soil resistivity measurement along with report is in Contractor's scope of Work for the Packages.
	<b>Technical-B</b>					
1	473- TENDERDOCUMENT_PART_4	Page 183 of 700	6.0	FOUNDATION RECOMMENDATION	As per Geotechnical report recommendation for shallow foundation are only mentioned, recommendation for Pile foundation with Diameter, length and capacities to be provided	As per the bid requirements, the detailed pile design is in bidder's scope.
2	740- TENDERDOCUMENT_PART_2	Page 52 of 457	2.1 & 7	METEOROLOGICAL DATA	Please provide the Basic wind speed for proposed plant.	Bidder to refer EDB
3	740- TENDERDOCUMENT_PART_2	Page 350 of 457	C.5.26	Rain water pipes	Please mention the material to be considered for Rain water downcomer	Architecture to reply
4	740- TENDERDOCUMENT_PART_2	Page 197 of 457	PART-C: U/G CIVIL	STORM WATER DRAINAGE SYSTEM Design & providing storm water drainage system for effective surface drainage of the whole area under this package. Drainage work (network of RCC drains) shall also cover RCC paved area and plant facilities area and shall be connected to OSBL storm water drain	Please provide the drain disposal location with its distance for proposed plant.	Rain water drain disposal is outside the Battery limit of the plant along the Roads. For location of Roads/drain disposal refer scope drawing no B269-475-81-41-14561 & B269-475-81-41-14562.
5	740- TENDERDOCUMENT_PART_2	Page 197 of 457	PART-C: U/G CIVIL	STORM WATER DRAINAGE SYSTEM Garland drain	Please provide the type of construction of Garland Drains (RCC or Brick work)	Refer Note no-7 of scope drawing no B269-475-81-41-14561 & B269-475-81-41-14562 for MOC of Drains
6	740- TENDERDOCUMENT_PART_2	Page 193 of 457	PART B: STRUCTURAL (X)	Damp proof course	Please provide the thickness of DPC	Bidder to refer EDB

7	740-TENDERDOCUMENT_PART_2	Page 309 of 457	A.4.1.11	Fencing / Compound Wall	As per spec Material for construction of compound wall & Fencing shall be as per Existing Project Philosophy. Please provide the specification of Compound wall & Fencing for <u>proposed plant</u> if any required.	Refer scope drawing no B269-475-81-41-14561 & B269-475-81-41-14562
8	740-TENDERDOCUMENT_PART_2	Page 197 of 457	PART-C: U/G CIVIL	iv) ROADS & APPROACHES	Please provide the Width of Roads / Shoulders and Material of Construction for roads & Shoulders.	all approach road shall be RCC refer S.No-4 of Clause no A.4.1.4 of EDB-B269-999-81-41-EDB-1001 EDB-1001
9	740-TENDERDOCUMENT_PART_2	Page 196 of 457	PART-C: U/G CIVIL	Site Grading	Please provide the contour levels of the proposed plant area for calculation of earthwork for grading purpose.	Topography survey data to be provided to successful bidder.
10	General			Plastering in Tanks	No plastering considered for RCC tanks. Please confirm.	Bidder to follow requirements as mentioned in EDB

			Bidder-4			
SUB			PRE-BID QUERIES FOR WATER BLOCK PACKAGE (INCLUDING RWTP,RO-DMP,CPU & ZLD PLANT)			
TENDER NO.			BIDDING DOCUMENT : SG/B269-475-PA-T-8701/23			
SR. NO	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	Part 2	page 252/457	4, Sr 17	Specific Design Requirement	Rating of distribution transformer shall be as per Maximum demand as calculated from process loads. We understand that there is no stringent requirement of 2500 KVA as minimum transformer rating. Please confirm.	Bidder understanding is not correct w.r.t. the referred clause S. No. 17 of Eng. Design Basis -Electrical B269-999-16-50-EDB-1001 attached with Tender. As per this clause, the rating of distribution transformer shall be standardised to 2500kVA. Bidder shall restrict to this much standard rating. This does not mean that Dist. Trafo. shall have minimum 2500kVA. For small power requirements, Bidder to size the Dist. Trafo. accordingly keeping in view the Tender specification requirements and the Standard ratings available in IS-2046/IEC-60076. Distribution shall comply to latest IS-1180 (Part-1) & its amendments including but not limited to amendment 4 and latest Gazette of India Order. Accordingly, efficiency of transformer at 50% and 100% load shall be considered with total losses at 50% and 100% loading not exceeding maximum losses values specified in Table-6 of IS-1180 (Part-1) for Energy Efficiency level-2/ Table-3 of Gazette of India for Star-1 (for transformers rated up to 2500kVA).
2	Part 2	page 252/457	4, Sr 17	Specific Design Requirement	Based on Maximum demand, contractor can consider Distribution transformer rating as 3.15MVA also. Please confirm.	Refer reply at SR. No. 1 above.
3	Part 2	page 281/457	5.70	Cabling system	Kindly specify short circuit withstand time for ACB feed Motors >55kw, 415V. Else we shall consider as 0.16sec	Bidder understanding is not correct w.r.t. the referred clause 5.7.1 (S.No. 6) of Eng. Design Basis -Electrical B269-999-16-50-EDB-1001 attached with Tender. As per this clause, it is not applicable.
4	Part 2	page 283/457	5.80	Earthing system	Kindly specify sizes for earthing strips for different electrical equipments ex. Motors, Transformers, HV/MV Panels, distribution boards etc.	Bidder to follow Cl.No. 3.22.16 of Job Spec.(Electrical) B269-475-16-50-SP-8701 attached with tender, w.r.t. main grid size as 100x12 for Substation and 50x6 for Unit. Earthing sizing calculation shall be furnished by Contractor for the final GI earth strip selected. Bidder to follow Equipment Earthing Schedule 7-51-0116 attached with Tender.
5	Part 2	page 285/457	5.11	Electrical equipment for hazardous area	We understand that water treatment plant RP,DM,ZLD,CPU,RWTP comes under SAFE area and E&I equipments shall be consider applicable for SAFE area only as weather proof, IP65(suitably). Please confirm.	Bidder to note that Hazardous Area Classification (HAC) is not applicable as these are Safe Area plants. However, in case any hazardous substance is handled in these packages the requirement of corresponding Hazardous Area Equipments shall be complied by Contractor. Further Wherever Contractor is supplying/ installing any hazardous area equipments in these plant areas, then same shall be supported with necessary statutory certificates and PESO approval.
6	Part 6	page 45,46	SLD	Bus distribution for HV Switchboard	In HV Switchboard we donot understand the purpose of using 2no. Breakers in Buscoupler. We shall consider HV Switchboard with 2no. Incomer and 1no. Buscoupler configuration. Kindly confirm.	Deviation is not acceptable. Bidder to follow Tender Documents.
7	Part 6	page 45,46	SLD	Distribution Transformer quantity	Based on the Maximum demand and distribution transformer rating, kindly allow us flexibility to consider 3no. Transformer serving as incomer to MV Switchboard.	Deviation is not acceptable. Bidder to follow Tender Documents.
8	Part 8	page 891/1400	4.4.2	Design philosophy of Electrical facility, Capacity of Electrical system	Standby Driven equipment in (Working+Standby) shall be considered for calculating maximum demand. For ex. For driven equipment 3no. Working+2no. standby, in this case Contractor will consider 2no. standby motors and then 10% of total standby shall be considered accordinly. Since the maximum demand will increase significantly if 'standby' in 'Normal-standby' combination will not be considered as standby loads. Please confirm.	Bidder's understanding is not correct. Bidder to follow Tender Documents.



9	Part 2	page 169/457	Cl 55	MV power & control cables for Owner supplied equipments	Kindly provide rating & quantity of all owner supplied equipments within package battery limit to enable us to size and supply MV power & control cable.	Bidder to note that for each of the Owner's Loads as specified at Note-f at Page 13/14 of 15 of Scope of Supply & Work-Electrical (Doc. No. B269-475-16-50-SOW-8701), Contractor's scope of supply is limited to providing only Owner feeders in Contractor's respective switchboards/ panels. Other than these listed Owner Feeders, all other Owner supplied equipment (Free Issued Materials-FIM) located in substation, control room, plant areas along with their cabling is included in Contractor's scope of supply & work. Bidder to follow the Tender documents.
---	--------	--------------	-------	---	--	---

**PRE-BID QUERIES (Bidder-5)**

**Tender No. SG/B269-475-PA-T-8701/23**

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	RESPONSE
1	Document No. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 1904 of 7166, Sl . 93	Lime Solution Dosing Pump	As per Technical data sheet & Equipment list Tag nos 2 (1W+1S)pumps are given	Quantity given in Equipment list is 3 (2W+1S) Nos. Please clarify which document will govern.	Lime solution dosing Pump shall be 2 nos. (1W + 1S)
2	Document No. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 1904 of 7166, Sl . 10	Filter Backwash Pump	As per Technical data sheet & Equipment list Tag nos 3 (2W+1S)pumps are given	Quantity given in Equipment list is 2 (1W+1S) Nos. Please clarify which document will govern.	Filter backwash Pump-I shall be 2 nos. (1W + 1S)
3	Document No. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 1896 of 7166, Sl . 11	Air Blower flow rate	As per Technical data sheet flow rate is given 630Nm3/hr	As per Equipment list flow rate is given 690 m3/hr. Please clarify which document will govern.	Flow rate of Filter Air Blower shall be 630 Nm3/h
4	Document Np. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 1896 of 7166, Sl . 11	Air Blower Qty.	As per Technical data Qty is given 3 (2W+1S)	As per Equipment list Qty is given 2(1W+1s), Please clarify which document will govern.	Filter Air Blower-I shall be 2 nos. (1W + 1S)
5	Document No. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 2010 of 7166,	UF-I FEED TANK	Tank height	As per data sheet Tank height is given 19 mtr, but in description L.D. 18 mtr + DVD 1mtr +1 F.B required.	UF Feed tank height shall be 20 m
6	Document No. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 1898 of 7166,	Degassed Water Storage Tank	MOC	As per data sheet Tank MOC is CS Epoxy coated, but in Equipment list : CS with Glass Flake Vinyl Ester lining. Please clarify.	Degassed Water tank MOC shall be CS with Glass Flake Vinyl Ester lining
7	Document Np. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 2051of 7166, & 2057 of 7166	UF Design Pressure & Operating Pressure	In UF -1 Design pressure is given 7.5 bar and UF -2 design pressure is given 8.0 bar & UF – RWTP design pressure is 6.5 bar	We understand that design pressure is as per Manufacturer standard , please confirm.	Minimum design pressure of UF skids (UF-I/II/RWTP) shall be 5 kg/cm2g
8	Document No. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Page no 987of 7166	Total (Ractive) Silica as SiO2	Reactive Silica Reduction required & nature of chemical for Silica reduction	As per Table 5 : RO -DM Plant Reject Water Quality Total Reactive Silica is given 200 ppm so Dolomite /Mgo chemical need to dosing in HRSCC . Please also clarify nature of chemical to be used for Silica precipitation.	Please follow tender
9	PIPING & INSTRUMENTATION DIAGRAM (RO BASED DM PLANT) ULTRA-FILTRATION -II SKIDS	Page no 2494 of 7166	A91S Pipe line MOC	UF-II Backwash pump outlet header MOC	1) UF Backwash pump outlet header (after static mixer) are shown in 14" (RO BASED DMA PLANT) & 26" (RWTP) - A91S . Please note that above 10" size A91S material, fittings & valves are not easily available in the market. Hence, we request you to provide alternate option.  2) PMS of A91S is not available in tender. Please provide the same.	1) The UF backwash header post CEB dosing shall be SS304 or equivalent  2) Piping material specification and corresponding valve material specification which are generally applicable for P-25 complex shall be shared with succesful bidder. For Piping material specification and valve material specification which are exclusive to the subject package as per approved P&IDs of package vendor, shall be developed by the package vendor and submitted for approval along with all required back-up calculations meeting the requirements of ASME B31.3.
	PIPING & INSTRUMENTATION DIAG (RAW RAW WATER TREATMENT PLANT) ULTRA-FILTRATION -II SKIDS	Page no 2444 of 7166	A91S Pipe line MOC	UF Backwash line header- 26" A91S		

10	SFD RO-DMP PLANT	Page no 2469 of 7166	CIO2 dosing	Inlet of CTBD storage tank and Inlet of UF-I feed storage tank	<p>CIO2 dosing are shown at Inlet of CTBD storage tank and Inlet of UF-I feed storage tank in SFD. However, in tender P&amp;ID of CTBD collection tank (Page no. 2466) and P&amp;ID of UF-I feed collection tank (page no. 2475), CIO2 dosing are not shown. Details of CIO2 dosing system are not furnished in Tender data sheet and equipment list.</p> <p>Please clarify the requirement of CIO2 dosing system. In case if it is applicable, then please provide the technical specification of the same.</p>	CIO2 dosing is not envisaged in RODMP
11	PIPING & INSTRUMENTATION DIAGRAM (RO BASED DM PLANT) CENTRIFUGE SYSTEM	Page no 2473 of 7166	Sludge trolley		<p>Details of sludge trolley are not provided in scope of work, equipment list and technical data sheet. Please clarify whether sludge trolley are in Bidder's scope or not. If it is in bidder's scope, please provide the technical details like capacity, quantity, MOC etc.</p>	Sludge trolley are in bidder's scope. The details to be reviewed during detailed engineering.
12	Document No. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 1900 of 7166,	Dual Media Filters (vertical)-II	MOC	<p>As per data sheet Vessel MOC is CS Epoxy coated, but in Equipment list : CS with Glass Flake Vinyl Ester lining. Please clarify.</p>	MOC of DMF-II: CS with Glass Flake Vinyl Ester lining.
13	Document No. B269-475-17-44-EL-1001 Equipment list for RO-DM Plant and ZLD Plant,	Page no 1900 of 7166,	Activated Carbon Filters-II	MOC	<p>As per data sheet Vessel MOC is CS Epoxy coated, but in Equipment list : CS with Glass Flake Vinyl Ester lining. Please clarify.</p>	MOC of ACF-II: CS with Glass Flake Vinyl Ester lining.
13	Document No. B269-475-17-44-EL-1001 Equipment list for CPU	Page no 1917 of 7166,	Primary & Secondary Activated Carbon Filter (ACF)	MOC	<p>As per data sheet Vessel MOC is CS Epoxy coated, but in Equipment list : CS with Glass Flake Vinyl Ester lining. Please clarify.</p>	MOC of Primary & secondary ACF: CS with Glass Flake Vinyl Ester lining.
14	Document No. B269-475-17-44-EL-1001 Equipment list for CPU-PNCP complex	Page no 1920 of 7166,	Primary & Secondary Activated Carbon Filter (ACF)	MOC	<p>As per data sheet Vessel MOC is CS Epoxy coated, but in Equipment list : CS with Glass Flake Vinyl Ester lining. Please clarify.</p>	MOC of Primary & secondary ACF: CS with Glass Flake Vinyl Ester lining.
15	Document No. B269-475-17-44-SOW-5000 Rev. B	Page no 903 of 7166, Page no 2859 of 7166,	SCOPE CLARITY	Clean agent system for Control Room/SRR of RO/DM/RWTP/CPU/ZLD as per NFPA-2001	<p>Layout shows clean agent room, Please clarify whether clean agent system is applicable or not.</p>	Bidder has to consider the clean agent system as per NFPA-2001 Latest Revision

				Bidder-7		
TO				M/s. INDIAN OIL CORPORATION LTD		
SUB				PRE-BID QUERIES FOR WATER BLOCK PACKAGE (INCLUDING RWTP,RO-DM,CPU & ZLD PLANT)		
TENDER NO.				BIDDING DOCUMENT : SG/R269-475-PA-T-6701/23		
SR. NO	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	Part4	Page 1891/7166	Sr. No-52	EQUIPMENT LIST (PLOT PLAN AND WATER GROUP) FOR RAW WATER TREATMENT	Line slaker System-Capacity: 500 kg/hr  Query -> Please provide the Line Slaker system Datasheet.	The datasheet of line slaker system shall be developed by the bidder during detail engineering as per line slaker system supplier recommendation.
2	Part4	Page 1891/7166	Sr. No-57	EQUIPMENT LIST (PLOT PLAN AND WATER GROUP) FOR RAW WATER TREATMENT	Drinking water Storage Sump-datasheet - As per Structures PMD No. B269-999-81-41-34222  Query -> Please provide the drinking Water Storage Sump Datasheet or provide retention time to be considered for siting of this tank.	Refer PMD No. B269-999-81-41-34222 attached with the tender for Drinking water sump capacity
3	Part5	Page 2431/7166	-	Indicative Equipment layout- RAW Water Treatment plant	Query-> Treated Water Sump and Drinking water Storage Sump Location is not Found in Layout. Please confirm where we have to locate These tanks in RWTP Layout.	These are located on the left side of the treated water reservoir. Please refer indicative layout.
4	Part4	Page 1899/7166	Sr. No-43	EQUIPMENT LIST (PLOT PLAN AND WATER DEPARTMENT) OF RO-ME BASED DM PLAN	DM Water Storage Tank - AS PER PROCESS DATA SHEET Query -> Please provide DM Water Storage Tank-datasheet	PDS SHALL BE PROVIDED ALONG WITH THE AMENDMENT
5	Part4	Page 1899/7166	Sr. No-44	EQUIPMENT LIST (PLOT PLAN AND WATER DEPARTMENT) OF RO-ME BASED DM PLAN	DM Water Transfer Pumps- AS PER PROCESS DATA SHEET Query -> Please provide DM Water Transfer Pumps-datasheet	Refer Page no 2306 for DM water transfer pump pds
6	Part4	Page 1908/7166	Sr. No-124	EQUIPMENT LIST (PLOT PLAN AND WATER DEPARTMENT) OF RO-ME BASED DM PLAN	Line slaker System-Capacity: 25 m3/hr  Query -> Please provide the Line Slaker system Datasheet.	The datasheet of line slaker system shall be developed by the bidder during detail engineering as per line slaker system supplier recommendation.
7	Part 2	Page 158/457	3.32.	SCOPE OF WORK INSTRUMENTATION RWTP, RO-DM, CPU & ZLD PANIPAT REFINERY EXPANSION PROJECT	Contractor shall carryout engineering and 3D modeling for CCTV camera. Contractor shall prepare location layout for CCTV cameras in Field & local control room and shall submit for review to purchaser. Based on final approved location layout, CCTV cameras along with junction box, network cabinet, interconnection cabling shall be free issued to contractor. Contractor shall carry out the erection and commissioning of CCTV cameras along with network cabinet and power supply distribution including all cabling under the supervision of CCTV vendor. Contractor shall consider power supply of 1KVA from PDB in CR-112, CR-122 for CCTV camera. Also erection of panel for CCTV camera including base frame supports in CR-112, CR-122 shall be by contractor. Contractor may consider panel size as approx. 2100mm (H) x 800mm (W) x 800mm (D). However actual dimensions shall be inferred during detailed design.  Query -> we understand that CCTV & All accessories related to it's installation & commissioning shall be provided(free issued ) by Client/Purchaser to us. only coordination/monitoring with cctv vendor & purchaser will be our scope. kindly confirm.	CCTV and its accessories shall be free issued to contractor. Bidder to follow tender requirement for bidder's scope related to CCTV.
8	Part 2	Page 155/457	2.1.1.	Scope of design & engineering for Instrumentation	A. RO-DM ,CPU & ZLD package, dedicated PLC based control system for RWTP. B. RWTP package, dedicated PLC based control system for RWTP. C. New CPU package in PNCP complex, dedicated PLC.Scope of procurement, supply and installation based control system for New CPU in PNCP complex. (All instrumentation and control equipments in RWTP, RO-DM ,CPU, ZLD & New CPU package in PNCP complex package shall be hard-wired interfaced to dedicated PLC based control systems for respective package).  Query -> We assume that all field instruments,analyser,cables,fit,cable tray tubing,hookup materials, support for new CPU in PNCP Complex package will not be our Scope of Supply and engineering. Only PLC based Control system with console panel shall be our Scope of design and supply for details Engineering for these control system,purchaser will provide all required layout (n kit, Spec, Instruments index etc.). Kindly confirm	Bidder's understanding is not correct, follow tender requirement for scope related to new CPU package.
9	Part 2	Page 156/457	3.1.	Scope of procurement, supply and installation	Dedicated Package PLC based control system for 1. RO-DM/CPU ii. ZLD Consoles and other associated hardware including cabinet base frame supports in CR-112. Dedicated Package PLC based control system for RWTP package Consoles and other associated hardware including cabinet base frame supports in CR-122. Dedicated Package PLC based control system for new CPU package in PNCP complex. Consoles and other associated hardware including cabinet base frame supports in DMR0 control room.  Query -> We will design,Supply Stand alone PLC/SCADA based system for dedicated package. Kindly confirm.	Follow tender requirement for control system requirement.
10	General	General	General	General	We understand that supply of all Electrical equipments of New CPU plant shall be in "others" scope.	All electrical scope of work & supply for the New CPU plant is in Contractor's Scope.  For CPU plant (in PNCP Area), Bidder to note that only Feeders for Contractor's supplied equipments shall be provided by Owner in the nearest Substation-10 (in the PNCP Area). Complete power supply & other associated electrical works for feeding CPU package back in PNCP complex shall be Contractor's scope of supply & work.
11	Part-3	Page 127/243	2.4.3.	PLC Configuration	A. Redundant PLC control system with all the following modules (cards) and network components as being redundant: a. PLC Processor (CPU) and Communication Processor b. Processor power supply, 10 rack power supply & 10s Bulk Power Supply (BPS). c. Serial communication (Mother) module. d. IO cards / modules (all closed loops, controls, logics, interlocks, safety, shutdown signals). e. PLC network and its components (switches).  B. The entire PLC control system hardware shall be pre-installed and pre-wired in industrial grade steel cabinets. All PLC cabinets shall be freestanding type with dimensions of 2400mm (H) x 800mm/1200mm (W) x 800mm (D) and of colour RAL 7035. The cabinets shall be installed in control room (CR-112,CR-122,DMR0 control room)  C. Contractor to ensure that no items shall be installed in side of the PLC panels except, utility socket and its switch and Fan failure detection modules.  Query -> We under stand that redundancy of I/O cards module is not required.Pls confirm.	Bidder's understanding is not correct, redundancy shall be considered as per tender requirement

Bidder-8

Work Details		: RWTP/RODMP/CPU/ZLDP FOR P-25																										
Bidding Document No		: B269-475-17-44-PA-T-8701																										
Sl. No.	Reference of Bidding Document				Bidder's Query	Consultant Reply																						
	Part / Vol.	Page No.	Clause No.	Subject																								
1	Part-II, Doc. No. B2269-475-17-44-SS-1002, Rev.2, Page 9 of 26.	74 of 457	2.13	Performance and Guarantees	Condensate quality at ZLD plant outlet parameters: <table><tr><td>Component</td><td>Unit</td><td>Condensate Water Quality</td></tr><tr><td>Total Dissolved Solids</td><td>ppm</td><td>&lt; 300</td></tr><tr><td>Total Suspended Solids</td><td>ppm</td><td>&lt; 1.0</td></tr></table>	Component	Unit	Condensate Water Quality	Total Dissolved Solids	ppm	< 300	Total Suspended Solids	ppm	< 1.0	Shall be updated in amendment													
Component	Unit	Condensate Water Quality																										
Total Dissolved Solids	ppm	< 300																										
Total Suspended Solids	ppm	< 1.0																										
2	Part-II, Doc. No. B269-475-17-44-DB-1001, Rev.3, Page 11 of 21.	233 of 457	2.3.3	Treated water quality at zero liquid discharge plant outlet <table><tr><td>S. No.</td><td>Parameter</td><td>Unit</td><td>Specification</td></tr><tr><td>1.</td><td>Temperature</td><td>Deg C</td><td>40 (Max)</td></tr><tr><td>2.</td><td>pH</td><td>-</td><td>6.5 - 7.5</td></tr><tr><td>3.</td><td>Total Dissolved Solids (TDS)</td><td>ppm</td><td>100(Max)</td></tr><tr><td>4.</td><td>Total Suspended Solids (TSS)</td><td>ppm</td><td>Nil</td></tr><tr><td>5.</td><td>Silica (as SiO<sub>2</sub>)</td><td>ppm</td><td>&lt; 1.0</td></tr></table> In view of discrepancies in the above indicated parameters, please clarify the guarantee parameters to be considered for ZLD	S. No.	Parameter	Unit	Specification	1.	Temperature	Deg C	40 (Max)	2.	pH	-	6.5 - 7.5	3.	Total Dissolved Solids (TDS)	ppm	100(Max)	4.	Total Suspended Solids (TSS)	ppm	Nil	5.	Silica (as SiO <sub>2</sub> )	ppm	< 1.0
S. No.	Parameter	Unit	Specification																									
1.	Temperature	Deg C	40 (Max)																									
2.	pH	-	6.5 - 7.5																									
3.	Total Dissolved Solids (TDS)	ppm	100(Max)																									
4.	Total Suspended Solids (TSS)	ppm	Nil																									
5.	Silica (as SiO <sub>2</sub> )	ppm	< 1.0																									

**Name of Work** : RWTP, RO-DMP, CPU & ZLD Plant for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India

**Bidding Document**: SG/B269-475-PA-T-8701/23

**Bidder**: Paramount Limited, Vadodara (Ref. 1776)

### **PRE-BID QUERIES (COMMERCIAL)**

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	NOTICE INVITING e-TENDER	Page 34 of 7166	11.1.3	Technical Criteria – Minimum Capacity for Multi Effect Evaporator unit	<p>You are aware that the large capacity MEE are being tendered by various refineries in recent past only and not a single MEE plant is commissioned in refineries till the date.</p> <p>The references of various contractors who are qualifying in Oil &amp; Gas EPC water &amp; waste water projects can be only in Chemical/ Pharma/ Textile etc industries where capacities of MEE are 150 m3/ day or less.</p> <p>Paramount, to its credit have, on its own designed, engineered, manufactured, supplied, erected &amp; commissioned successfully following largest capacity MEE project in last 12 years:</p> <p><b>For Mazda Colours Limited:</b> We have executed an order of MEE System for 150 m3/ day and the said plant was commissioned in May 2016.</p> <p>Therefore, we have our own eligible experience for execution of MEE in last 12 years if capacity is allowed as 150 m3/ day in PQ criteria in place of 180 m3/ day.</p> <p>Kindly be informed that if 150 m3/ day capacity is not granted in PQ criteria, other suppliers who would have executed MEE orders of required capacity would have no experience of stringent design, engineering &amp; specifications including design safety factors, approved vendors &amp; manufacturing/ testing standards viz. end to end executions and comfort of system integration with guarantees would both become limitation with these vendors.</p> <p>Hence, kindly allow PQ criteria of 150 m3/ day for MEE in place of 180 m3/ day.</p>	Please follow tender

## RWTP, RO-DMP, CPU &amp; ZLD PLANT for PANIPAT REFINERY EXPANSION PROJECT (P25) of M/s IOCL

Bidding Document No.: SG/B269-487-PC-T-8702/1018

REFERENCE OF ENQUIRY DOCUMENT						
Sl.No.	PART/VOL	PAGE NO.	CLAUSE NO.	SUBJECT	BIDDER'S QUERY	EIL/IOCL REPLY
1	TENDERDOCUMENT_PART_1	Pg. 110 of 192	8.6.0.0	Limitation of Liability	The limitation of liability clause presently in the tender is very restrictive and has several open ends resulting into an unlimited liability for the contractor. This will be very difficult for all the contracting firms to accept. We propose and request you to replace the Limitation of Liability clause with relevant FIDIC Clauses as they are balanced to protect interests of both employer and contractor.	Already replied
	Section 8 Miscellaneous-8.6.0.0					
2	Part 1-NOTICE INVITING e-TENDER	4-5 of 24 /32-33 of 757		Extension of the Bid and Site visit date and pre bid clarifications	Due to Covid restrictions and to prepare a detailed Offer we request you to extend the bid submission date by One month and Site visit date upto February 15th. We also request you to extend the pre bid clarification submission date upto 5th February	Already replied
3	Part 1	Page 27/ 459 of 756	8	Price adjustment	As per the referred clause price adjustment is allowed only for Steel component and hence we request you to allow price adjustment for all other materials.	Already replied
3	Drawings B269-999-17-44-00002-Rev F ; B269-000-16-51-0080-Rev E B269-472-17-44-10001-Rev 01 & B269-475-17-44-10001-Rev 01	-	-	Plot plan	Please furnish dimensional details of proposed RWTP layout within overall plot plan with proposed treatment plant	bidder to visit site for better clarity
4	Drawings B269-999-17-44-00002-Rev F ; B269-000-16-51-0080-Rev E & B269-475-17-44-10001-Rev 01	-	-	Plot plan	Please furnish dimensional details of proposed RODM/CPU/ZLD/CPU-PNCP layout	Refer Technical amendment no: B269-475-81-45-TA-8701-01 Rev.0
5	Drawings B269-999-17-44-00002-Rev F ; B269-000-16-51-0080-Rev E & B269-475-17-44-10001-Rev 01	-	-	Plot plan	Please furnish dimensional details of proposed CPU-PNCP layout	Refer Technical amendment no: B269-475-81-45-TA-8701-01 Rev.0
6	Drawings B269-000-17-44-00001 & B269-000-16-51-0080-Rev E	-	-	Plot plan	Please furnish dimensional details of OVERALL PLOT PLAN IN ACAD	The document will be shared with the successful bidder
7	Scope Drawings B269-475-81-41-14561-Rev B & B269-475-81-41-14562-Rev C	2550 & 2555	-	Grade Level	We understand that entire site grading within scope battery limit already graded up to FGL 238.32 M above MSL, EPCC contractor to further raise grading level to meet HPP 238.72.	Refer Note -3 of Scope Drawings B269-475-81-41-14561-Rev B & B269-475-81-41-14562-Rev C
8	Scope Drawings B269-475-81-41-14561-Rev B & B269-475-81-41-14562-Rev C	2550 & 2555	-	Type of Pavement	We understand that RCC pavement shall be provided for entire area within battery limit, Type of pavement for vehicular movement is Type - I and balance area is Type -II,Pipe supports to be designed accordingly.	Refer Note -7 of Scope Drawings B269-475-81-41-14561-Rev B & B269-475-81-41-14562-Rev C
9	Scope Drawings B269-475-81-41-14561-Rev B & B269-475-81-41-14562-Rev C	2550 & 2555	-	Approach Road	Please furnish length of approach road from main road to scope battery limit.	Refer Note -8 & 9 of Scope Drawings B269-475-81-41-14561-Rev B & B269-475-81-41-14562-Rev C
10	Drawings B269-000-16-51-0080-Rev E & B269-475-81-41-14561-Rev B	-	-	RWTP area	RWTP Area marked as per overall plot plan is 21560 sqm ; where as per Scope drawing for RWTP it was mentioned as 21229 sqm. Please clarify.	Refer Latest Overall plot plan attached with Technical amendment no: B269-475-81-45-TA-8701-01 Rev.0 alongwith scope drawing

## RWTP, RO-DMP, CPU &amp; ZLD PLANT for PANIPAT REFINERY EXPANSION PROJECT (P25) of M/s IOCL

Bidding Document No.: SG/B269-487-PC-T-8702/1018

Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL	PAGE NO.	CLAUSE NO.	SUBJECT		
11	Drawings B269-000-16-51-0080-Rev E & B269-475-81-41-14562-Rev C	-	-	RODM/CPU & ZLD area	RODM/CPU & ZLD Area as per Scope drawing for mentioned as 49498 sqm. Please confirm.	Refer Latest Overall plot plan attached with Technical amendment no: B269-475-81-45-TA-8701-01 Rev.0 alongwith scope drawing
12	General	-	-	Existing Facilities in RWTP/RODM/CPU & ZLD	Demolishing/refurbishment of existing above ground / under ground facilities within scope battery limits is not bidder's scope of work.Please confirm	Bidder to follow bid requirements
13	Engineering Design basis	-	-	Pipe rack at Battery limit	Bidder is free to route the pipe rack, please clarify and confirm	LOCATION OF THE OSBL PIPE RACK BATTERY LIMIT FOR BOTH RWTP & RO-DM-CPU-ZLD PLANT HAS BEEN INDICATED IN THE PIPING SCOPE DRAWING (B26-475-16-43-SK-8701 ,REV C) . THE FINAL DETAILS OF THE BATTERY LIMIT ARRANGEMENT SHALL BE FIRMED UP DURING DETAIL ENGINEERING .BIDDER IS NOT FREE TO ROUTE OR SUGGEST THE ROUTING OF THE OSBL PIPE RACK .
14	General	-	-	Pipe rack at Battery limit	Please furnish section/elevation details of pipe rack.	THE TENTATIVE CORDINATES OF THE OSBL PIPE RACK INTERFACE WITH RWTP & RO-DM-ZLD-CPU PACKAGE LIMIT IS INDICATED IN B269-487-16-43-SK-8701.  THE TENTATIVE PORTAL CROSSECTION WIDTH CAN BE 6M /8M .NO OF PORTALS IN THE CROSSECTION SHALL BE FINALISED DURING DETAILED ENGINEERING  THE TENTATIVE ELEVATIONS ARE 106.250 & 108.750
15	Geotechnical Report B269-475-81-41-GTD-0022-Rev. 0	1639	5	Ground Water Level	Design groundwater table is considered at 2.0m below finished ground level (FGL) for foundation design purposes, please confirm.	Confirmed.
16	Geotechnical Report B269-475-81-41-GTD-0022-Rev. 0	1640	6	Foundation	Considering functional requirement and soil strata Net SBC at Founding level considered as 10 T/sqm in all areas and how ever if Net SBC increases /decreases as per geotech report,Bidder is free to adopt,please confirm.	Bidder to note that carrying out of confirmatory soil investigation is in their scope of work, based on whcih they shall formulate comprehensive Geotechnical recommendation document as per the bid requirements.
17	Geotechnical Report B269-475-81-41-GTD-0022-Rev. 0	1639	5	Settlement	Settlements considered 25 mm for isolated footings and 40 mm for strip footings , How ever per Table 1 / IS 1904 the same can be considered 50 mm for isolated footings and up to 75 mm for raft type foundation system, please confirm.	Bidder's to follow the tender requirements.



## RWTP, RO-DMP, CPU &amp; ZLD PLANT for PANIPAT REFINERY EXPANSION PROJECT (P25) of M/s IOCL

Bidding Document No.: SG/B269-487-PC-T-8702/1018

Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL	PAGE NO.	CLAUSE NO.	SUBJECT		
18	Geotechnical Report B269-475-81-41-GTD-0022-Rev. 0	-	-	Chemical analysis of water	Please furnish chemical analysis of sulphates and chlorides in ground water.	Available data are attached in the tender document. Bidder to generate the required/additional data during confirmatory soil investigation.
19	Site Specific Seismic Spectra A882-000-16-54-DB-0001	2870	-	Liquefaction	We Request to furnish liquefaction analysis report	Available data are attached in the tender document. Bidder to note that carrying out of confirmatory soil investigation is in their scope of work, based on which they shall formulate comprehensive Geotechnical recommendation document as per the bid requirements.
20	Engineering Design Basis (Civil-Structural & Architectural) B269-999-81-41-EDB-1001_Rev. 0	1076	Cl B 4.1.1 (5)	Uplift Check	The Design ground water table shall be as per geotechnical report..... Uplift check for liquid retaining structures shall be considered at " <b>2.0 m from FGL</b> ", please confirm.	Confirmed.
21	Scope of Work & Supply ( UG Civil-Structural & Architectural) B269-475-81-41-SOW-8701_Rev. D and Engineering Design Basis (Civil-Structural & Architectural) B269-999-81-41-EDB-1001_Rev. 0	949 & 1079	1.1 & Cl A 4.2.1	Design Methodology	All liquid retaining structures shall be designed for uncracked section..... As per latest IS 3370 (2021), liquid retaining structures shall be designed as per limit state method with limiting crack width of 0.20 mm and working stress design is deleted, Please confirm.	Design concept as mentioned in the EDB may be followed. However, for crack width or any other criteria, bidder to comply with the codal provisions.
22	Scope of Work & Supply ( UG Civil-Structural & Architectural) B269-475-81-41-SOW-8701_Rev. D	-	-	Exposure condition	Our Exposure condition shall be "Severe" as per IS 3370(2021) please confirm.	Bidder to comply with the codal provisions.
23	General	-	-	Boundary wall & security building for RWTP	We presume that, construction of permanent Boundary wall / fences & Security building not in current scope of tender. Kindly confirm.	Refer Scope Drawing B269-475-81-41-14561 & B269-475-81-41-14562 attached with tender
24	General	-	-	Boundary wall & security building for RODM/CPU & ZLD	We presume that, construction of permanent Boundary wall / fences & Security building not in current scope of tender. Kindly confirm.	Refer Scope Drawing B269-475-81-41-14561 & B269-475-81-41-14562 attached with tender
25	General	-	-	CPU-PNCP	Location, area marked ,scope layout of CPU @ PNCP not clear, request to furnish the same.	Refer Technical amendment no: B269-475-81-45-TA-8701-01 Rev.0
	<b>Process / Mechanical Clarification</b>					
26	Tender part-5, RWTP	2433 of 7166	raw water treatment plant (RWTP) sh 1 of 2	RWTP inlet water quantity : 2400 cu.m/hr	TO meet the 2400 cu.m/hr UF permeate flow, it requires the more quantity of raw at inlet of RWTP plant. Please confirm the quantity.	THE DESIGN FLOW RATE FOR THE UF FEED PUMPS SHALL BE DESIGNED BASED ON THE INSTANTANEOUS FLOW REQUIREMENTS (DESIGN FLOW) OF THE UF AS PER UF SYSTEM SUPPLIER RECOMMENDATIONS. The backwash waste is envisaged to be recycled back to the plant inlet for maximizing recovery in the plant.
	Tender part-2, RWTP	766 of 7166	B269-472-17-44-SS-1001	Performance guarantee UF permeate = 400 cu.m/hr (6W+1S)		

## RWTP, RO-DMP, CPU &amp; ZLD PLANT for PANIPAT REFINERY EXPANSION PROJECT (P25) of M/s IOCL

Bidding Document No.: SG/B269-487-PC-T-8702/1018

REFERENCE OF ENQUIRY DOCUMENT						
Sl.No.	PART/VOL	PAGE NO.	CLAUSE NO.	SUBJECT	BIDDER'S QUERY	EIL/IOCL REPLY
27	Tender part-5, RWTP	2433 of 7166	raw water treatment plant (RWTP) sh 1 of 2	HRSCC outlet : Clarified water tank sludge to centrifuge Clarifier outlet to Flash mixture inlet	As per RWTP flow diagram, the complete sludge handling system treated water is reusing the RWTP plant only. There is no provision of feed this clarified water to UF inlet tank. Please confirm the same.	Bidder understanding is correct
		2459 of 7166	Schematic Flow diagram Demineralization plant RO based DM plant sh 1 of 2	one of the source to UF inlet source is RWTP HRSCC clarified water		
28	Tender Part 5 ,CPU	2309 / 7166	B269-476-02-DS-1901	Oil Coalescer	As per Datasheet for Oil coalescer, oil inlet = 5 PPM , Outlet requirement =<5ppm. As per CPU Datasheet Design Oil inlet is10 ppb , outlet Oil content, ppm Nil. As per process, condensate will be feed to oil coalescer, ACF & CPU. As there is ambiguity in oil quantity design parameters for oil coalescer.	1. In CPU PDS(B269-476-02-DS-1901) characteristics of Feed Condensate, Oil content unit shall be considered as ppm. PDS shall be updated.
29	Tender Part 5 ,CPU	1917 / 7166	Equipment List CPU	CPU Feed pumps ,Pump MOC Casing : SS304 L , Impeller : SS304L	As there is discrepancy in the Pump MOC , Please Confirm the Pump MOC	Please refer TA-01.
	Tender Part 5 ,CPU	2163 / 7166	B269-476-17-44-DS-1002 ,	CPU Feed pumps ,Pump MOC Casing : CS , Impeller : CS		
30	Tender Part 5 ,CPU	2166 / 7166	B269-476-17-44-DS-1004	Activated Carbon filter MOC - SHELL & HEADS - CARBON STEEL ASTM SA 516 GR 60/70 SPECIAL SURFACE FINISH INSIDE (YES/NO) - YES, AS PER EIL SPECS. ETAILS OF INTERNAL PROTECTION EPOXY COATED	As there is discrepancy in the type of painting Activated carbon filter, Please Confirm the ACF MOC.	MOC shall be CS with glass flake vinyl ester lining. Shall be updated in amendment.
	Tender Part 5 ,CPU	1917 / 7166	Equipment List CPU	Activated Carbon Filter MOC - Shell CS with glass Flake Vinyl Ester lining		
31	Tender Part 2	989 / 7166	2.3.3. TREATED WATER QUALITY AT ZERO LIQUID DISCHARGE PLANT OUTLET	3. Total Dissolved Solids (TDS) ppm 100(Max	There is discrepancy in the ZLD Plant Condensate TDS & TSS Quality, Please confirm. We request to kindly modify the treated condensate qty from 100 ppm to 150 ppm as with feed 43000 ppm the thermal systems design shall vary in quality.	The condensate quality as per SOW document B269-475-17-44-SS-1001 shall be guaranteed by system supplier at ZLD Plant outlet
	Tender Part 2	830 / 7166	Quality Parameters to be guaranteed under ZLD as specified below:	Condensate Quality at ZLD Plant Outlet Component Unit Condensate Water Quality Total Dissolved Solids ppm < 300 Total Suspended Solids ppm < 1.0		
32	Maximum Consumption Figures for Utilities in ZLD Plant, RWTP- RO-DM & CPU	846 of 7166		Power , kW	Please confirm whether Miscellaneous loads like lighting , Ventilation , Transformer losses to be considered for power guarantees. Also, Please confirm power requirement of intermittent operation pumps/blower to be considered for power evaluation.	Power guarantee shall be as per loading and penalty criteria document no. B269-472/475/476-17-44-LC-8701
33	6.1 Maximum Consumption Figures for Utilities	900/7166		Power , kW	Please confirm whether Miscellaneous loads like lighting , Ventilation , Transformer losses to be considered for power guarantees	Power guarantee shall be as per loading and penalty criteria document no. B269-472/475/476-17-44-LC-8701
34	Datasheets B269-475-17-44-DS-1011, ITEM NO.: 475-K-101 A/B/C	2006 of 7166	FLOW RATE NORMAL(m3/hr) 690	Flowrate capacity of the blowers	There is a discrepancy in the blower capacity. Please confirm the value to be considered	Flow rate of Filter Air Blower-I shall be 630 Nm3/h

## RWTP, RO-DMP, CPU &amp; ZLD PLANT for PANIPAT REFINERY EXPANSION PROJECT (P25) of M/s IOCL

Bidding Document No.: SG/B269-487-PC-T-8702/1018

Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL	PAGE NO.	CLAUSE NO.	SUBJECT		
	Equipment list B269-475-17-44-EL-1001, Rev 3	1896 of 7166	11. Capacity 630 M3/h		value to be considered.	630 Nm3/h
35	Datasheets B269-475-17-44-DS-1053, ITEM NO.: 475-K-104 A/B	2055 of 7166	FLOW RATE NORMAL(m3/hr) 565	Flowrate capacity of the blowers	There is a discrepancy in the blower capacity. Please confirm the value to be considered.	Flow rate of Filter Air Blower-II shall be 560 Nm3/h
	Equipment list B269-475-17-44-EL-1001, Rev 3	1900 of 7166	56. Capacity 560 Nm3/h			
36	Datasheets Equipment List	1844 to 2156 of 7166	Head	Head of equipment	We understand that the head mentioned in the datasheet & equipment list is tentative. The same shall be finalised during detailed engineering. Please confirm.	Head indicated in datasheets and equipment list are minimum requirements. Bidder to finalize during detail engineering
37	Datasheets B269-475-17-44-DS-1011, ITEM NO.: 475-K-101 A/B/C	2006 of 7166	3 (2w+1S)	No. of working blowers	There is a discrepancy in the number of blowers. Please confirm the value to be considered.	Filter Air Blower-I shall be 2 nos. (1W + 1S)
	Equipment list B269-475-17-44-EL-1001, Rev 3	1896 of 7166	2 (1+1S)			
38	Notice inviting Tender	35 of 756	11.1.3- VI	Number of MOU for Zero Liquid discharge Plant with vendors	Kindly Clarify how many MOU's can be kept along with the bid.	MoU shall be with supplier(s) meeting the BQC criteria
39	Part II - Doc No B269-472-17-44-SS-1001	Page 13 of 22/15 of 457 /77 of 457	4	Sludge disposal from Centrifuge to Landfill	Kindly confirm Our sludge Disposal Point shall at the Tip of Centrifuge. Further disposal from centrifuge to Shed area and Land fill will be in IOCL Scope.Kindly confirm whether is understanding is correct	The sludge shall be collected in trolley. Disposal of sludge from trolley shall be in IOCL's scope. The trolley shall be in contractor's scope.
40	Part II	Page 227 of 457	2.1.1	Feed Streams of the DM Plant	We request you to provide the details of bolier blow down TDS break up.	The ionic breakup is not available, however, the major contaminants in Boiler blow down shall be silica and phosphates
41	Part II -RWTP	-	-	Raw Water Stoarge	The raw water treatment and treated raw water reservoir shall have with two compartments with a total storage capacity equivalent to eight hours of Treated Raw Water Requirement for the P-25 Project. The new raw water system will comprise of: 8 hrs each compartment or both tanks together. Kindly confirm	Refer Note no 4 in P&ID no B269-02-42-472-1111
42	TENDERDOCUMENT_PART_2 269-81-17-44-SS-1001,	4.0 SCOPE OF CONTRACTOR'S WORK/ SUPPLY (ISBL)	Page 12 of 19	Required integration of new and existing signals shall be done in the new control system provided for the CPU.	Kindly provide the number of I/Os from existing system which are to be taken care in New Control System.	To be considered by bidder and confimed during detail engineering
43	TENDERDOCUMENT_PART_2 B269-475-16-51-SOW-8701	2. Scope of design & engineering	Page 2 of 12	A. RO-DM ,CPU & ZLD package, dedicated PLC based control system for i RO-DM/CPU ii ZLD	We understand that common PLC shall be considered fpr RO-DM/CPU and ZLD. Please confirm.	Bidder's understanding is not correct, dedicated PLC based control system shall be supplied for RO-DM/CPU and ZLD as per tender requirement
44	TENDERDOCUMENT_PART_2 B269-475-16-51-SOW-8701	2. Scope of design & engineering	Page 6 of 12	Contractor shall carryout engineering and 3D modeling for CCTV camera. Contractor shall prepare location layout for CCTV cameras in Field & local control room and shall submit for review to purchaser. Based on final approved location layout, CCTV cameras along with junction box, network cabinet, interconnection cabling	There is a contradiction in the clause. From below clause, We understand that CCTV is not in Bidder scope of Supply. Please	CCTV shall be free issued to

## RWTP, RO-DMP, CPU &amp; ZLD PLANT for PANIPAT REFINERY EXPANSION PROJECT (P25) of M/s IOCL

Bidding Document No.: SG/B269-487-PC-T-8702/1018

Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL	PAGE NO.	CLAUSE NO.	SUBJECT		
45	TENDERDOCUMENT_PART_2 B269-475-16-51-SOW-8701	2. Scope of design & engineering	Page 9 of 12	Coordination with I. Owner/Purchaser II. Package PLC vendor III. Purchaser's DCS / ESD PLC vendor IV. Purchasers CCTV vendor V. System oriented item's vendor VI. Instrumentation site team for successful commissioning	understand that CCTV is not in bidder scope of supply. Please confirm.	CCTV shall be free issued to bidder.Bidder's scope related to CCTV is as tender requirement.
46	TENDERDOCUMENT_PART_2 B269-475-16-51-SOW-8701	2. Scope of design & engineering	Page 9 of 12	Coordination with I. Owner/Purchaser II. Package PLC vendor III. Purchaser's DCS / ESD PLC vendor IV. Purchasers CCTV vendor V. System oriented item's vendor VI. Instrumentation site team for successful commissioning	We understand that DCS/ESD PLC is not in Bidder scope of supply. Please confirm.	Main Plant DCS loacted in UCR-105 is by purchaser, bidder to follow tender requirement for detailed scope of work related to package PLC .
47	TENDERDOCUMENT_PART_3 B269-475-16-51-SP-8701	Clause 2.1	Page 4 of 42	Further data shall also be sent to Purchaser's Main plant DCS at UCR-105 (through CR-112 & CR-122) for monitoring & shall be mapped to DCS with dedicated graphics.	We understand that updation required ( Hardware/ Software) in MCR DCS shall be in purchaser scope. Please confirm.	Noted
48	TENDERDOCUMENT_PART_3 B269-475-16-51-SP-8701	Clause 2.4.5	Page 5 of 42	PLC SOE (Sequence Of Events) requirement - SOE capability required with PLC scan-time.	We propose to have 100 SOE points for each PLC. Please confirm the same.	Follow tender requirement
49	TENDERDOCUMENT_PART_3 B269-475-16-51-SP-8701	Clause 2.4.5	Page 8 of 42	Isolated Output - Shall be provided wherever repeat signals are required.	Kindly clarify which signals are referred as repeat signal here.	As per P&ID and process requirement.
50	TENDERDOCUMENT_PART_3 B269-475-16-51-SP-8701	Clause 2.4.5	Page 8 of 42	Interposing Relays - Shall be provided for all MCC interface and field switches (if applicable).	Interposing Relays shall be considered at MCC end for the Digital Output signals, interfaced between PLC and MCC. Please confirm the requirement.	shall be at control system end in control room

**FORMAT FOR BIDDERS' QUERIES (Commercial)**

**WORK DETAILS** : RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India

**BIDDING DOCUMENT** : SG/B269-475-PA-T-8701/23

**NAME OF BIDDER** : Larsen and Toubro Limited

Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
10	ANNEXURE A-Xa TO SCC GUARANTEES & PENALTIES FOR OPERATION & MAINTENANCE	6 of 9 (626/5335)	5.3 (1)	Penalty clause for short fall in performance during Operation & Maintenance period due to any fault on the part of the Operation & Maintenance Contractor	Any deviation in Raw effluent quality will effect the performance of plant, process equipment / system. If any such occasions, bidder not to be penalized for not meeting the quality of treated effluent water untill the plant restore the performance. Kindly confirm	Please follow tender
11	ANNEXURE A-Xa TO SCC GUARANTEES & PENALTIES FOR OPERATION & MAINTENANCE	7 of 9 (627/5335)	Note 1	Maximum cumulative Penalty on account of all the parameters	Bidder requesting to consider maximum penalty shall be limited to 5% of monthly O&M Charges instead of 25% of monthly O&M Charges	bidder to follow bidding documents
12	PREAMBLE TO SCHEDULE OF PRICES	12 of 14 (737/855)	22.9	The Operation & Maintenance Charges shall not be payable in case the Effluent Treatment Plant (ETP) is not under operation for the reason(s) attributable to the Contractor. Pro-rata deduction of Operation & Maintenance Charges will be made in the event of nonoperation/ shut down of the Effluent Treatment Plant (ETP) for reason(s) attributable to the Contractor	O&M is a service contract it comprises majorly on fixed charges (Manpower & maintenance). Such occasions Contractor will take necessary action to resolve the issues to restore plant In operation. So request to consider to pay the fixed component during such occasions. please confirm	bidder to follow bidding documents

**SIGNATURE OF THE BIDDER :**

**WITH SEAL/STAMP**

## PRE-BID QUERIES (Bidder-6)

Tender No. SG/B269-475-PA-T-8701/23

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
	<b>Commercial</b>					
1	B269-TENDER_DOC-B269-475-17-44-PA-T-8701		-	-	Bidder requests Owner to introduce new Clause as stipulate below: " The Contract Value and duration (if required) shall be adjusted to take account of any increase or decrease in cost resulting from a change in the laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the date of Price bid submission, which affect the bidder in the performance of obligations under the Contract.	Not Acceptable. Bidder to follow the provisions of Tender Document.
2	B269-TENDER_DOC-B269-475-17-44-PA-T-8701	2.8.0.0 Page no 22 of 192		Payment for Materials in transit during suspension period which are dispatched but under transit condition	We presume that materials dispatched during suspension period which are in transit condition shall be payable to the bidder . Kindly confirm the same.	Bidder to follow the provisions of Tender Document.
3	General - Main transmission to get raw water requirement	Document No. B269-472-17-44-DB-1001 Rev. B - Page 971/ 7166	RAW WATER REQUIREMENT	Getting Source of water	Raw water will be sourced from existing Munak canal. The Raw water for the new refinery complex shall be made available from the existing raw water reservoir (I & II) facility. The raw water from the existing reservoir shall be treated and filtered in a new raw water treatment plant (RWTP). - <b>Main transmission required for getting Raw water in Whose scope</b>	Bidder's scope start from RWTP battery limit.
4	General - Special Condition for outlet point for drainout dewatering water	Page 482 / 7166 on Special condition	Work In Monsoon	Getting Source of water	The successful bidder shall be required to submit within 15 days of Letter of Acceptance of offer / award of work, to the PMC/OWNER his contingency plan for work during monsoon, clearly stating their methodology / strategy to progress uninterruptedly during monsoon mentioning the deployment of resources viz, numbers, capacity, category of equipment and manpower on a weekly basis for approval - <b>Out let for drainout pumped dewatering water not mentioned</b>	bidder understanding is correct
5	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant.	Clause no 2.1.2.2 Page no 984 of 7166	BOILER BLOW DOWN	Blow down Quality	1. TDS given for Blow down from Process Unit is 50 mg/l , Please provide complete ionic breakup ( in terms of Ca , Mg etc) so we can calculate combined feed TDS for designing of RO -DM Package.	The ionic breakup is not available, however, the major contaminants in Boiler blow down shall be silica and phosphates

## PRE-BID QUERIES (Bidder-6)

Tender No. SG/B269-475-PA-T-8701/23

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
6	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.2.3 Page no 984 of 7166	TREATED ETP EFFLUENT	Treated ETP Effluent Quality	In Treated ETP Effluent Quality, The following parameters are also present in water. 1. COD $\leq$ 125 mg/l 2.BOD $\leq$ 15 mg/l 3. Cyanide as CN $\leq$ 0.2 mg/l 4. Hexavalent Chromium $\leq$ 0.1 mg/l 5. Total Chromium as Cr $\leq$ 2.0 mg/l 6. Oil & Grease $\leq$ 5.0 mg/l Please note that in RO-DM given scheme , Treatment for above mentioned ions is not given . Please clarify .	The scheme provided is minimum requirement.
7	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.2.3 Page no 984 of 7166	TREATED ETP EFFLUENT	Treated ETP Effluent Quality	As per Treatment Scheme Treated Effluent from ETP will be feed to UF-1 Feed Collection Tank , after That directly feed to UF & RO Section. In Treated ETP Effluent Quality, The following parameters are also present in water. 1. Lead as Pb $\leq$ 0.1 mg/l 2.Mercury as Hg $\leq$ 0.01 mg/l 3. Zinc as Zn $\leq$ 5.0 mg/l 4. Nickel as Ni $\leq$ 1.0 mg/l 5. Copper as Cu $\leq$ 1.0 mg/l 6. Vanadium as V $\leq$ 0.2 mg/l 7. Benzene $\leq$ 0.1mg/l 8. Benzo Pyrene $\leq$ 0.2mg/l 9. COD $\leq$ 125mg/l 10. Oil & Grease : $\leq$ 5.0 mg/l Please note that UF will not remove dissolved solid, Heavy metal, Oil & These heavy metal can damage the RO membrane if we feed without treatment . Please clarify .	The scheme provided is minimum requirement.
8	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.2.3 Page no 984 of 7166	TREATED ETP EFFLUENT	Oil & Grease $\leq$ 5 mg/l	Please specify nature of Oil (suspended or dissolved) ?	This shall be Total oil (combination of free, emulsified and dissolved oil)
9	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.2.3 Page no 984 of 7166	TREATED ETP EFFLUENT	Oil Content in CTBD & Treated ETP effluent	Oil Content given in Cooling Tower Blow Down from CT-1 & CT-2 is 10 ppm max. Oil content from Treated ETP Effluent is <5 ppm Please note that UF will not remove Oil and as per specification RO -DM Plant Reject Water Quality is showing Oil : NIL , DM Water Quality (at outlet of MB Exchanger) Oil : NIL Please clarify.	Please follow tender.
10	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.2.3 Page no 984 of 7166	TREATED ETP EFFLUENT	Total Dissolved Solids 3000 mg/l	Please provide ionic breakup ( in terms of Ca , Mg etc)	The ionic breakup is not available, can be considered based on Cooling Tower blow down and treated raw water quality.

## PRE-BID QUERIES (Bidder-6)

**Tender No. SG/B269-475-PA-T-8701/23**

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
11	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.2.1.1 Page no 987 of 7166	Table-5: RO-DM plant Reject Water Quality	Colloidal Silica as SiO <sub>2</sub> in Treated water Quality for RO-DM Plant	RO-DM Plant feed sources (CTBD, BD, Treated ETP effluent, Treated RWTP water) are not showing Colloidal Silica as SiO <sub>2</sub> , but clause 2.3.2 Table – 8: Design Treated Water Quality for RO-DM Plant is showing Colloidal Silica value. Please clarify.	Please follow tender.
12	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.1 Page no 983 of 7166	FEED STREAM TO THE RO-DM PLANT	TREATED RAW WATER	Treated Raw Water Quantity (m <sup>3</sup> /hr) (Normal ) : 149 m <sup>3</sup> /hr Treated Raw Water Quantity (m <sup>3</sup> /hr) (Design ) : 20 m <sup>3</sup> /hr Design value is coming less than normal feed value - Please clarify	Please follow tender.
13	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.1 Page no 983 of 7166	FEED STREAM TO THE RO-DM PLANT	Sl no. 4 ETP Treated Water (Note-2)	Note -2 is missing in the document .Kindly provide the same .	Note-2 stands deleted
14	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.2 Page no 983 of 7166	DESIGN INLET STREAMS FOR THE RO-DM PLANT		As per Specification RO-DM plant feed source is as below 1. CTBD from CT -1 & CT-2 2. Blow Down from process Unit 3. Blow down from Utility Boiler 4. ETP Treated Water 5. Treated Raw Water Please provide combined water quality which will be feed to RO-DM Plant.	Please follow tender.
15	Document Np. B269-475-17-44-DB-1001 Process Design Basis (Plot Plan & Water) for RO-DM Plant and ZLD Plant,	Clause no 2.1.2.4 Page no 985 of 7166	TREATED RAW WATER	In case the normal feed streams to the RO-DM plant are not available, complete backup of Treated Raw Water shall be considered from the Treated Water Reservoir to produce required quantity of DM water.	As per Clause 2.1.1 FEED STREAM TO THE RODM PLANT Treated Raw water (380M <sup>3</sup> /HR) from Raw Water Treatment Plant shall be kept as backup feed for the RO-DM Plant in case of non-availability of one largest feed to RO-DM plant) and during start-up if required. As per Clause 2.1.2.4 TREATED RAW WATER In case the normal feed streams to the RO-DM plant are not available, complete backup of Treated Raw Water shall be considered from the Treated Water Reservoir to produce required quantity of DM water.  Both clauses are contradicting , Clause 2.1.1 is showing RWTP treated water steam will replace from largest in coming feed Source ( during start -up if required) & Clause 2.1.2.4 is showing about complete backup . Please clarify	Backup from treated raw water shall be equivalent to one largest feed stream of RODMP. Same shall be updated in amendment
16	B269-81-17-44-SS-1001, Rev. 1	2.10 Page 5 of 19	SUPPLY OF CONSUMABLES & CHEMICALS	HCl, NaOH & Morpholine shall be free issue supply by IOCL.	Please clarify whether Morpholine shall be free issue supply by IOCL or not.	Both plants are at different locations. Morpholine shall be free issue only for CPU located in PNCP area.
	B269-475-17-44-SS-1001, Rev.4	2.10 Page 6 of 25	SUPPLY OF CONSUMABLES & CHEMICALS	HCl and NaOH shall be free issue supply by IOCL		



## PRE-BID QUERIES (Bidder-6)

**Tender No. SG/B269-475-PA-T-8701/23**

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
17	B269-475-17-44-EL-1001 Rev. 3	Sr. no. 5 A. CTBD TREATMENT SECTION	EQUIPMENT LIST FOR RODM PLANT	High Rate Solid Contact Clarifier –I Capacity: 370 m3/h	Please clarify the capacity of High Rate Solid Contact Clarifier –I.	Capacity of HRSCC-I shall be 370 m3/h
	B269-475-17-44-DS-1005	475-CL-101 A/B	DATA SHEET HIGH RATE SOLID CONTACT CLARIFIER-I	INFLUENT FLOW PER UNIT (m3/hr) : 308		
18	B269-476-17-44-EL-1001 Rev. 1	Sr. no. 4, Page 2 of 3 CPU Feed Pumps	EQUIPMENT LIST FOR CPU	CPU Feed Pumps C: SS304L, I:SS304L	Please clarify the MOC of CPU Feed Pumps.	MOC of CPU Feed Pumps shall be C: SS304L; I: SS304L
	B269-476-17-44-DS-1002	ITEM NO.: 476-P-101 A/B	DATA SHEET CPU FEED PUMPS	MOC Casing: CS Impeller: CS		
19	B269-81-17-44-EL-1001 Rev. 0	Sr. no. 3, Page 2 of 3 Unpolished Condensate Feed Pumps	EQUIPMENT LIST FOR CPU-PNCP	Unpolished Condensate Feed Pumps C: SS304L, I:SS304L	Please clarify the MOC of Unpolished Condensate Feed Pumps.	MOC of unpolished condensate Feed Pumps shall be C: SS304L; I: SS304L
	B269-81-17-44-DS-1001	ITEM NO.: 81-P-101 A/B/CC	DATA SHEET UNPOLISHED CONDENSATE FEED PUMPS	MOC Casing: CS Impeller: CS		
20	DWG NO. B269-475 81 41 14562 REV C	-	SCOPE DRAWING FOR ROOM/CPU/ZLD PLANT PACKAGE		In scope of drawing, location of tapping point (utility lines, process line Incoming/Outgoing etc) are not shown. Please provide the same to understand piping scope.	Drawing number B269-475 81 41 14562 REV C is related to mainly underground tapping and General Civil facilities. Location & Elevation of these tapings are to be given during detailed engineering. For above ground piping, refer piping Battery limit drawing.
21	B269-475-02-EL-1001 Rev. A	Page 2 of 2	EQUIPMENT LIST	- DM Water Storage tanks	Please provide the Technical data sheet & size of DM water storage tanks.	Shall be provided in Amendment
22	B269-475-17-44-EL-1001 Rev. 3	Page 16 of 17	EQUIPMENT LIST FOR RODM PLANT	132. Chemical Dosing Tank 133. Chemical Dosing Pumps	Since technical data sheet of Chemical Dosing Tank & Chemical Dosing Pumps are not available in tender and the same are not shown in tender P&IDs, we could not able to understand the requirement of these equipments. Please clarify.	Chemical dosing tank and pump for chemical cleaning of ZLD shall be provided
23	B269-475-17-44-EL-1001 Rev. 3	Sr.no. 124 Page 15 of 17	EQUIPMENT LIST FOR RODM PLANT	Lime Slaker System Capacity: 25 m3/h  MOC: DDE	Please provide the technical specification & data sheet of Lime slaker system.	Bidder to develop
24	B269-475-17-44-EL-1001 Rev. 3	Sr. no. 7, Page 2 of 17 Filter Feed Pumps-I	EQUIPMENT LIST FOR RODM PLANT	Filter Feed Pumps-I  Capacity:300 m3/h Head: 60 m	Please clarify the differential head of Filter Feed Pump-I 60 m or 45 m.	Minimum differential Head of Filter feed pump shall be 45 m
	B269-475-17-44-DS-1007	ITEM NO.: 475-P-102 A/B/C	DATA SHEET FILTER FEED PUMPS-I	DIFFERENTIAL HEAD (m): 45 m		

## PRE-BID QUERIES (Bidder-6)

Tender No. SG/B269-475-PA-T-8701/23

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
25	B269-6-44-0005-8701	Page 4 of 87	PIPING MATERIAL SPECIFICATION INDEX		Please provide the specification of Piping class for SDSS, CPVC, B1N & A21V.	PIPING MATERIAL SPECIFICATION AND CORRESPONDING VALVE MATERIAL SPECIFICATION WHICH ARE GENERALLY APPLICABLE FOR P-25 COMPLEX SHALL BE SHARED WITH SUCCESSFUL BIDDER. FOR PIPING MATERIAL SPECIFICATION AND VALVE MATERIAL SPECIFICATION WHICH ARE EXCLUSIVE TO THE SUBJECT PACKAGE AS PER APPROVED P&IDS OF PACKAGE VENDOR, SHALL BE DEVELOPED BY THE PACKAGE VENDOR AND SUBMITTED FOR APPROVAL ALONG WITH ALL REQUIRED BACK-UP CALCULATIONS MEETING THE REQUIREMENTS OF ASME B31.3.
26	B269-475-17-44-EL-1001 Rev. 3	Sr. no. 7, Page 2 of 17 Filter Feed Pumps-I	EQUIPMENT LIST FOR RODM PLANT	Filter Feed Pumps-I Capacity:300 m3/h Head: 60 m	Please clarify the differential head of Filter Feed Pump-I 60 m or 45 m.	See response to query no. 19
	B269-475-17-44-DS-1007	ITEM NO.: 475-P-102 A/B/C	DATA SHEET FILTER FEED PUMPS-I	DIFFERENTIAL HEAD (m): 45 m		
27	PANIPAT NAPHTHA CRACKER PROJECT EPCC-6 RO DM PLANT	DWG. No. 6556-EPCC-6- P094-D0001-001 Rev 08	Equipment layout of RO based DM plant & CPU	Piping between proposed equipments	Please clarify whether bidder can use existing pipe rack and support from existing pedestals wherever if required.	Noted
28	Document No. B269-475-80-43-SP-8701-01 Rev. No. B	7.2 , Page 8 of 19	Special Requirements for Centrifugal Pumps (General Purpose Process/General Water service)		We understand the centrifugal pumps including RO high pressure pumps are Non-API and conforming to IS standard. Please confirm	Follow Tender Requirement
29	Document No. B269-475-80-43-SP-8701-01 Rev. No. B	7.2 , Page 8 of 19	Special Requirements for Centrifugal Pumps (General Purpose Process/General Water service)		We understand the centrifugal pumps including RO high pressure pumps are Non-API and conforming to IS standard. Please clarify.	Follow Tender Requirement
30	B269-476-02-DS-1901 Rev. No. B	13 , Page 1 of 4	CHARACTERISTICS OF FEED CONDENSATE :	- Unit of oil and ammonia  - Value of alkalinity is not furnished	Please recheck and confirm the unit of oil and ammonia, ppb or ppm. Please provide the value of alkalinity.	1. Unit of Oil & ammonia to be considered as ppm. 2. alkalinity value shall be provided in Amendment

## PRE-BID QUERIES (Bidder-6)

**Tender No. SG/B269-475-PA-T-8701/23**

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
31	B269-81-02-DS-1901 Rev. No. 0	13 , Page 1 of 3	CHARACTERISTICS OF FEED CONDENSATE :	CPU PROCESS DATA SHEET NEW CPU (PNCP AREA)  Oil contents , ppm for design: 20 ppm	Feed condensate of PNCP area content 20 ppm of oil. Please check and confirm the requirement of oil coalescer unit before primary & secondary ACF as per similar scheme of CPU P-25 project.	1. As per PDS, Design Oil content PPM shall be 10 ppm only. 2. Normal oil content is 2-5 ppm, hence, oil coalescer is not envisaged. If required as per bidder, the oil coalescer shall be included as part of CPU (PNCP complex)
32	TENDERDOCUMENT_PART_2	987 of 7166	2.2.1.1	Reject Water RO-DM Plant (ZLD Package Feed Quality)	As per the Section "Process Design Basis for RO-DMP & ZLDP)" Parameter "Sulphate" concentration/ value is given in the stream "Cooling Tower Blowdown" which will be part of RO-DMP plant feed system, and final reject of the system will be feed to ZLD System. Here sulphate will also get concentrated similar to other ions like Na & Cl in the RO-DMP plant reject. Sulphate concentration in complete ionic balance of feed water is also one of the important parameter for selecting the appropriate MoC of the ZLD equipment's. Hence customer to provide Sulphate concentration in ZLDP feed water.	The ionic breakup is not available, quality of RODM can be considered based on Cooling Tower blow down and treated raw water quality.
33	TENDERDOCUMENT_PART_3	1338 of 7166	1.2	Area Classification	It is mentioned in the Tender Doc "TENDERDOCUMENT_PART_3" in Section "Job Specification for Instrumentation" that Area classification shall be as defined in Electrical section of this tender. Whereas in the Electrical Section of the tender document (Page 1041 of 7166) has given selection criteria for Zone 1 & Zone 2 for the electrical equipment's, but not specified applicable Zone for the sub packages - i) RO-DM, CPU ii) ZLD. Customer to provide the same.	Bidder to note that Hazardous Area Classification (HAC) is not applicable as these are Safe Area plants. However, in case any hazardous substancne is handled in these packages the requirement of corresponding Hazardous Area Equipments shall be complied by Contractor. Further Wherever Contractor is supplying/ installing any hazardous area equipments in these plant areas, then same shall be supported with necessary statutory certificates and PESO approval.
34	TENDERDOCUMENT_PART_4 & TENDERDOCUMENT_PART_8	1581 of 7166 & 4273, 4298, 4319 of 7166	5.0	Job Specification for SME-Rotating Equipments - Pumps	Tender says for "General Purpose Process Service" such as De-mineralised Water (DMW) plants, Raw Water Treatment Plants (RWTP), Effluent Treatment Plants (ETP)" pumps no design code has to be complied. Customer to confirm that our understanding is correct.	Follow Tender Requirement
35	TENDERDOCUMENT_PART_4 & TENDERDOCUMENT_PART_8	1581 of 7166 & 4273, 4298, 4319 of 7166	5.0	Job Specification for SME-Rotating Equipments - Pumps	Design code or standard for the ZLDP pumps are not specified in the "Job Specification" documents as well as in the "Standard Specification for the Centrifugal Pumps". Customer to confirm which design codes to be followed for ZLDP pumps.	Follow Tender Requirement.
36	TENDERDOCUMENT_PART_1 & TENDERDOCUMENT_PART_7	& 3175 onwards of 7166	3.0.5.13 & 2.0	Make of Material & Master Vendor List - Rotating Equipments	It is mentioned in the "TENDERDOCUMENT_PART_1" in Section "3.0.5.13 Make of Material" that All equipment and materials to be supplied under this Contract shall be from approved vendors as indicated in the Bidding Document or as otherwise approved by the Engineer-in-Charge/ OWNER. In the "TENDERDOCUMNT_PART_7" in Section "Master Vendor List" Vendor list for Rotating Equipment like Pumps, Blowers, Progressive Cavity Pumps, Positive Displacement Pumps, Turbo charger are not provided. Customer to provide the same or Customer to confirm that Bidder has to provide vendor list for these equipment with proposal.	Technical Amendement shall follow Shortly.

## PRE-BID QUERIES (Bidder-6)

**Tender No. SG/B269-475-PA-T-8701/23**

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
37	Scope of Work	3.9/912 2.4/1339		PLC system Requirement.	As per this clause, dedicated PLC system is required for RO-DM, ZLD and new CPU (PNCP area). Instead of three PLC systems, can we consider two PLC systems i.e. one for RO-DM/CPU-ZLD and second one for new CPU (PNCP area)	Follow Tender requirement
38	Job Specification	2.4.3/1340		PLC configuration i.e. Redundant PLC control system with all the following modules (cards) and network components as being redundant:	Please confirm whether all IO module to be considered redundant.	Shall be as specified in this clause, follow tender requirement for the same.
39	Job Specification	2.3/1339		PLC to MCC hardwire signal exchange i.e. Start, Stop, trip, Auto / Manual, Local / Remote commands, run feedbacks to / from MCC	Following input/output are being considered in PLC system for each drive based on specification requirement 1. Digital Input : 1 no. 2. Digital Output : 4 nos.  Please confirm.	Follow Tender requirement
40	Job Specification	2.1/1339		Further data shall also be sent to Purchaser's existing DCS system at DMRO control room for monitoring & shall be mapped to DCS with dedicated graphics.	Please note PLC HMI software and DCS HMI software works on different platform and all graphics of PLC HMI screen can not be copied in DCS HMI software and hence kindly review the requirement and keep all screen development in DCS in TPL scope only.	Bidder's understanding is not correct, data shall be mapped in DCS and graphics shall be by DCS vendor.
41	Job Specification	2.14/1347		For solenoid valves with Field Manual Reset, reset shall be through separate Exd field push-button (i.e. not integral reset with solenoid valve).	Please note after every command issue to solenoid valve, reset PB is also to be pressed which is practically not possible for sequence operation and hence please review the requirement and confirm.	In general SOV shall be Auto-reset type. For solenoid valve requiring FMR, Shall be as per P&ID and other process requirement.
42	General				Please share PLC Configuration for better clarity.	Follow Tender requirement
43	Scope of Work	3.11.6/913		Cables between MCC and PLC	Since dedicated PLC based control system is required for new CPU (PNCP area) and hence please confirm distance from control room (new CPU PNCP area) to MCC for cable calculation.	For new CPU PNCP area, substaion is SS-10. Distance between SS-10 and DMRO control room is as per overall plot plan attached with tender.
44	Job Specification	1.6-c/1338		Approximate cable distance between DMRO control room existing DCS system.	We assume from this clause that 200 meters distance is from field to existing DMRO control Room for new CPU (PNCP area). Please confirm.	Bidder's understanding is not correct, the distance mentioned is for existing DCS system in DMRO control room and vendor's package PLC.
45	Job Specification	2.4/1339		Purchaser shall consider 1 No. NTP port at purchasers GPS system in UCR-105 and DMRO control room. Cabling from UCR-100 and DMRO control room to vendors system shall be by vendor including required convertors, LIU, etc. at both sides.	Please provide distance from UCR-100 and DMRO to RO-DM/CPU-ZLD control room for this connectivity. We assume, existing cable tray is available to lay these cable. Please confirm.	UCR-100 shall be read as UCR-105, no connectivity is envisaged between UCR-105 and DMRO control room.
46	Job Specification	2.2/1339		Repeat alarms in local panels	We request you to elaborate the clause as the requirement is not clear	Shall be as per P&ID and other tender requirement.
47	General	-	-	-	Please share overall layout showing CR-112, CR-122, DMRO control room, UCR-105 & UCR-100 for better clarity of cable routing.	Overall Duct layout, Rev.G, Attached with instrumentation Amendment.
48	General	1.1/1.2/1338		As defined in Electrical section of this tender	Please Inform Area classification for all Instrumentation and Control system as it is un clear.	Shall be as per instrumentation job specification and scope pf work.
49	B269-472-17-44-DB-1001 Rev. B	6 of 12	3.2	Raw Water Quality	In the tender document, the TSS of Raw water is mentioned as 20-40 mg/l, and in the datasheet as 500 mg/l at peak flow and 200 mg/l at normal flow. Please confirm the inlet TSS to be considered for design of RWTP.	Design suspended solids value shall be considered as 200 ppm for design at RWTP inlet. However, 40 ppm shall be considered for design of UF skids.
	B269-472-17-44-DS-1003	1931 of 7166	Lamella Clarifier	Inlet Characteristics		

## PRE-BID QUERIES (Bidder-6)

**Tender No. SG/B269-475-PA-T-8701/23**

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
50	B269-472-17-44-EL-1001 Rev. 1	Page 3 of 10	14	HRSCC 1W 340 m3/hr	Please confirm the design flow rate for HRSCC to be considered for design.	Design Flow of HRSCC shall be 340 m3/h
	B269-472-17-44-DB-1001 Rev. B	9 of 12	4.3	HRSCC (for UF Backwash Treatment) 1 Working 300 m3/hr Capacity		
51	B269-472-17-44-DS-1003	1931 of 7166	Lamella Clarifier	Inlet Characteristics	Turbidity of 1 NTU can be achieved at the outlet of UF. Turbidity of 1 NTU is cannot be achieved at the outlet of lamella clarifier. Kindly confirm the revised outlet guarantee of turbidity at lamella clarifier.	Guarantee of turbidity at the outlet of lamella clarifier shall be <20 NTU.
52	B269-472-17-44-DS-1019	1951 of 7166	Centrifuge	Influent Flow rate 28 m3/hr	There is a discrepancy in the capacity of centrifuge. Please confirm the capacity to be considered for design of centrifuge.	Design capacity of Centrifuge shall be 30 m3/h
	B269-472-17-44-EL-1001 Rev. 1	Page 4 of 10	19	Capacity: 30 m3/hr (Each)		
53	Tender Part 4	1884 / 7166	B269-472-17-44-EL-1001	RWTP , UF CIP Cleaning Tank Agitator	In Equipment list and Equipment datasheet Agitator for UF CEB dosing tanks (Acid , Caustic and , NaoCL ) are not there whereas in P&ID we Agitator has been provided . Please confirm whether Agitator need to provided or not .	No agitator is required for CEB-I/II/III Tanks. Same shall be updated in amendment.
54	Tender Part 4	1884 / 7166	B269-472-17-44-EL-1001	Static Mixer - RWTP	Please provide the Technical details for Static Mixer	Shall be developed by bidder during detailed engineering
55	Part 2	6 of 27	B269-999-80-42-EDB-1002 , 5.1.7	Fire & Smoke Dampers shall be pneumatically operated for Control Room building. For other buildings, Fire & Smoke Dampers shall be electrically operated motorized type. All fire dampers shall be fail safe type.	We propose to provide electrically operated fire damper for control room building similar to other buildings. Please accept.	Not acceptable. This is OISD requirement. Follow tender specification.
56	Part-4	105	B269-475-80-43-SP-8701-02 , 3.1.2	The control room building /analyser room shall be 3-5 mm WC over pressurized. No. of air changes shall be 5-6 ACPH. AHU shall be designed & selected accordingly.	Air change for air conditioned area of Control Room building/ Analyser room shall be designed as per Engineering Design Basis - Packaged Equipment (Doc. No. B269-999-80-42-EDB-1002_Clause No.5.1.9). Please accept.	Not Acceptable. Follow Tender specification.
57	Part-4	105	B269-475-80-43-SP-8701-02 , 3.1.4	For Air conditioning of Substation & control room Building (Housing the sub station and control room) / Analyser room, Contractor to consider Two (2) Nos. (both Working – 50% capacity each) Package cooling towers (induced draft FRP type) in contractor's scope and only make up water shall be provided by client at battery limit of the unit.	For Air conditioning requirement of less then 20 TR, we propose to provide air cooled packaged AC units. Please accept	Not Acceptable. Follow Tender specification.
58	TENDERDOCUMENT_PART_2 B269-999-81-41-EDB-1002 Rev 0	4.2	8 of 13	a) Fire water storage a. Storage capacity - 6 hrs storage of installed system capacity.	As per OISD-116, clause no:5.4, <b>The effective capacity of the reservoir above the level of suction point shall be minimum 4 hours aggregate working capacity of pumps.</b> So bidder is considering the same. Please confirm.	Not in the scope of RWTP/RODMP/CPU/ZLDP bidder

## PRE-BID QUERIES (Bidder-6)

Tender No. SG/B269-475-PA-T-8701/23

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
59	TENDERDOCUMENT_PART_2 B269-999-81-41-EDB-1002 Rev 0	4.2	8 of 13	b) Fire water pumps a. Capacity - Normal capacities 1000 m3/hr	As per OISD-116, clause no:5.2 (i), <b>Fire water flow rate for supplementary stream, shall be based on using 4 single hydrant outlets and 1 monitor simultaneously. Capacity of each hydrant outlet as 36 m3/hr and of each monitor as 144 m3/hr may be considered at a pressure of 7 kg/cm2 g. Total pump capacity is 288 m3/hr (36*4+1*144) + 342 m3/hr (spray system) = 630 m3/hr.</b> So bidder is considering the same. Please confirm.  Bidder is considering 1 no 630 m3/hr @ 13 kg/cm2 of Main motor driven pump & 1 no 630 m3/hr @ 13 kg/cm2 of standby diesel driven pump. Please confirm.	Not in the scope of RWTP/RODMP/CPU/ZLDP bidder
60	TENDERDOCUMENT_PART_2 B269-999-81-41-EDB-1002 Rev 0	4.2	9 of 13	b) Fire water pumps h. Fire water Jockey pumps - Capacity	As per OISD-116, clause no:5.5.4, <b>The capacity of jockey pumps shall be 3% (minimum) and 10% (maximum) of the design fire water rate and its head higher than the main fire water pumps.</b> So bidder is considering the Jockey pump capacity and quantity as 19 m3/hr (3% of Main pump capacity) and 2 Nos (1W+1S). Please confirm.	Not in the scope of RWTP/RODMP/CPU/ZLDP bidder
61	TENDERDOCUMENT_PART_2 B269-475-17-44-SOW-5000 Rev B	1.1.1	4 of 7	Fire water hydrant / Monitor system	As per OISD-116, clause no:5.6.6 & 5.1.1, <b>The maximum distance between two hydrants, however, shall not exceed 30 mtrs around hydrocarbon storage and hazardous areas and 45 mtrs in other areas and the location of water monitors shall not exceed 45 mtrs. from the hazard to be protected.</b> So bidder is considering distance between two hydrants and two water monitors spacing shall be 45 mtrs. Please confirm.	Fire water header around unit including hydrants and monitors on same will be available to Package Contractor. Contractor to ensure and provide Fire Monitors including tapping and piping from main fire water line around unit for entire coverage of unit after considering fire hydrants/monitors(by others) on fire water main header around unit. At least one hydrant post shall be provided for every 30 M of external wall measurement or perimeter of unit battery limit in case of hazardous areas.
62	TENDERDOCUMENT_PART_8 6-66-0050 Rev. 2	1	4 of 18	Scope of supply: Clean Agents to be considered are 1G-541, IG-100, IG-55 and 1G-01 as per NFPA-2001.	Bidder is considering for Clean Agent gas as IG-541 @ 300 bar for Control room & Setellite rack room as per NFPA-2001, 2012 edition. Please confirm.	Bidder to follow bid requirement and NFPA-2001 latest edition is applicable. Inert gas shall be finalised during details engineering.
63	Scope of Work & Supply ( UG Civil-Structural & Architectural) B269-475-81-41-SOW-8701_Rev. D Part A	943	-	Scope of Work	"....in all respect of Architectural, Structural & Civil, underground (U/G) piping works of <b>PACKAGE-16:</b> RWTP, RO-DM CPU & ZLDP PACKAGE for PANIPAT REFINERY EXPANSION PROJECT (P-25)" Present scope of work is limited to " <b>Package 25</b> " only, Please confirm.	P25 is not package-25. P25 is the part of name of project.
64	Document No. A882-000-16-54-DB-0001	2870	-	Site Specific Spectra	Please specify any multiplying factor to be applied to the site specific horizontal acceleration spectral coefficients to obtain the design acceleration spectra for a) SMRF RC structures & b) Liquid Retaining Structures.	Bidder to comply with the codal provisions. The same can also be discussed during detailed engineering
65	Document No. A882-000-16-54-DB-0001	2875	-	Response Reduction Factor	Response Reduction factor shall be as per latest IS 1893 (part 1) for SMRF RC structures and IS 1893 (part 2) for Liquid retaining RC structures ,please clarify.	Bidder to comply with the codal provisions. The same can also be discussed during detailed engineering

## PRE-BID QUERIES (Bidder-6)

Tender No. SG/B269-475-PA-T-8701/23

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
66	Scope Drawings B269-475-81-41-14561-Rev B , B269-475-81-41-14562-Rev C & B269-999-81-41-EDB-1001_Rev. 0 PART - A	1059, 2550 & 2555	-	Finished Road Level(FRL)	We understand tha Finished Road Level(FRL) corresponds to HPP 238.72 M which is <b>0.400 M above FGL level</b> ( ~ 238.32 M) , however per Engineering Design Basis FRL Top level mentioned for all areas except pipe ways is <b>0.45 m to 0.6 m above FGL</b> , please clarify.	All Main road outside the scope Battery limit are not in the scope of bidder. Road top level of Main roads (not in bidders scope) shall be constructed as per Engineering design basis (B269-999-81-41-EDB-1001). Bidder to refer scope drawing no B269-475-81-41-14561-Rev B & B269-475-81-41-14562-Rev C for scope of approach road (bidder's scope) & Top of pavement of unit (bidder's scope).
67	Drawing No. B269-000-81-41-02507_Rev. A	2557	-	Finished Floor Level(FFL)	We understand that <b>Finished Road Level(FRL) mentioned as 100.000 corresponds to HPP 238.72 M above MSL , Finished Floor level ( FFL) shall be 500 mm above HPP/FRL</b> ,please confirm	FFL is 500mm above nearest FRL.The MSL of FRL shall be acertainated by Bidder from Civil.
68	Drawing No. B269-000-81-41-02431_Rev. C	2559	-	Finished Floor Level(FFL)	We understand that <b>Finished Road Level(FRL) mentioned as 100.000 corresponds to HPP 238.72 M above MSL , Finished Floor level ( FFL) shall be 500 mm above HPP/FRL</b> ,please confirm	FFL is 500mm above nearest FRL.The MSL of FRL shall be acertainated by Bidder from Civil.
69	TENDERDOCUMENT_PART_2 B269-475-16-50-SOW-8701, Rev. C, SCOPE OF SUPPLY & WORK (Electrical)	f).	13 of 15	Scope of work - Owner's feeder requirement and its associated cabling works.	In the stated clause it is mentioned as,"All feeders in respective switchboards and associated cabling for feeding Owner's supplied equipment located in substation and control room are included in Contractors scope."  We presume that contractor scope is only limited to consider the owner's feeder requirement in the respective panel. However necessary cable, terminations, cable trays & its associated structural work upto the owner's load is not in the contractor scope. Kindly confirm.	Bidder to note that for each of the Owner's Loads as specified at Note-f at Page 13/14 of 15 of Scope of Supply & Work-Electrical (Doc. No. B269-475-16-50-SOW-8701), Contractor's scope of supply is limited to providing only Owner feeders in Contractor's respective switchboards/ panels. Other than these listed Owner Feeders, all other Owner supplied equipment (Free Issued Materials) located in substation and control room along with their cabling is included in Contractor's scope of supply & work.

## PRE-BID QUERIES (Bidder-6)

Tender No. SG/B269-475-PA-T-8701/23

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
70	TENDERDOCUMENT_PART_3 B269-475-16-50-SP-8701, Rev. C JOB SPECIFICATION (Electrical)	3.6.5	17 of 49	Upstream 66kV Switchboard & 6.6kV Switchboard PS class CT details at SS-100	<p>In the stated clause it is mentioned as, "Transformer + Feeder differential relay (87T+F) of same make/ model as installed in the Upstream 66kV Switchboard at SS-100 shall be free-issued to CONTRACTOR for installation and wiring in 6.6kV Switchboard incomer panels in SS-112."</p> <p>Kindly furnish us the upstream substation (SS-100) 66kV Switchboard &amp; 6.6kV Switchboard outgoing feeder differential protection class CT details (like Knee point voltage (Vk), Rct, ratio etc.) for our consideration.</p>	<p>Bidder to note that 66/6.9 kV Power Transformer is "Deleted" from Contractor's's scope. Accordingly 66kV main power supply at SS-112 shall not be provided anymore. Bidder to kindly note that Owner/EIL shall provide 6.6kV Plant Feeders (2 Nos.) (Each rated for 100% load of the package) from Owner's 6.6kV Switchboard (located in MRSS-100) along with 6.6kV Cable, control cables, OFC cable to RODM/CPU/ZLD Substation SS-112. Termination of all cables is in the scope of Contractor for SS-112. Accordingly, "Transformer+Feeder Differential Relay (87T+F)" is not to be installed anymore. However, Feeder differential relay (87F) of same make/ model as installed in Owner's Upstream 6.6kV Switchboard at MRSS-100 shall be free-issued to CONTRACTOR for installation and wiring in Contractor's 6.6kV incomer panels. Testing and commissioning of loose supply relay is included in scope of CONTRACTOR. Optical fiber cable along with HDPE duct (Green conduit with white strip) shall be provided by others, however end termination of OFC including all accessories for receiving end shall be in the scope of Contractor.</p> <p>Bidder to further note that required details as requested here shall be provided to successful Bidder post order and during detail engineering.</p>
71	TENDERDOCUMENT_PART_2 B269-475-16-50-SOW-8701, Rev. C, SCOPE OF SUPPLY & WORK (Electrical)	f).	13 of 15	Scope of work - Owner's feeder requirement and its associated cabling works.	<p>In the stated clause it is mentioned as, "All feeders in respective switchboards and associated cabling for feeding Owner's supplied equipment located in substation and control room are included in Contractors scope."</p> <p>If cabling is in the contract scope, kindly provide us the co-ordinate of each load location (or) approx. distance from the respective SS building to each load location to consider the necessary cabling in the scope of work.</p>	<p>Refer reply at S. No. 1 above. Further, Bidder to note that as per 1st para on page 5 of 49 of Job Spec. Electrical (Doc. No. B269-475-16-50-SP-8701) attached with Tender, 230V AC UPS system shall be provided by Contractor for Control supply of VFD, Heater Control thyristor panels, LAN system, ECS system etc. This UPS shall be located in a separate room/partition in switchgear hall of substation. Also any non-UPS power supply for the Owner's equipment shall be in the scope of Contractor. Also, Owner's supplied equipments such as FA, PA, ECS, other such free issued equipments cabling is in Contractor's scope of work &amp; supply. Bidder to follow some of the available documents in tender such as scope drawings(Civil, Piping), Substation &amp; Control Room Drawings, to carry the approx. estimations for cabling.</p>



## PRE-BID QUERIES (Bidder-6)

**Tender No. SG/B269-475-PA-T-8701/23**

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	
72	TENDERDOCUMENT_PART_3 B269-475-16-50-SP-8701, Rev. C JOB SPECIFICATION (Electrical)	2.3.6	8 of 49	Cable derating factor	In the stated clause it is mentioned as, "CONTRACTOR to consider maximum cable de-rating factor of 0.5 for sizing of cables on ground rating at 30 degree specified in cable catalogue. This shall be considered for all underground cables."  We presume that, cable derating factor shall not be considered as 0.5 for all underground cables. Same shall be considered as per the design requirement. Kindly confirm.	Bidder to note that total derating factor for cable shall be as per design requirement. However, if the calculated value is greater than 0.5, then Contractor to follow derating factor as 0.5 and if the calculated value is below 0.5, then Contractor shall follow the value which is below 0.5, for sizing of cables in Under Ground.
73	TENDERDOCUMENT_PART_2 B269-475-16-50-SOW-8701 Rev. C SCOPE OF SUPPLY & WORK (Electrical)	4.7	15 of 15	SVL box requirement for 66kV cable	In the stated clause it is mentioned as, "Supply and laying of 66kV Power cables and associated Control Cables from Owner's 66 kV switchboard to Contractor's 66/6.9kV Power transformers for normal power supply located in SS-112 for RODM/ZLD/CPU."  We presume that necessary SVL (Sheath Voltage Limiter) box required for the 66kV cable also not in the contractor's scope. Kindly confirm.	Refer reply at S. No. 2 above. Accordingly, 66KV cable & accessories are not in Contractor's scope.
74	TENDERDOCUMENT_PART_8 6-51-0099 Rev. 7 DESIGN PHILOSOPHY FOR ELECTRICAL FACILITIES	5.10.1	18 of 32	HV Capacitor banks	In the stated clause it is mentioned as, "The capacitor banks shall be supplied with series reactor and RVT (residual voltage transformer). All the capacitor bank equipment except APFC panel shall be suitable for outdoor location unless otherwise specified."  Where as in the TENDERDOCUMENT_PART_3, B269-475-16-50-SP-8701, Rev.C, pg no.13 of 49, under clause no. 3.3.2, it is mentioned as, "Capacitor banks along with APFCR shall be indoor panel mounted type, installed in switchgear hall. Dry type series reactor, RVT installed inside panel shall be provided with the capacitor banks."  We presume that HV APFC System shall be with Indoor panel mounted Capacitor bank, Dry type reactor, RVT etc., inside the Switchgear Building. Kindly confirm.	Bidder to follow Job Spec. Electrical B269-475-16-50-SP-8701, Rev.C which is job specific attached with the Tender.
75	TENDERDOCUMENT_PART_2 B269-999-16-50-EDB-1001, Rev No. 0 Engineering Design Basis (Electrical)	5.6.16, Notes point no. 4)	38 of 49	Control cable shielded requirement	In the stated clause it is mentioned as, "Control cable shall be of multistranded conductor, twisted pair overall shielded, XLPE insulated type."  Where as in the TENDERDOCUMENT_PART_5, B269-999-16-50-DS-0426, Rev.D, pg no.2 of 2, under EIL notes, point no. 1 of COMMUNICATION & FIRE ALARM CABLE DATASHEET, it is mentioned as, "Control cable shall be of Multistranded conductor, twisted pair individual & overall shielded, XLPE insulated type".  Kindly clarify the requirement of control cable.	Bidder to note that the Control cable shall be of Multistranded conductor, twisted pair individual & overall shielded, XLPE insulated type. Kindly ignore any other control cable types mentioned anywhere in the Tender documents.
76	TENDERDOCUMENT_PART_6 6556-EPCC-6-P094-D0001-001, Rev No. 8 Equipment Layout of RO based DM & CPU	-	-	Electrical scope of work for the CPU loads in PNCP Complex area.	From the stated layout we observed that various pump/motor loads are marked in the different locations of the PNCP complex area.  We presume that power supply & other associated electrical works for the same is not in the contractor scope of work. Our scope of supply is limited to the pump/motors only. Kindly confirm.	Bidder to note that only Feeders for Contractor's supplied equipments shall be provided by Owner in the nearest Substation-10 (in the PNCP Area). Complete power supply & other associated electrical works for feeding CPU package loads in PNCP complex shall be Contractor's scope of supply & work.

**Name of Work** : RWTP, RO-DMP, CPU & ZLD Plant for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
**Bidding Document**: SG/B269-475-PA-T-8701/23

### **PRE-BID QUERIES (bidder-1)**

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	-	-	-	-	<p>The type of recirculation pump to be used for MEE system is not mentioned.</p> <p>As per our experience, axial flow type of recirculation pumps is used in MEE system.</p> <p>Hence, kindly confirm that axial flow pumps can be used for recirculation in MEE system.</p>	<p>Contractor to supply the proven pump for the offered service. The same may be considered subject to meeting the qualification requirements of the proposed type of pump in similar service and operating conditions.</p>

### **PRE-BID QUERIES (bidder-2)**

	General		Availability of Continuous Power supply		<p>We request to confirm the availability of continuous Power supply. In case if you envisage any power breakdown or black out, request customer to confirm the max Power blackout duration to plan any Emergency power requirement for the equipment.</p>	<p>No requirement of emergency power for process units is envisaged.</p> <p>Bidder to note that Emergency Power shall be made available from OWNER's 6.6kV</p>
--	---------	--	---	--	--	--

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						EMERGENCY SWITCHBOARD (backed by Emergency DG Set). Kindly refer Key Single Line Diagrams (B269-475-16-50-0001 & B269-475-16-50-0011) attached with Tender.
	B269-081-02-DS-1401	Page 2329 of 7166	HEAT EXCHANGER PROCESS DATA SHEET CPU (PNCP AREA)		<p>Kindly check and reconfirm the parameter(flow rate and temperature) of Feed/Polished condensate Heat exchanger and cooling water flow for Trim cooler for NEW CPU-PNCP Area.</p> <p>In normal case:- Primary side(Suspect Condensate) temperature mentioned 90° C at the inlet and 50° C at the outlet side. Secondary side(Polished condensate) inlet temperature mentioned 61.6° C at inlet and 93.6° C at outlet side. It is not possible to achieve 50° C at the outlet of primary side when we cool it by 61.6° C(inlet temperature of secondary side) and parallely it is not possible to achieve 93.6° C outlet at secondary side by heating it by 90° C (inlet temperature of primary side).</p> <p>Temperature achievable at the outlet of Primary Side(Suspect Condensate temp.) is always greater than of the inlet temperature of secondary side(61.6° C) and temperature achievable at the outlet of secondary side is always less than the inlet temperature of primary side(90° C). Please clarify.</p> <p>As per process requirement we have to bring down the temperature of the suspect condensate to 40° C at the outlet of trim cooler(heat exchanger). To meet the same we need to increase the quantity of cooling water in the trim cooler to keep Δt of cooling water unchanged. Please clarify the same.</p>	Revised exchanger data sheet shall be provided along with amendment.

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
					The same is applicable for the condition of "Check Case" of Heat exchanger of the NEW CPU-PNCP Area.	
	B269-475-16-43-SOW-8701 Rev. D	Page 962 of 7166	VMS	Bidder shall procure materials from EIL approved vendors as per the requirements of Piping Material Specification (PMS), Valve Material Specification (VMS), Piping design basis and PMS General notes.	VMS is not available in tender. Please provide the same.	Piping material specification and corresponding valve material specification which are generally applicable for P-25 complex shall be shared with successful bidder. For Piping material specification and valve material specification which are exclusive to the subject package as per approved P&IDs of package vendor, shall be developed by the package vendor and submitted for approval along with all required back-up calculations meeting the requirements of ASME B31.3.
	B269-475-17-44-DB-1001	pg 5-8/ 2.1.2.1-2.1.2.4			Complete feed analysis of missing parameters or the TDS break up to be provided for all inlet streams as TH,Ca,K,NO3,SO4,CL, NH4 etc as these will effect the ZLD design.	Please follow tender. The ionic breakup is not available, quality of RODM can be considered based on Cooling Tower blow

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
						down and treated raw water quality.
	PFD OF RO DM ZLD & P&ID of ZLD				There is ambiguity as in PFD it specified LP steam whereas as in PID as well as in datasheet it is mentioned MP steam. Kindly clarify as in what is to be considered for design of ZLD here.	MP steam shall be used in ZLDP
	B269-475-17-44-DB-1001	pg 6 2.1.2.3			In the ETP treated water analysis, the NH3-N has been mentioned as 15 ppm which is very high. All this high NH3, after passing through the scheme, will end up in ZLD distillate and hence it shall be not possible to guarantee TDS of 100 ppm as distillate quality. As per biological treated effluent, the NH3 values should be 1-2 ppm . Client is requested to recheck the same and confirm the analysis.	Please follow tender
	General				Please confirm location of MCC and PLC location for the CPU-PNCP AREA. Please mark location on the layout for better clarity.	Please follow tender
	General				Since CPU PNCP plant is already operational and hence can we use already laid electronic earthing for new CPU-PNCP plant.	Earthing in CPU package in PNCP shall be Contractor's scope of supply & work. Electronic earthing shall be done based on Instrumentation & control requirements and OEM's recommendation. Further, availability of existing electronic earthing (if any) at CPU-PNCP can be checked by Contractor during detail engineering.

**PRE-BID QUERIES (bidder-3)**

SL. No	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	TENDERDOCUMENT_PART_2	Section 2.1.2.3/ 984 of 7166	Treated ETP Effluent	Parameters Ammonia & TKN vales are mentioned ≤ 15 ppm for Ammonia & ≤ 40 ppm for TKN respectively.	<p>"Its is observed very less Ammonia and or TKN in aerobic treated effluent. Typical it will be in the range of 1 to 2 ppm as TKN. Most of Organic Nitrogen and Ammonia converts in to Nitrate in Aerobic Process. And finally in anoxic process Nitrate converts in to Nitrogen gas. We believe that the treated ETP effluent is also passing through the series of such anoxic and aerobic biological process.</p> <p>Kindly note that the given Ammonia and TKN values will change the design of the downstream system and also will change the cleaning frequency of the membrane filtration system.</p> <p>To design appropriate treatment system, request to customer to provide the precised values of parameters of Treated ETP Effluent. "</p>	Please follow tender.

FORMAT FOR BIDDERS' QUERIES (Commercial)						
WORK DETAILS : RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India						
BIDDING DOCUMENT : SG/B269-475-PA-T-8701/23						
NAME OF BIDDER : BIDDER-1						
Sl.No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		
1	TENDERDOCUMENT_PART_1 FORM OF BG IN LIEU OF EARNEST MONEY DEPOSIT	391 of 756 397 of 756 613 of 756	(1) in Bid Security (i) in Security Deposit (vi) in PROFORMA OF BANK GUARANTEE (ADVANCE)	<b>BID SECURITY (BANK GUARANTEE)</b> Open ended BG Auto renewal SL No.1 Form of Bank Guarantee in Lieu of Earnest Money Deposit  <b>SECURITY DEPOSIT</b> Open ended BG Auto renewal SL No.(i) Form of Bank Guarantee in Lieu of Security Deposit  <b>PROFORMA OF BANK GUARANTEE (ADVANCE)</b> Open ended BG Auto renewal SL No (vi) SPECIAL CONDITIONS OF CONTRACTANNEXURE – A-VI TO SCC ( ABG FORMAT)	We request that all the Bank Guarantee to only be renewed with consent of the contractor. Kindly Confirm	Not Acceptable. Follow the provisions of Tender Document.
2	TENDERDOCUMENT_PART_1 FORM OF BG IN LIEU OF EARNEST MONEY DEPOSIT  TENDERDOCUMENT_PART_1 FORM OF BG IN LIEU OF SECURITY DEPOSIT	392 of 756  396 of 756	SL No.7 Form of Bank Guarantee in Lieu of Earnest Money Deposit  SL No.(Vii) Form of Bank Guarantee in Lieu of Security Deposit	<b>BID SECURITY (BANK GUARANTEE)</b> <b>Postal Clause</b>  <b>SECURITY DEPOSIT</b> <b>Postal Clause</b>	In bid it is stated as "Without prejudice to any other mode of service, a demand or claim or other communication may be transmitted by the Corporation to the Bank either by post or by fax. If transmitted by fax, the transmission shall be complete as soon as acknowledged by the Bank."  In order to avoid conflict in future, we request you to modify as "Without prejudice to any other mode of service, a demand or claim or other communication may be transmitted by the Corporation to the Bank either by post or by fax. If transmitted by fax or Post, the transmission shall be complete as soon as received and acknowledged by the Bank on or before the claim date/expiry date."  Kindly Confirm.	Not Acceptable. Follow the provisions of Tender Document.
3	TENDERDOCUMENT_PART_1 SCC OF CONTRACT	444 of 756	SCC OF CONTRACT TENDERDOCUMENT_PART_1 6.1.2	<b>BG for Mobilisation advance to be given for its GST also</b>	Please restrict the BG value for advance amount excluding GST. Kindly Confirm	Not Acceptable. Follow the provisions of Tender Document.
4	TENDERDOCUMENT_PART_1 SCC OF CONTRACT	443 of 756	SCC OF CONTRACT TENDERDOCUMENT_PART_1 6.1.1	<b>Advance BG issued for value higher than the advance amount</b>	We request to make Advance Bank Guarantee value 100% of the amount paid as advance. Kindly Confirm	Not Acceptable. Follow the provisions of Tender Document.

SIGNATURE OF THE BIDDER :

WITH SEAL/STAMP

PRE-BID QUERIES (Bidder-1)						
NAME OF THE PROJECT			RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India			
Sl..No.	Bid Document Reference	Tender Notice Page No	Section or Clause Ref	Reference as per Tender	Bidder's Query	Client reply
	Technical					
1	SPECIFICATION FOR MEDIUM VOLTAGE SWITCHBOARD FIXED TYPE FOR PACKAGE EQUIPMENT Spec No.6-51-0012 Rev. 5	05 of 09	4.0 SITE CONDITIONS	Design ambient temperature of 40° C	Design ambient temperature of 40 deg C is mentioned in spec whereas 45 deg C is mentioned in data sheet. Please confirm correct Design ambient temperature	Bidder to Note that Equipment Design Temperature is 45 deg C as per Cl. 5.1 of Engg. Design Basis-Electrical (B269-999-16-50-EDB-1001). Kindly follow the same for Site Conditions and follow the tender document.
2	SPECIFICATION FOR MEDIUM VOLTAGE SWITCHBOARD FIXED TYPE FOR PACKAGE EQUIPMENT Spec No.6-51-0012 Rev. 5	05 of 09	5.0 DESIGN AND FABRICATION REQUIREMENTS	5.3 The switchgear shall be assembled out of vertical panels of uniform height not exceeding 2450 mm in a single line up.	The height of the switchgear panels shall be as per OEM standard design. Please confirm your acceptance.	Bidder to follow Tender Documents.
3	B26947516500001/Rev.B	-	6.6 KV HV PANEL-KEY SINGLE LINE DIAGRAM	Outgoing plant feeder (for owner)	Kindly provide load details of owner for our switchgear sizing calculation	Bidder to note that 'Outgoing plant feeder (for Owner)' is not required and stands 'Deleted' from the Tender scope. For Owner's other loads bidder to refer tender document/Technical Amendment
4	SPECIFICATION FOR ENERGY EFFICIENT MEDIUM VOLTAGE INDUCTION MOTORS Spec No.6-51-0064	04 of 12	1.0 - Scope	This specification covers the design, manufacture, testing, packing and supply of energy efficient-High efficiency (IE2/IE3 as specified in data sheet) three phase medium voltage squirrel cage induction motors.	Please clarify if Motor energy efficient shall be either IE2 or IE3.?	Bidder to note that Motor shall be IE3 as per cl. 4.0 (Specific Design Requirements, S. No. 24) of Engg. Design Basis-Electrical (B269-999-16-50-EDB-1001).
5	SPECIFICATION FOR ENERGY EFFICIENT MEDIUM VOLTAGE INDUCTION MOTORS Spec No.6-51-0064	04 of 12	4.2 - Frequency and Voltage Variations	The terminal voltage differing from its rated value by not more than + 6 %	We have considered +10% to -10% voltage variation as per standard practice & as given in motor data sheet. (doc.no.B269-999-16-50-DS-0502). Please confirm your acceptance.	Bidder to follow Cl. 5.6.10 of Engg. Design Basis-Electrical (B269-999-16-50-EDB-1001) for Motors.
6	SPECIFICATION FOR ENERGY EFFICIENT MEDIUM VOLTAGE INDUCTION MOTORS Spec No.6-51-0064	04 of 12	4.2 - Frequency and Voltage Variations	The frequency differing from its rated value by not more the + 3 %	We have considered +5% to -5% frequency variation as per standard engineering practice. Please confirm your acceptance.	Bidder to follow Cl. 5.6.10 of Engg. Design Basis-Electrical (B269-999-16-50-EDB-1001) for Motors.
7	SPECIFICATION FOR ENERGY EFFICIENT MEDIUM VOLTAGE INDUCTION MOTORS Spec No.6-51-0064	06 of 12	5.2 - Performance	Unless specified, the starting current (as % rated current) shall be as per IS 12615:2011, subject to IS tolerance	Please note that, the motor starting current is limited to 600% of FLC (Subject to IS tolerance) as per standard engineering practice. Please confirm your acceptance.	Noted. Bidder to follow Tender Documents.



8	SPECIFICATION FOR ENERGY EFFICIENT MEDIUM VOLTAGE INDUCTION MOTORS Spec No.6-51-0064	11 of 12	9.0 - Painting	Color shade of final paint shall be 632 of IS: 5/ RAL-7031.	Please note that, we have considered motor paint shade for RAL 7031 as per motor data sheet. (doc.no.B269-999-16-50-DS-0502). Please confirm your acceptance.	Bidder to note that colour shade of final paint shall be 632 of IS-5/ RAL-7031, & both are acceptable as per Tender Documents.
9	SPECIFICATION FOR HIGH VOLTAGE INDUCTION MOTORS Spec No.6-51-0031	05 of 17	4.2 - Frequency and Voltage variations.	The terminal voltage differing from its rated value by not more than + 6 %	We have considered +10% to -10% voltage variation as per standard practice & as given in motor data sheet. (doc.no.B269-999-16-50-DS-0451) . Please confirm your acceptance.	Bidder to follow Cl. 5.6.10 of Engg. Design Basis-Electrical (B269-999-16-50-EDB-1001) for Motors.
10	SPECIFICATION FOR HIGH VOLTAGE INDUCTION MOTORS Spec No.6-51-0031	05 of 17	4.2 - Frequency and Voltage variations.	The frequency differing from its rated value by not more the +/- 3 %	We have considered +5% to -5% frequency variation as per standard engineering practice. Please confirm your acceptance.	Bidder to follow Cl. 5.6.10 of Engg. Design Basis-Electrical (B269-999-16-50-EDB-1001) for Motors.
11	SPECIFICATION FOR HIGH VOLTAGE INDUCTION MOTORS Spec No.6-51-0031	16 of 17	12.0 - Painting	Color shade of final paint shall be 632 of IS: 5/ RAL-7035.	Please note that, we have considered motor paint shade for RAL 7031 as per motor data sheet. (doc.no.B269-999-16-50-DS-0451). Please confirm your acceptance.	Bidder to note that colour shade of final paint shall be 632 of IS-5/ RAL-7031, & both are acceptable as per Tender Documents.
12	SPECIFICATION FOR SMALL MV VARIABLE FREQUENCY DRIVE SYSTEM Spec No.6-51-0049	07 of 16	5.1.16 - Performance Requirement	Type test report for EMC compliance for VFD Panel shall be submitted by vendor.	Please note that, as per OEM recommendation Type test report for Electromagnetic Compatibility (EMC) compliance should be provided for VFD module only. Hence, Please confirm your acceptance.	Bidder to note that Type Test Reports shall be submitted by Vendor for complete VFD panel in line with the relevant IS/ IEC requirements w.r.t. EMC compliance. Bidder to follow Tender Documents.
13	SPECIFICATION FOR HV VARIABLE FREQUENCY DRIVE SYSTEM Spec No.6-51-0050	07 of 19	5.1.16 - Performance Requirement	Type test report for EMC compliance for VFD Panel shall be submitted by vendor.		
14	SPECIFICATION FOR MV VARIABLE FREQUENCY DRIVE SYSTEM Spec No. 6-51-0038	07 of 17	5.1.16 - Performance Requirement	Type test report for EMC compliance for VFD Panel shall be submitted by vendor		
15	SPECIFICATION FOR SOFT STARTERS FOR MOTORS Spec No. 6-51-0036	07 of 16	5.1.13 - Performance Requirement	All electronic devices including thyristors, transistors, diodes, IGBT, IGCT, IEGT, SGCT (as applicable) etc. shall be rated under operating conditions for approximately 200% of the maximum current carried by the device.	Please note that, as per OEM recommendation the Electronic device should be rated under operating condition for 150% of the maximum current carried by the device. Hence, please confirm your acceptance.	Bidder to follow Tender Documents.
16	SPECIFICATION FOR SOFT STARTERS FOR MOTORS Spec No. 6-51-0036	07 of 16	5.1.17 - Performance Requirement	Harmonics at the supply side of the soft starter system shall be restricted within the maximum allowable levels of current and voltage distortion as per recommendations in the latest edition of IEEE-519.	Please note that, as per OEM suggestion the Current & Voltage Harmonic distortion at supply & load side is not created by Soft Starter module. Since, this is only for switching mode operation and also limit the starting current & soft starting purpose . Moreover, the Harmonic distortion is only applicable for VFD module only. Hence, the same is not envisaged. Please confirm your acceptance.	Bidder to follow Tender Documents.
17	SPECIFICATION FOR SOFT STARTERS FOR MOTORS Spec No. 6-51-0036	08 of 16	5.3.3 - Panel Construction	The drive shall be suitably housed in sheet steel panels and shall be fabricated using Galvanised steel or any other material complying with EMC requirements.	Please note that, as per OEM recommendation, the Electromagnetic Compatibility (EMC) is only applicable for Soft Starter module only. Moreover, Panel Enclosure material is considered for sheet steel panels and shall be fabricated using Galvanised steel as per specification. Please confirm your acceptance.	Bidder to note that Type Test Reports shall be submitted by Vendor in line with the relevant IS/ IEC requirements w.r.t. EMC compliance. Bidder to follow Tender Documents.
18	SPECIFICATION FOR SOFT STARTERS FOR MOTORS Spec No. 6-51-0036	11 of 16	5.4.4 - Output filter	Soft starter output current waveform shall be inherently sinusoidal with harmonic limits as specified in this specification. Output filter shall be provided, if required.	Please note that, the Soft Starter does not produce Voltage & Current Harmonic at Source & Load side. Hence, the output filter is technically not required. Please confirm your acceptance.	Bidder to follow Tender Documents.

19	SPECIFICATION FOR SOFT STARTERS FOR MOTORS Spec No. 6-51-0036	11 of 16	5.4.5 - Bypass Feature	All necessary interlocks as required for safe and reliable operation of soft start system along with bypass feeder and output side isolator/breaker considered by Purchaser shall be provided in the soft start system.	Please note that, the isolation is being considered in the input side of individual Soft Starter with By-Pass arrangement module for maintenance & troubleshooting purpose. Hence, the output side isolator/breaker is not required. Hence, please confirm your acceptance.	Bidder to follow Tender Documents.
20	B269-999-16-50-EDB-1001 Engineering Design Basis (Electrical)	10 of 49	4.0 SPECIFIC DESIGN REQUIREMENTS	23, In all Substations/ MCC rooms, space for future extension of all GIS, HV Switchboards, PCCs, MCCs and ASBs shall be provided. Minimum space for two vertical panel extension on each side (for each Bus section) or four vertical panel extension space on one side (in exceptional cases) shall be provided	In all Substations/ MCC rooms, space for future extension of switchboards shall be provided as per clause 6.0 SUBSTATION / MCC ROOM DESIGN PHILOSOPHY. Please confirm your acceptance.	Bidder to follow Cl. 4.0 of Engg. Design Basis-Electrical (B269-999-16-50-EDB-1001) for specific design requirements. Further, EDB shall be read in conjunction with other requirements specified in 6-51-0099 and other documents attached with tender.
21	DESIGN PHILOSOPHY FOR ELECTRICAL FACILITIES Spec No. 6-51-0099 Rev. 7	25 of 32	6.0 SUBSTATION / MCC ROOM DESIGN PHILOSOPHY	6.16, In all Substations/ MCC rooms, space for future extension of switchboards shall be provided. One panel extension space on each side (for each Bus section) or two panel extension space on one side (in exceptional cases) shall be provided for all GIS, HV Switchboards, PCCs, MCCs, ASBs and LDBs. In addition, space for future extension of the substation/ MCC room building shall be considered, as specified in project design data sheet.		
22	Engineering Design Basis (Electrical) Doc No. B269-999-16-50-EDB-1001	26 of 49	5.4.4.1 Metering devices in EHV, HV and MV switchboards	8.) Digital multi-function meters shall be provided in incomers, buscoupler & outgoing breaker feeders (except motor feeders) for MV PCC with communication over RS-485 or fibre optic cable, preferably with IEC protocol. This shall be in addition to metering as part of numerical relays for energy management functions.  11) Digital multi-function meters with communication over RS-485 or fibre optic cable, preferably with IEC protocol shall be provided in incomers of UPS ACDB.	As per OEM standard, Digital multi-function meters with communication RS-485 and RJ45 Port. There is no requirement for fibre optic cable. Hence, please confirm your acceptance.	Noted. Bidder to follow Tender Documents.
23	Engineering Design Basis (Electrical) Doc No. B269-999-16-50-EDB-1001	30 of 49	5.6.2 HV SWITCHBOARD	Notes : - 5.) Double bus tie circuit breaker shall be provided in all HV Switchboards (6.6kV). Second buscoupler shall be without any kind of numerical relay and shall be provided with Electro mechanical type Trip circuit supervision relay. Status of second buscoupler shall be used in interlock of Auto changeover logic, which shall be implemented in the first buscoupler with numerical relay. There shall not be any feeder in between the both bus coupler.	The usage of Second buscoupler breaker is always (NC) Normally closed and is without numerical relay. Functionally, Single buscoupler breaker with numerical relay is generally used for FBT & auto change over effectively. Hence, we propose to follow single buscoupler circuit breaker at HV switchgear (6.6kV).  Please confirm your acceptance.	Deviations are not acceptable. Bidder to follow Tender Documents.
24	Engineering Design Basis (Electrical) Doc No. B269-999-16-50-EDB-1001	37 of 49	5.6.15 VARIABLE FREQUENCY DRIVE	2.1 MV Inverter ii) 690V for motor kW rating more than 315kW & up to 700kW	We propose the following motor voltage level for VFDs 2.1 MV Inverter ii) 415V / 690V for motor kW rating more than 315kW & up to 700kW  <u>Please confirm your acceptance</u>	Deviations are not acceptable. Bidder to follow Tender Documents.
25	Engineering Design Basis Document No. B269-999- 16-50-EDB-1001 Rev No. 0	39 of 49	5.7.2 CABLE LAYING PHILOSOPHY	-	Cable laying philosophy for cable trays shall be as per follows Top trays shall be Instrumentation / control cables Next shall be LT Power cables Lower most shall be HT power cables.	Instrumentation cables shall not be clubbed with Electrical cables. Bidder to follow Tender Documents.

26	Engineering Design Basis Document No. B269-999- 16-50-EDB-1001 Rev No. 0	39 of 49	5.7.2 CABLE LAYING PHILOSOPHY	1 Process area RCC trench, sand filled without racks 2 Offsite paved area Above Ground cable tray on sleeper 3 Offsite unpaved area Above Ground cable tray/Directly buried	1 Process Plant building inside / out door process tank within the dyke / area within the shed / are included in Process area. 2 Area leading to above cited locations (which are paved) are Offsite paved area 3 Area leading to above cited locations (which are unpaved) are Offsite unpaved area Please confirm your acceptance of our understanding of paved area and other areas.	Regarding paved and unpaved areas, RCC Pavement shall be provided for all area within battery limit.Refer Note No 7 of scope Drawing B269-475-81-41-14561 Rev.B and Drawing B269-475-81-41-14562 Rev.B. For cable laying philosophy in paved and unpaved areas, Bidder to follow tender/Technical Amendment.
27	Engineering Design Basis (Electrical) Document No. B269-999-16-50-EDB-1001 Rev No. 0	39 of 49	5.7.1 CABLE DETAILS	5.7.1 CABLE DETAILS NOTES 4) MV Busduct shall be Phase insulated Sandwich type.	MV Busduct shall be Phase insulated Sandwich type / Conventional type Please confirm your acceptance	Bidder to note that as per cl. 3.4.3 of Job Specification-Electrical (B269-475-16-50-SP-8701) attached with Tender, Note-4 of EDB Doc. No. B269-999-16-50-EDB-1001 (page 39 of 49) stands deleted and is replaced by following:  "Non segregated phase air insulated type MV bus duct shall be provided in place of sandwich type busduct."  Also, Please read the same as "Non segregated phase air insulated type" in MV Busduct Datasheet Doc. No. B269-999-16-50-DS-0103 attached with Tender.
28	JOB SPECIFICATION (Electrical) Doc. No. : B269-475-16-50-SP-8701	21 of 49	3.7 MV SWITCHBOARD	3.7.5 Limiting maximum rating of PMCC/EPMCC shall be 4000A and fault level limited to 65kA for 1 sec.	The fault level at PMCC/EPMCC can be sized within the limit of 50kA by providing the transformer's Impedance as 10%. Hence, please confirm your acceptance	Deviation is not acceptable. Bidder to follow cl. 2.2 "Fault Level Selection" of Job Specification-Electrical (B269-475-16-50-SP-8701) attached with Tender for HV & MV system.

### PRE-BID QUERIES

RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
Tender No. SG/B269-475-PA-T-8701/23

Date: 12-04-2022

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	EIL response
1	Special Conditions of contract	ANNEXURE A-XIX LIST OF FREE ISSUE MATERIAL Page 728 of 7166	Free Issue of O&M chemicals	ACID AND CAUSTIC	<p>The Inlet Parameters to RO DM PLANT are not specified in tender and bidder needs to extrapolate the parameters with several streams of inlet water Including CTBD outlet and accordingly Design process and chemicals required. We Understand the assessment of Chemical consumption will be different based on assumptions on inlet parameters by different bidders and actual consumption may be very different during execution. Hence considering this chemicals as a bid parameter will lead to significant disparity in costs of different bidders and will lead to incorrect Cost evaluation. Hence in this regard we request you to provide the following chemicals as free issue.</p> <p>1) Lime 2) Soda ash</p>	Please follow tender

PRE-BID QUERIES REPLY							
NAME OF THE PROJECT			RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India				
NAME OF THE CONSULTANT			Engineers India Limited				
CLIENT			INDIAN OIL CORPORATION LIMITED				
Sl..No.	Bid Document Reference	Tender Notice Page No	Section or Clause Ref	Reference as per Tender	Bidder's Query	Client reply	
	Process						
1	Tender document_part_4, Engineering Design Basis Static & Machinery (Rotating Equipment)	57 of 700 (or) 1513 of 7166	2.2 Codes & Standards/Publications  Note-2	Typical areas of applications are non-process services & utility services such as De-mineralised Water(DMW) plants, Raw water Treatment Plant (RWTP), Effluent Treatment Plant(ETP),Blow -down services etc.	We understand that De-mineralised Water (DMW) plants, Raw water Treatment Plant (RWTP), Effluent Treatment Plant (ETP), Blow -down services, RO-DM Plant, CPU & CPU-PNCP etc.fall under non-process services & utility services. Please confirm.	Follow Tender requirement	
2	Tender document_part_2, Engineering Design Basis Electrical	282 of 457 (or) 1038 of 7166	5.7.2 Cable Laying Philosophy	1. Process Area - RCC trench, sand filled without racks  2. Offsite paved area - Above Ground cable tray on sleeper  3.Offsite unpaved area - Offsite unpaved area	We understand that De-mineralised Water (DMW) plants, Raw water Treatment Plant (RWTP), Effluent Treatment Plant (ETP), Blow -down services, RO-DM Plant, CPU & CPU-PNCP etc. falls under Offsite paved area. Please confirm.	This PBQ is already replied as per BGR Query Sl. No. 26 of "Pre Bid Queries-IOCL-Panipat-S2".	
3	B269RODMPTechnical Amendment01	109 of 277 (or) 11 of 56	3.1.2 Mode of Plant operation	For RWPT - CR-122  For RO-DM/CPU & ZLD - CR 112	We understand that CR-122 , CR-112 doesn't fall under the category of SRR. Kindly confirm whether the bidder understanding is correct.	As per referred document, for RWPT - CR-122 and for RODM/CPU/ZLDP - CR 112 are dedicated control room not SRR.	
4	B269RODMPTechnical Amendment01	109 of 277 (or) 11 of 56	3.1.2 Mode of Plant operation	For RWPT - CR-122  For RO-DM/CPU & ZLD - CR 112	We understand that CR-112 and CR-122 Building shall not be blast resistant structure designed as per OISD-STD 163. Kindly confirm.	Bidder understanding is correct. However, the building shall be positive pressurized and designed as per Tender Specifications	

**Name of Work** : Effluent Treatment Plant (ETP) for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
**Bidding Document**: SG/B269-487-PC-T-8702/1018

### **PRE-BID QUERIES LOT-5**

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY	Bidder's further query	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT				
1	Engineering Design Basis (Instrumentation) Doc. No. B269-999-16-51-EDB-1001 Rev.2	1446 /533 5	4.5.4		<p>It is indicated under this clause that "In general ball type valves shall be used for shutdown unless any other type specifically required for the application. For line sizes 20" and above triple offset butterfly valves with double flange design shall be used.</p> <p>1. Kindly note that Detailed P&amp;ID is provided in tender documents indicating type of On-Off valves as per EIL process requirement.</p> <p>From above we understand that the type of valve Ball/Butterfly shall be followed as per tender P&amp;ID.</p> <p><b>Kindly confirm</b></p> <p>2. The On- Off valve shall have following specifications.</p> <p>Ball Valve type</p> <p>(a) Body &amp; Flange rating – 300# Min or as per relevant pipe class whichever is higher.</p> <p>(b) Body Material as per relevant pipe class.</p> <p>(c) Ball material – SS316</p> <p>(d) Seat Material – PTFE</p> <p>Butterfly Valve type</p> <p>(a) Body rating – 300# Min or as per relevant pipe</p>	<p>Sr. No. 1 &amp; 2: For Ball &amp; Butterfly valve follow MR requirement.</p> <p>S. No. 3</p> <p>Refer Notes in P &amp; ID B269-487-17-44-1111 attached with TA-02</p>	<p>In the referred P &amp; ID following is indicated in Note no. 33</p> <p>"For Auto On Off valves EDB B260-999-16-51-EDB-1001 shall be followed."</p> <p>In EDB B260-999-16-51-EDB-1001 clause no. 4.5.4 "On Off valves" specifies use of Ball valves for shutdown valves.</p> <p>We would like to submit that on off valves used in ETP in refineries are process isolation valves and NOT shutdown valves. Therefore in all EIL's ETP projects On Off Ball valves are used only upto 4" size and for sizes above 4", Double eccentric Butterfly valves with lugged end design are used.</p>	<p>For on-off application Ball valve shall be used for size upto 20",</p>

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY	Bidder's further query	
					<p>class whichever is higher</p> <p>(b) End Connection – Lugged</p> <p>(c) Design --- Double Offset design</p> <p>(d) Body material – as per relevant pipe class</p> <p>(e) Disc Material – SS316</p> <p>(f) Seat Material – PTFE</p> <p><b>Kindly confirm.</b></p> <p><b>3.</b> Further we would like to inform that in P &amp; ID at some places On Off valve type has been depicted as Gate valve. However since On Off valves are mainly available as either Ball or Butterfly valve, for places where On - Off Gate valve has been depicted, we will consider On Off Butterfly valve with above specifications.</p> <p><b>Kindly confirm</b></p>		<p>We request you to review the above and kindly allow us use of Double eccentric lugged end design butterfly valves for size 6” and above</p>	

**Name of Work** : RWTP, RO-DMP, CPU & ZLD Plant for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
**Bidding Document:** SG/B269-475-PA-T-8701/23

## PRE-BID QUERIES

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY	Further Query	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT				
2	JOB SPECIFICATIONS (INSTRUMENTATION) Doc. No. B269-475-16-51-SP-8701 Rev. F	1340/7166	2.4.3		<p>It is indicated under this clause that “<b>Redundant</b> PLC control system with all the following modules (cards) and network components <b>as being redundant</b>:</p> <p>a. PLC Processor (CPU) and Communication Processor</p> <p>b. Processor power supply, IO rack power supply &amp; IOs Bulk Power Supply (BPS),</p> <p>c. Serial communication (Modbus) module.</p> <p>d. IO cards / modules (all closed loops, controls, logics, interlocks, safety, shutdown signals).</p> <p>e. PLC network and its components (switches).</p> <p>We understand as below.</p> <p>(i) The PLC system required is General purpose (NOT SIL Certified) with redundancy as specified in this clause.</p> <p>(ii) IO Cards for Monitoring shall be Non Redundant.</p> <p>(iii) Analog IO cards are NOT required with HART Pass through feature and IAMS (Instrument Asset Management system software) is also NOT required.</p> <p>Please confirm our understanding.</p>	<p>It has been clarified as below for point No.(iii) “Noted. Refer clause 3.3.9 of Instrumentation design basis Doc. No. B269-999-16-51-EDB-1001</p>	<p>Please note that as per clause 3.3.9 sr.1 of Instrumentation Design Basis, Asset management system is required and as per note For package PLCs interfaced through MUX and dual Input barriers in PLC.</p> <p>Generally the requirement specified in Instrument Design Basis is for Overall Project. Requirements pertaining to specific package are generally specified in Job Specification. However the requirement of Asset management system has NOT been specified in Job Specification .</p> <p>In view of above, please clarify following</p> <p>(i) Whether for the PLC system of ETP, Asset Management system software to be considered or NOT.</p> <p>(ii) Whether the HART</p>	<p>(i) Asset management System is not required for ETP PLC.</p> <p>(ii) Not Required.</p>



SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY		
							signals to be interfaced through MUX and dual Input barriers in PLC	
24	Engineering Design Basis (Instrumentation) Doc. No. B269-999-16-51-EDB-1001 Rev No. 3	3062/7 166	4.5.4		<p>It is indicated under this clause that "In general ball type valves shall be used for shutdown unless any other type specifically required for the application. For line sizes 20" and above triple offset butterfly valves with double flange design shall be used.</p> <p>1. Kindly note that Detailed P&amp;ID is provided in tender documents indicating type of On-Off valves as per EIL process requirement.</p> <p>From above we understand that the type of valve Ball/Butterfly shall be followed as per tender P&amp;ID.</p> <p><b>Kindly confirm</b></p> <p>2. The On- Off valve shall have following specifications.</p> <p>Ball Valve type</p> <p>(a) Body &amp; Flange rating – 300# Min or as per relevant pipe class whichever is higher.</p> <p>(b) Body Material as per relevant pipe class.</p> <p>(c) Ball material – SS316</p> <p>(d) Seat Material – PTFE</p> <p>Butterfly Valve type</p> <p>(a) Body rating – 300# Min or as per relevant pipe class whichever is higher</p> <p>(b) End Connection – Lugged</p> <p>(c) Design --- Double Offset design</p> <p>(d) Body material – as per relevant pipe class</p> <p>(e) Disc Material – SS316</p>	<p><b>Sr. No. 1 &amp; 2: For Ball &amp; Butterfly valve follow MR requirement.</b></p> <p><b>S. No. 3 Auto on off valves shall be as per Instrumentation EDB B260-999-16-51-EDB-1001</b></p>	<p>In EDB B260-999-16-51-EDB-1001 clause no. 4.5.4 "On Off valves" specifies use of Ball valves for shutdown valves.</p> <p>We would like to submit that on off valves used in ETP in refineries are process isolation valves and NOT shutdown valves. Therefore in all EIL's ETP projects On Off Ball valves are used only upto 4" size and for sizes above 4", Double eccentric Butterfly valves with lugged end design are used.</p> <p>We request you to review the above and kindly allow us use of Double eccentric lugged end design butterfly valves for size 6" and above</p>	<p>On-Off valves shall be ball type for size below 20" and triple offset butterfly valves with double flange design shall be used for size 20" and above.</p>

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY		
					<p>(f) Seat Material – PTFE</p> <p><b>Kindly confirm.</b></p> <p>3. Further we would like to inform that in P &amp; ID at some places On Off valve type has been depicted as Gate valve. However since On Off valves are mainly available as either Ball or Butterfly valve, for places where On - Off Gate valve has been depicted, we will consider On Off Butterfly valve with above specifications.</p> <p><b>Kindly confirm</b></p>			

**PRE-BID QUERIES**

RWTP, RO-DMP, CPU & ZLD PLANT for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India  
Tender No. SG/B269-475-PA-T-8701/23

Date: 11-04-2022

S.No.	Document Reference	Clause Number/Page No.	Title	As per Clause	Query	Reply
1	Special Conditions of contract	Clause no 8 Page no 459 of 7166 - Tender document _part 1	Price Variation	The price variation shall be applicable on basic supply price of bulk steel material for site fabrication/construction for permanent incorporation in work e.g. Structural steel, Reinforcement bars, Steel Gratings, CS Plates, MS anchor bolts, MS insert platesand chequered plate only	The amount payable to the Contractor and valued at base rates and prices hereof shall be adjusted in respect of the rise or fall in the indexed costs for labour, Contractor's Equipment and plant, materials and other inputs to the Works, by the addition or subtraction of the amounts determined by the formulae prescribed by Client and aslo the present clause for price variation is restricted to steel components only, So we request you to allow price variation for all compnents of the project in order to mitigatethe risk of uncertainty in the prices.	Not Acceptable. Bidder to follow the provisions of Tender Document.

**CORRIGENDUM No. 2****NOTICE INVITING e-TENDER**

FOR PANIPAT REFINERY EXPANSION PROJECT (P25)  
OF M/s INDIAN OIL CORPORATION LIMITED (IOCL), INDIA  
**(DOMESTIC COMPETITIVE BIDDING)**  
**(E-Tendering)**

The availability of Tender Document on website and Bid submission Due Date of above e-Tender stands revised as given below:

**TENDER DOCUMENT NO.: SG/B269-475-PA-T-8701/23**

<b>Name of Work</b>	<b>Tender download schedule</b>	<b>Last date of submission of tender</b>
<b>RWTP, RO-DMP, CPU &amp; ZLD PLANT</b>	From <b>20-01-2022 upto 1400 Hrs. IST on 06-04-2022</b>	Up to <b>1400 Hrs. IST on 06-04-2022</b>

Tender documents can be downloaded free of charge from the website <https://iocletenders.nic.in> during the above period.

Offer must be uploaded on e-tender website <https://iocletenders.nic.in> before the last date & time of submission of tender. Offer submitted using any other mode will not be accepted.

Sr. General Manager (SCM)  
Engineers India Limited, Gurugram

BID DUE DATE EXTENSION

BID DUE DATE EXTENSION

Extend bid submission start date

Extend bid submission start date



**CORRIGENDUM No. 1****NOTICE INVITING e-TENDER**

FOR PANIPAT REFINERY EXPANSION PROJECT (P25)  
OF M/s INDIAN OIL CORPORATION LIMITED (IOCL), INDIA  
**(DOMESTIC COMPETITIVE BIDDING)**  
**(E-Tendering)**

The availability of Tender Document on website and Bid submission Due Date of above e-Tender stands revised as given below:

**TENDER DOCUMENT NO.: SG/B269-475-PA-T-8701/23**

<b>Name of Work</b>	<b>Tender download schedule</b>	<b>Start date of submission of Bid/ Offer</b>	<b>Last date of submission of tender</b>
<b>RWTP, RO-DMP, CPU &amp; ZLD PLANT</b>	From <b>20-01-2022</b> upto <b>1400 Hrs. IST</b> on <b>16-03-2022</b>	From <b>1400 Hrs. IST</b> on <b>09-03-2022</b>	Up to <b>1400 Hrs. IST</b> on <b>16-03-2022</b>

Tender documents can be downloaded free of charge from the website <https://iocletenders.nic.in> during the above period.

Offer must be uploaded on e-tender website <https://iocletenders.nic.in> before the last date & time of submission of tender. Offer submitted using any other mode will not be accepted.

Sr. General Manager (SCM)  
Engineers India Limited, Gurugram