Reply to Queries of BHEL
On Bid Document for RMU of Umiam Umtru Stage-III Project

Sl. No.	BHEL's Queries	Reply of MePGCL
Commercial Queries:		
1	Kindly arrange to provide the editable copy of Tender Documents (i.e. Section-IV- Bidding Forms).	Cannot be entertained.
2	All major & minor Civil Works (including the civil work of excavation/back filling, if any) are excluded from the scope of E&M bidder. Please confirm.	Wherever some civil works are required for completion of E & M works, provision for the same should be kept in the bid.
3	We request M/s MePGCL to provide point wise reply to all pre-bid queries.	Yes, as far as practicable.
4	We understand that Bid Document i.e. Tender documents alongwith Corrigendum's/ Clarifications/ Replies, issued by M/s MePGCL, after the Pre bid meeting are not required to be submitted along with the Bid. Please confirm our understanding.	Yes, those are required to be submitted along with the bid.
5	We request MePGCL to provide transport limits of heavy consignment in respect of weight, length, width & height.	The bidder shall assess such informations before sending the consignments.
6	In case of requirement of Road Permit for supply of goods including BOIs / DD items in State, the same shall be provided by M/s MePGCL. Any document required for transportation of equipment/material envisaged in the tender (subsequently contract) under GST regime shall be provided by M/s MePGCL during execution. Please confirm.	MePGCL shall provide required documents, after receipt of necessary documents from the Contractor.
7	We request M/s MePGCL to provide at least 6 - 8 weeks' time for bid submission after issue of pre-bid replies.	Last date for submission of bids already extended. Further extension may not be possible.

8	We request MePGCL to accept Bid Security Declaration instead of Bank Guarantee as Bid security. The above provision is accepted by other utilities such as NHPC, SJVN Ltd. Kindly confirm.	The bid document is final and no modification will be entertained.
9	1. The format of Power of Attorney is not available in tender document. We understand that Bidder is to submit Power of Attorney in their own format. 2. We understand that Power of attorney has to be Notarized. Kindly confirm.	As per bid document.
10 11	With reference to Govt. of India, Ministry of Finance vide Office Memorandum No F.9/4/2020-PPD dated 12.11.2020 and 30.12.2021 decided to reduce Performance Security from existing 5-10% to 3% of the value of the contract for all existing contracts…. …Further, all tenders/ contracts issued/ concluded till 31.03.2023 should also have the provision of reduced Performance Security. In view of above we request MePGCL to kindly modify the clause accordingly.	The bid document is final and no modification will be entertained.
12 13	M/s MePGCL is requested not to ask for additional Bank Guarantee, instead kindly provide provision in contract to reduce the value of existing performance BG for value of part of the facility for which Defects Liability Period has been extended pursuant to Clause no. 27.0 of GCC. Kindly confirm.	The bid document is final and no modification will be entertained.
14	Please specify validity period of Performance Security.	Details are provided in the bid document.
15	It may happen that contract completes its obligation under the contract before the validity of the given security expires. In that case, we request M/s MePGCL to return the Security to the Contractor immediately within 7 Days or after its expiration, whichever is earlier.	The bid document stands.
16	We request M/s MePGCL to modify the clause as: Applicant bank charges shall be to Applicant's account and Beneficiary bank charges shall be to Beneficiary’s account.	The bid document is final and no modification will be entertained.
17 18	Kindly review the requirement Performance Security Bank Guarantee and issue amendment.	The bid document is final and no modification will be entertained.
19	We understand that 10% initial advance is Interest free.	As per bid document.

20	It is understood that cash flow is the essence of execution of contract. Timely payment of bills to contractor will assist in further timely payments to its sub-contractors and therefore smooth execution of project. The clause does not compensate the contractor for the delays caused by Employer in processing of payment bills of contractor. Hence we request to modify the clause as follows: ……within ***Twenty-One (21) Calendar days*** after receipt of invoice and documents. …In the event that the Employer fails to make any payment on its respective due date, the Employer shall pay the principle amount plus simple interest from the date immediately following the date agreed upon @8% per year.	The bid document is final and no modification will be entertained.
21	We understand that while making this payment of 80%: 1. 100% Taxes and Duties including GST shall be reimbursed at actuals as applicable at this stage. 2. 100% Price Adjustment along with 100% Taxes and Duties including GST shall be paid at actuals as applicable at this stage.	As per bid document.
22	It may happen that, Price Adjustment amount claimed by contractor and processed by employer has a difference. So, keeping in view, contractor will provide Proof/undertaking towards payment of GST deposited by contractor to concerned Taxation Authorities against the amount of price adjustment paid by Employer. Kindly confirm above.	As per bid document.
23	We understand that during the contractual period, there will be no ceiling on Price Adjustment available in contract.	As per bid document.
24	We understand that all types of Taxes & Duties shall be reimbursed by the employer to the contractor. Please provide separate schedule for providing details towards Taxes and Duties that have been considered by the contractor in their bid as of twenty-eight (28) days prior to the deadline for submission of Bids.	As per bid document.
25	We submit that no payment procedure is available for Schedule No. 2 & 3 in subject tender. Kindly provide.	As per bid document.
26	Please provide the format of "*No Liability Certificate (22 point proforma)".*	These Formats shall be issued to the Firm, after award of contract, as and when required.

<table>
<tr><td>27</td><td>Please provide the format of “Proforma-II” & “Proforma-III”.</td><td>These Formats shall be issued to the Firm, after award of contract, as and when required.</td></tr>
<tr><td>28</td><td>We understand that, for Ten percent (10%) advance payment under Schedule-2, 3 & 4, contractor can submit only one advance payment security for the equivalent amount in the form of Bank Guarantee made out in favor of the Employer with validity upto completion of E&M Works as per Time Schedule (Appendix-4).
Kindly confirm.</td><td>As per bid document.</td></tr>
<tr><td rowspan="4">29</td><td colspan="3">S1. Functional Guarantee Parameters</td><td rowspan="4">As per bid document.</td></tr>
<tr><td></td><td>Minimum Requirement</td><td>Acceptable Requirement</td><td rowspan="4">We understand that there are no loading in prices while evaluating the prices. Please confirm our understanding.</td></tr>
<tr><td>1. Efficiency of Turbines at rated head</td><td>93%</td><td>92%</td></tr>
<tr><td>2. Efficiency of Generators at rated conditions</td><td>98%</td><td>97%</td></tr>
<tr><td>3. Efficiency of Power Transformers</td><td>99%</td><td>98%</td></tr>
<tr><td>30</td><td>M/s MePGCL is requested to provide construction water as well as potable drinking water for the use of the Contractor’s Personnel free of cost. Kindly confirm:</td><td>The bid document is final and no modification will be entertained.</td></tr>
<tr><td>31</td><td>M/s MePGCL is requested to provide construction power free of cost. Kindly confirm</td><td>The bid document is final and no modification will be entertained.</td></tr>
<tr><td>32</td><td>We request MePGCL to confirm that the contract price shall be without GST and any other Taxes & Duties.

Kindly confirm.</td><td>The bid document is final and no modification will be entertained.</td></tr>
<tr><td>33</td><td>1) As a central PSU, BHEL procures equipment from vendors who are approved by BHEL through an internal process. These vendors are selected by BHEL through a rigorous evaluation process. BHEL proposes to procure BOP packages and other equipment / material from the standard vendor list of BHEL.</td><td>Irrelevant query, as it is a request to M/s. NHPC.</td></tr>
</table>

	Further BHEL procures equipment / material through an established tendering procedure. As the supply of E&M works will involve a large number of items, vendor approval for all items will not be practical and will delay the process of procurement / execution. We therefore request you to agree for procurement of equipment / material from our standard vendor list. 2) We submit that according to recent directives from the Government of India, procurements shall be done through Government E-market place (GeM) portal and all procurements by BHEL (a CPSU) of value below Rs. 200 Crs. shall be made from Indian supplier. Also, for purchase from vendor from abroad (outside India), approval is required from Govt. of India for each case. Also as per Make in India Policy, procurement is to be done from Indian Class-1 supplier. Accordingly, the vendors/ subcontractors shall be dealt during execution based on policy/ guidelines of Govt. of India. We request M/s NHPC to kindly accept and confirm above.	
34	We understand the documents are required to be submitted for claiming payments. However, we request M/s MePGCL that except advance payment of 10%, under each schedule, **For 80% payment (90% payment if no advance is taken),** payments shall be arranged through irrevocable Letter of Credit opened in a designated Bank (Issuing bank), which shall make payments to the Contractor upon presentation of documents against conditions specified in the Letter of Credit to the Negotiation bank of the Contractor.	The bid document is final and no modification will be entertained.
35	Documents required for making the above **80% payment (90% payment if no advance is taken)** to contractor shall be – **A**. For each partial shipment (CIP or EXW) under Price Schedule 1, 2 & 3 following clean documents in triplicate shall be presented to the Negotiating bank. All documents must indicate L/C Number *(Applicable for despatch of materials only)*. (i) Original Invoice (ii) Clean on board Bill of Lading / AWB (for Off- shore supply) Or RR/LR/GR (for on-shore supply). (iii) Insurance Declaration (iv) Material Despatch Clearance Certificates for CHP (Customer hold point) items or BHEL certification for Non-CHP Items (v) Packing list (vi) Certificate of Origin of Goods issued by chamber of commerce of that country or any other authorised organization (in case of Foreign Origin).	The bid document is final and no modification will be entertained.

36	We understand that e-Reverse Auction will not be conducted for this tender.	Not mentioned in the bid document.
37	We request M/s MePGCl to provide provision to compensate contractor (i.e Idling Time Cost Claims) in view of delays in execution of contract from original completion period This provision is available in other E&M Tender floated by other utilities (i.e. NHPC).	The bid document is final and no modification will be entertained.
38	We request MePGCL to provide training requirement of Employer's personnel.	As per bid document.
39	In case liquidated damages are levied on Contractor, all applicable taxes & duties including GST on liquidated damaged shall be to M/s MePGCL' s account. In case of termination / cancellation of contract, all applicable taxes & duties including GST on account of termination / cancellation of contract shall be to M/s MePGCL' s account.	The bid document is final and no modification will be entertained.
40	The rate at which liquidated damages is to be computed is very much on the higher side. Generally, for other E&M Tender the rate at which liquidated damages are calculated are as: - 0.015% per 1-week delay of delayed portion of contract price - Maximum deduction for liquidated damages: 5% of delayed portion of Contract Price. We request M/s MePGCL to kindly review & amend accordingly.	The bid document is final and no modification will be entertained.
41	Construction, Upgradation and maintenance of all roads till project site and within the E&M Contractor's acquired area/storage area shall be the Employer's responsibility. Please confirm. Further, we request MePGCL to provide possession and access to work areas and ensure proper access to site.	The bidder shall assess such informations before sending the consignments.
42	In the event that the project is delayed beyond the original contract completion period, MePGCL shall take over the spares supplied for the project. Please confirm.	The relevant clauses are self-explanatory.
43	Kindly confirm that the ownership of surplus material vest with Employer, which upon completion of works may subsequently be transferred to BHEL (E&M Contractor) free of cost. Further, BHEL is free to dispose-off the packing material.	The relevant clauses are self-explanatory
44	In case of delays due to Unforeseen Conditions for a prolonged period of more than 180 days, the contract price of project will be revised after review & mutual discussions. Please confirm.	The relevant clauses are self-explanatory
45	We understand that price adjustment shall be payable for supply & services during the extended period beyond the original contract completion period provided by Employer.	The relevant clauses are self-explanatory

46	In case of such opportunities, Employer shall ensure that the work of the E&M Contractor is not hampered or put on halt. If so happens during execution stage, we request M/s MePGCL that the E&M contractor shall be suitability compensated alongwith time extension of completion of E&M works. Kindly confirm.	The relevant clauses are self-explanatory
47	We understand that, the date of exchange rate shall be the date of deadline for bid submission and any extension thereof.	The relevant clauses are self-explanatory
48	We note the requirement of use of documents, forwarded by Contractor for the project during execution of Contract, for O&M by Employer. However MePGCL is requested not to pass on these documents (provided by Contractor to Employer) to any third party.	The relevant clauses are self-explanatory
49	We request MePGCL to exclude the requirement mentioned under Watching & Lighting from E&M Contractor scope.	The bid document is final and no modification will be entertained.
50	We understand that during the execution stage, If any test required by Employer but not covered under the contract, applicable charges shall be paid extra.	The relevant clauses are self-explanatory
51	The rate of liquidated damages mentioned under this clause is high. We request MePGCL to kindly review & amend the same.	The bid document is final and no modification will be entertained.
Technical Queries:		
1	We understand that here “Testing” means “Pressure Testing of Spiral Casing”. Request MePGCL to review above & confirm our understanding.	As per the bid document.
2	We understand that Draft Tube Liners are embedded in concrete and are to be replaced in both Unit # 1 & 2. Request MePGCL to review above & confirm our understanding.	As per the bid document.
3	We understand that HP Compressor is for Synchronous Condenser purpose for both U# 1 & 2. Request MePGCL to review above & confirm our understanding.	As per the bid document.
4	We request M/s MePGCL to provide type of Overhauling work to be carried out on Main tank, brake and service tank.	As per the bid document.

5	We understand that before commencement of dismantling work in 1st Generating Unit, EOT Crane, Drainage & De-Watering Systems, Hoists are to be made ready for de-watering of Water Path and pumping out of leakage water, dismantling and E&C work. In view of above, in the time schedule, 6(six) months should be allocated for these Dismantling and E&C of these common / station auxiliaries before Commencement of Construction of 1st generating Unit.	Bar chart given in the bid document shall stand.
6	We understand that, M/s MePGCL will: 1. Arrange Dewatering of Spiral Casing, Draft Tube and relevant areas. Kindly Confirm. 2. In case, during De-watering of Draft Tube and Spiral Casing, if sealing of Draft Tube Gate is required for which Divers might be deployed, M/s MePGCL will arrange the same. 3. During Erection Stage De-Watering Pumps may be required to be run time to time. M/s MePGCL will operate the same with their Shift workers. Kindly confirm above.	The scope of work will be with the bidder.
7	We understand that, M/s MePGCL will provide power supply required during Testing and Commissioning of plant, at free of cost. Kindly confirm.	The bid document is final and no modification will be entertained.
8	Kindly clarify how the Pressure Shaft, Penstock including Head Race Tunnel shall be dewatered for commencement of Dismantling & Erection Work at Power House as well as at Penstock Valve House. 1. Whether or not M/s MePGCL will be responsible for the same De-watering of water path. Whether or not there is any EOT crane is there in Penstock Valve House. If yes, please specify the kind work that is to be carried out there?	It will be the responsibility of the Contractor to plan and execute various works required for the Project.
9	We request M/s MePGCL to clarify following: 1. Provide spare existing Close Storage Shed to the Contractor, free of cost. 2. If charges applicable, kindly confirm the rate of lease of land to be given to Contractor. 3. On the leased land, if any storage structure etc. is built-up, at the end of project, under what condition, the land is to be returned.	Please refer Appendix 6, Vol I of the bid document.
10	We request M/s MePGCL to clarify following about handing over of dismantled scrap components for Turbine, Generator, Unit and Common and Station Auxiliaries etc.: 1. Whether or not any closed store shed and open storage yard are identified for scarp materials. 2. How far the store and yard is located from Power House and Penstock Valve House. 3. What would be the mode of disposal of Bearing, Lubrication and Hydraulic System Oil? We understand that MePGCL shall provide container to keep them free of cost?	As per the bid document.

	4. Whether or not M/s MePGCL will arrange security and Material Management Person to receive and protect the disposed machine components at the Disposal Store and Yard. Shall there be any reconciliation for disposed material? 5. Shall there be any reconciliation for disposed material?	
11	We request M/s MePGCL to clarify following 1. In case, any defect is detected in embedded sole plates & foundation bolts/studs of generator, lower/ bottom bracket etc. how they would be covered in the scope of this contract? 2. We understand that for efficiency test, embedded tubes & pipes are already there from draft tube and spiral casing. Kindly confirm whether or not healthiness of those tubes have already been checked by M/s MePGCL. If any defect is detected during execution stage like leakage / chocked in embedded portion and modification or rectification is to be carried out, how the same shall be added to this present contract.	As per the bid document.
12	We request M/s MePGCL to clarify following: 1. Whether or not M/s MePGCL has checked the healthiness of Civil Foundation of Generator, Bottom Bracket, Turbine, Governor etc. 2. In case, during execution, if any deficiency is found in Civil foundation, we understand that MePGCL will be responsible for rectification of the same. In case any cavity is detected below Stay Ring, Draft Tube Liner etc., we understand that MePGCL shall be responsible for rectification of the same.	As per the bid document.
13	Kindly arrange to provide us drawing of Service / Assembly Bay which is crucial **to meet the Contractual Schedule**.	The bidder should visit site and obtain the data, as per the bid document.
14	Kindly arrange to provide Floor Wise Layout Drawing of Power House Auxiliaries for estimation/ assessment.	The bidder should visit site and obtain the data, as per the bid document.
15	Kindly arrange to make available the drawings for Turbine, Generator and Auxiliaries for estimation/ assessment.	The bidder should visit site and obtain the data, as per the bid document.
16	In case any Residual Life Assessment of the Power Station and machinery has been carried out, we request MePGCL to share the same for estimation/ assessment.	It cannot be entertained.
17	Kindly confirm, the potable water and water required for different testing shall be made available to the contractor by M/s MePGCL free of charges at power house.	The bid document is final and no modification will be entertained.

18	We understand that the item is "**local motor control panels".** As per clause existing MCC shall be replaced with New MCC. However as per clause 1.7(a) MCC is new addition. Kindly clarify regarding the same. Also if existing MCC is there, SLD/Drawing for the same may kindly be provided.	As per the relevant clause of bid document.
19	As per practice followed in all hydro projects, MCC with local & remote control functions shall be provided. Sequence of operation shall be implemented in SCADA panels. Kindly confirm.	As per the relevant clause of bid document.
20	We understand that where replacement is required, items shall be replaced with same rating & type of existing equipment without any change. Kindly confirm	As per the bid document, latest technology shall be adopted.
21	Requirement regarding Mobile/internet facility is not clear. These are part of telecom companies. We request MePGCL to kindly exclude this requirement from the scope of this tender.	The bid document is final and no modification will be entertained.
22	1. Request MePGCL to provide detailed specification regarding required battery i.e. type of battery, capacity, parameters etc. 2. Request MePGCL to provide detailed regarding required battery charger i.e. capacity, parameters, enclosure, protection class etc. 3. Request MePGCL to provide Single Line Diagram of existing DCDB alongwith their specification. 4. Request MePGCL to provide the Quantity required as Spare. Please specify the requirement of maintenance devices & tools. 6. Request MePGCL to provide existing AC Power supply board/LTAC panels drawing/documents. 7. Bill of materials (BOM) for required new items to be furnished & Detailed overhauling work to be specified, whether only non-functioning components to be replaced or some additional modules/ protection to be provided.	The bidder should visit site and obtain the data, as per the bid document.
23	Request MePGCL to clarify if bidder/contractor shall be expected to put mobile towers and other paraphernalia for establishing mobile and internet connectivity in the Power House and Switchyard area such this work is usually done directly by the concerned telecom companies and BHEL does not have experience on the same. We request MePGCL to kindly review and delete this clause.	The bid document is final and no modification will be entertained.

24	We understand that the complete internal telephone system shall be replaced. Please confirm. If not, kindly provide the details of the existing telephone system. Also please specify the details such as required number of subscriber ports, no. of telephone sets, facilities required & other technical details etc. Installation of mobile and internet towers are not in the scope of plant control and monitoring system supplier. M/s MePGCL is requested to kindly take-up with the concerned OEM and experts separately for site survey and installation as per regulations & Laws. In view of above, we request MePGCL for deletion of the requirement of installation of equipments/ towers for mobile and internet connectivity at site from the tender.	The bid document is final and no modification will be entertained.
25	Request MePGCL to provide details of existing electrical single line diagrams/protection schemes of Generator, GT, 11KV system, LT system, Dc system.	The bidder should visit site and obtain the data, as per the bid document.
26	There is no requirement/existing provision of UPS supply specified in tender. Request MPGCL to review whether UPS/inverter supply is required for some panels/systems. Request MePGCL to kindly review above & provide your requirement (if any).	For successful completion of the Project, wherever required, UPS/inverters shall be provided.
27	Grounding System for power house & other adjoining areas is not specified in the tender document. Hence any kind of groundmat/ equipment earthing shall not be considered in bidder's scope.	Grounding System / ground mat / equipment earthing are vital for successful completion of the Project, which will be the responsibility of the bidder.
28	1. Kindly provide us detailed equipment layout of the power house for estimation of power, control and instrumentation cable quantity. 2. Detailed specification of the power and C&I cable (Conductor, Insulation, Inner sheath, outer sheath, armoured/unarmoured etc.) is not mentioned in the tender document. Kindly furnish the same. 3. Use of 12 kV cable is not mentioned in the tender document. Kindly clarify and also provide the type of connection of Generator with GT and tap-off to UAT/SST. 4. Please provide the LTAC/DC load (kW/HP/Amp rating) details for LT power cable sizing. 5. We understand that all the cable trays shall be replaced with new trays. Kindly confirm and provide the existing cable tray layout. 6. We understand that any kind of optical fibre cable is not mentioned in the tender document and hence shall not be offered.	The bidder should visit site and obtain the data, as per the bid document.

	7. Any kind of cable interconnection between power house & BFV area and Power house & Dam is not mentioned in BF valve house and Dam Area. Hence same shall not be part of our offer. 8. Any kind of cabling work is not mentioned in BF valve house and Dam Area. Hence same shall not be part of our offer. 9. For LT Power/ Control Cable 1.1KV Grade Cable shall be provided. Kindly furnish your acceptance.	
29	a) Kindly provide the Single Line diagram & detailed technical specification for clarity of scope. b) Kindly provide existing schematic drawings. c) Kindly confirm the communication protocol requirement of Numerical relays for Protection system.	The bidder should visit site and obtain the data, as per the bid document.
30	We request M/s MePGCL to: 1. kindly provide Cable route length between Power House Control Room and Valve House. 2. We understand that Fiber Optic Cables are required as a communication media between Power House Control Room and Valve House Please confirm. 3. Whether Laying of Fiber Optic Cables shall be underground or over the poles. Please clarify. Required approvals and clearance from concerned Regulatory Authority shall be taken by M/s MePGCL for laying the above Fiber Optic Cables. Kindly confirm	The bidder should visit site and obtain the data, as per the bid document.
31	We request M/s MePGCL to: 1) Please furnish cable route length between a) Power House Control Room and Main Dam. b) Power House Control Room and Fore bay c) Power House Control Room and Tail Race 2) We understand that Fiber Optic Cables are required as a communication media between a) Power House Control Room and Main Dam b) Power House Control Room and Fore bay Please confirm. 3) Whether Laying of Fiber Optic Cables shall be underground or over the poles for the above locations. Please clarify. Required approvals and clearance from concerned Regulatory Authority shall be taken by the purchaser for laying the above Fiber Optic Cables.	The bidder should visit site and obtain the data, as per the bid document.
32	We understand that, provision of minimum control switches and push buttons shall be provided for safe shutdown. Please confirm.	As per the bid document, both SCADA and manual provision for operation of the equipments should be provided.

33	Please provide the drawing indicating quantities of different lighting fixtures, conduits, lighting panels and distribution boards that needs to be dismantled.	The bidder should visit site and obtain the data, as per the bid document.
34	The cables shall confirm to IS (Indian Standard), IEC standards as applicable. Power Cable shall be Aluminium conductor Armoured/ Unarmoured as per relevant IS/ IEC standards. The electrical conduits and the accessories shall confirm to IS (Indian Standard), IEC standards as applicable.	The bid document is final and no modification will be entertained.
35	Kindly provide the ESLD of the existing plant.	The bidder should visit site and obtain the data, as per the bid document.
36	We request M/s MePGCL to provide the cable route lengths between Power house control room and Switchyard.	The bidder should visit site and obtain the data, as per the bid document.
37	Please provide the Layout Drawings of the applicable areas and Lighting Layouts and Circuit Diagram of the existing illumination system for estimating the details of scope of work/ BOQ/ Type of Fixtures for area: a) Power House inside & outside premises b) Switchyard premises c) Road from Switchyard to Valve House d) Valve house premises e) Steps between Power House & Switchyard f) Ware House premises and along the road from Ware House to Power House This is basic requirement to calculate required Fixture Type/ fixtures BOQ for replacement/ addition.	The bidder should visit site and obtain the data, as per the bid document.
38	Kindly furnish the following requirement for the applicable areas: *Lux Level *Fixture type *Maintenance factor *Reflection Factor * LV Power services requirement (Like Receptacles/ Welding receptacles) Kindly furnish the Lighting/ Welding Distribution Board/ Lighting panel Specification requirement. Kindly furnish the Lighting Pole/ Mast Technical requirement.	The bidder should visit site and obtain the data, as per the bid document.
39	Spare parts shall be interchangeable with and of same quality and dimensions as the corresponding part of the Equipment supplied by BHEL in this tender. Kindly furnish the minimum quantity requirement of Recommended and E&C spares.	The meaning / interpretation of the clauses in the bid document remain as it is. The bidder should visit site and obtain the data, as per the bid document.

40	a) Type of Ventilation System is not specified in Specification. As per Existing components mentioned in tender, we assume Ventilation system is of Dry type. Please confirm. b) Please confirm the inside condition required for ventilated areas. Please furnish Ambient condition for all the season i.e Summer, Monsoon & Winter for capacity calculation of HVAC.	The bidder should visit site and obtain the data, as per the bid document.
41	Areas other than Turbine floor, Generator floor & MIV Gallery like control room, Battery Room, Pantry Room, Panel Room, Electrical Room, workshop area, service area, Toilets etc. not mentioned in Technical Specification. Please confirm the scope of areas to be considered for ventilation.	The bidder should visit site and obtain the data, as per the bid document.
42	Two motor pumps are mentioned in (S.12) Ventilation System but not in (S.12.1) Description of existing equipments. Purpose of these pumps is not clear.	The bidder should visit site and obtain the data, as per the bid document.
43	"Though the motor-pump sets are operating satisfactorily, ***there is some problem in getting fresh air in some outlet ducts."*** Please elaborate this clause.	As per the bid document.
44	We request MePGCL to provide the list of Spare/consumables/tools so that all bidders shall be at par while quoting.	The bidder should visit site and obtain the data, as per the bid document.
45	Please provide the Control System details (Relay / PLC / DCS / SCADA) of existing Ventilation System.	The bidder should visit site and obtain the data, as per the bid document.
46	We request MePGCL to provide capacity of existing exhaust fans which is not mentioned in Technical Specification.	The bidder should visit site and obtain the data, as per the bid document.
47	Requirement of air conditioning is not mentioned in technical specification. We understand that Air Conditioning System is not the requirement of tender. Please review & confirm.	As per the bid document.
	Please provide the General layout Plan.	The bidder should visit site and obtain the data, as per the bid document.
	Please provide the individual Building/Room layout Plan for the areas need to be ventilated or air conditioned.	
	Please provide document related to ventilation like equipment GA, P&ID, Ducting layout etc.	
	Please provide the detail of existing equipment, heat dissipation data of equipment retained and placed, and layout for any area need to be air conditioned or ventilated.	

48	Please provide civil design documents and civil drawings of structures related to cutouts, to enable stability analysis of said civil structure, if required.	The bidder should visit site and obtain the data, as per the bid document.
49	M/s MePGCL is requested to furnish the following: (i) Panel Layout with dimensions & BOQ of existing 11kV Switchgear. (ii) Single Line Diagram (iii) OGA, Make, scheme drawings etc. of existing panels.	The bidder should visit site and obtain the data, as per the bid document.
50	We understand that crane structure including crab structure, Main hook assembly, Aux hook Assembly, Main hoist rope drum, aux hoist rope drum, wheels and rails shall remain same. All other parts of the crane shall be replaced. Please confirm.	The meaning / interpretation of the clauses in the bid document remain as it is.
51	We understand that same speed shall be provided in refurbished crane. Creep speed is not considered for any of the motion of the crane, hence not envisaged. Please confirm.	In the bid document, provision for new EOT Crane is mentioned.
52	There is no mandatory spare list for EOT crane in tender specification. Only erection & commissioning spares for EOT crane to be provided. We have not envisaged any mandatory spare list for EOT crane. Please review above & confirm.	As per the bid document, all equipments to be supplied and installed, mandatory spares shall be supplied by the contractor.
53	We understand that requirement of Duty Class for EOT crane is M3. Crane equipments to be selected accordingly. Kindly confirm.	As per clause S.9. of the bid document.
54	Load and overload test of power house crane shall be done at site as per IS 3177. Bidder understands that Cradle and slings (for 187.5T (i.e. 125% of Crane capacity)) for load and overload testing shall be provided by customer (M/s MePGCL) during load/ overload testing. Please review above & confirm. In case, Cradle along with slings are not to be provided by customer at the time of load/overload test of crane, cradle shall be arranged by bidder on returnable basis. Please clarify the scope related to cradle and slings required for load/ overload testing.	The bidder should visit site and obtain the data, as per the bid document.
55	We understand that cable from crane feeder (from Unit Auxiliary Board) to Switch Fuse Unit (provided at operating floor of power house) of power house crane is not required to be replaced/ not in bidder's scope. Please confirm.	As per clause S.9. of the bid document.
56	Make, size & rating of various items such as cables, DSL, control system , brakes, couplings, fuses etc. for power house crane shall be as per BHEL's standard vendor list and as per IS 3177. Please review & confirm.	As per the bid document

57	Key parameters (such as span, hook approaches, end approaches, head room, baylength, Number of LT and CT wheels and their sizes: etc.) of existing power house crane are not mentioned in tender specification. Please furnish these parameters and GA of power house crane. Kindly share power house layout also.	The bidder should visit site and obtain the data, as per the bid document.
58	There is no mandatory spares list for EOT Crane in the tender document. Hence Bidder understand that Mandatory Spares for EOT Crane are not applicable. Please review above & confirm our understanding.	As per the bid document, all equipments to be supplied and installed, mandatory spares shall be supplied by the contractor.
59	From the specified clause for evaluation of turbine and loading purpose, we understood that efficiency band at rated head and at rated output which shall be taken into consideration with upper and lower limits as 93.0% and 92.0% respectively. Kindly confirm.	As per the bid document.
60	There is ambiguity between both the specified clause regarding bottom ring replacement/repair. We understand that since the existing machine is undergoing the complete renovation to achieve maximum efficiency with existing space and setting. Therefore, replacement of bottom ring will be essentially required, as specified in scope of work. Kindly accept & confirm.	Yes, clause 1.1. (f) of the bid document stands.
61	As draft tube liner shall be embedded into concrete for the subject project, therefore it will not be possible to replace the entire DT liner as specified in clause. However, refurbishment of DT liner is possible upto some extent w.r.t. site limitation. Kindly accept & confirm.	The bid document is final and no modification will be entertained.
62	Kindly furnish the Present design head of New design Main inlet Spherical valve to be offered for the subject project.	The bidder should visit site and obtain the data, as per the bid document.
63	As per IS 12837 Clause 5.3, the minimum load upto which turbine may be continuously operated without undue cavitation and vibration for Francis type of turbine is 50%. Referring IS norm & considering the fixed space along with setting of existing machine, to avoid cavitation, the minimum continuous output at max/rated/min head should be restricted to 50% of rated output. Kindly accept & confirm.	The bid document is final and no modification will be entertained.
64	Furnishing of all the site/hydraulic parameter on the basis of which existing machine need to be refurbished shall be the sole responsibility of M/s MePGCL (Owner). At least some of the major hydraulic parameters that need to be furnished by owner on which bidder will be required to offer machine guarantees are as follows: - Present Maximum/Rated/Minimum Net Head - Present Reservoir Level (Max/Min) at site. - Present Tail Water Level (Max/Min) at site.	The bidder should visit site and obtain the data, as per the bid document.

	- Present Maximum Discharge available at site. Kindly furnish the above parameter enabling bidder to refurbish the existing machine w.r.t. actual scenario.	
65	Considering the present market scenario, we will be offering the minimum rating of reciprocating type HP compressor of 60 Kg/cm2 and Rotary screw type LP compressor of 7 Kg/cm2 of suitable FAD fulfilling both the unit requirement. Kindy accept & confirm.	As per the bid document, the Compressors shall be replaced.
66	As per specified clause, kindly furnish the existing numbers of Cooling water Pumps, Strainer along with their type.	The bidder should visit site and obtain the data, as per the bid document.
67	The requirement as specified in particular clause need to be first explored at site before offering the option of providing additional supply to cooling water system. **OR** If it is possible at site, kindly confirm.	The bidder should visit site and obtain the data, as per the bid document.
68	Kindly furnish the Present design head of New Penstock Butterfly valve to be offered for the subject project.	The bidder should visit site and obtain the data, as per the bid document.
69	In order to bring all the bidder at par during bid evaluation, we request M/s MePGCL to furnish list of spares pertaining to Turbine, MIV, Penstock Valve, Cooling water system & Compressed air system etc.	The bidder should visit site and obtain the data, as per the bid document.
70	To ensure the desired output and performance, machine will be designed based on computerized simulation studies and Report of CFD analysis shall be made available to M/s MePGCL instead of model test. Kindly accept & confirm.	The bid document is final and no modification will be entertained.
71	In order to bring all the bidder on same platform during bid evaluation, the material standard of major components of Turbine, MIV Spherical valve & Penstock BFV has been recommended in **Annexure-I** as attached for your kind consideration. Kindly accept & confirm.	The bid document is final and no modification will be entertained.
72	IEC 60193-1 (first addition) & IEC-995 has been replaced by IEC 60193-2019 (Third edition) Request MePGCL to review above & modify accordingly.	The bid document is final and no modification will be entertained.
73	S.2.7.4. Step-up Formulae The prototype efficiencies shall be calculated and derived from the model efficiencies as per the IEC-995 Code or equivalent.	The bid document is final and no modification will be entertained.
74	Air admission test is not a qualitative test and this will only be performed to suppress the pressure fluctuations which are above the permissible limits to safeguard the machine. Therefore air admission test will only be done at test range of sigma if peak to peak pressure fluctuation in draft tube rises above + 3%.	The bid document is final and no modification will be entertained.

75	Detailed water conductor system (penstock) drawing is not available with tender. Detailed penstock drawings are needed for study of the turbine field acceptance test method. Request MePGCL to provide detailed Penstock drawings.	The bidder should visit site and obtain the data, as per the bid document.
76	As per IEC 60193-2019 clause no. 5.4.2, Specific hydraulic energy (gH) should be more than 100 J/Kg or, in other word test head should be more than 10 m for Francis/radial turbine. Hence it is observed that the Tender clause of testing the model at not less than 40m is going beyond the IEC standard without any specific advantage to the model test. It must be noted that this is typically medium head Francis machine with Prototype rated head as 150 m only, the condition of minimum head of 40 m which is one-fourth of rated net head is not justified. May kindly review and consider the IEC requirement and allow as per IEC or minimum head of 20m may be allowed. IEC 60995 has been replaced by IEC 60193, Therefore the clause may be modified as- "The step-up of the model efficiency to the prototype efficiency shall be in accordance with IEC Publication 60193" Please confirm & modify the clause accordingly.	The bid document is final and no modification will be entertained.
77	UMIAM being a R&M project, the model of the turbine will be designed suiting to the project requirement and then manufactured and tested. It will take around 9-10 months up to model testing and report submission without affecting the overall commissioning schedule. Therefore, the clause may be modified as; “The test shall be conducted in accordance with the IEC publications 60193-2019. The test shall be completed and comprehensive test reports submitted for approval of the Corporation within nine (9) months after the award of contract." Please confirm & modify the clause accordingly.	The bid document is final and no modification will be entertained.
78	Curves showing relationship between wicket gate angle/wicket gate opening and servo motor stroke can be given after Prototype design only and is not related to Turbine model tests, therefore this point no. (k) may be deleted from the specifications. Please confirm & modify the clause accordingly.	The bid document is final and no modification will be entertained.
79	Turbine field acceptance test shall be conducted at the head available at the time of field acceptance test and results are converted to different heads as per IEC-60041. Please confirm & modify the clause accordingly.	The bid document is final and no modification will be entertained.
80	Kindly list out the parameters to be measured.	The bidder should visit site and obtain the data, as per the bid document.
81	As per clause, operating system of Penstock Valve shall be replaced. In view of this, we presume that the complete oil pressure system of PV shall be replaced.	As per the bid document.

	Kindly review above & confirm the same.	
82	We propose RADAR type water level measuring system at Main Dam, Fore bay and Tail race sites. Kindly confirm.	As per the bid document.
83	Kindly provide drawings of Tail Race site for accessing the suitable location for Discharge measurement system. Discharge measuring system (Winter-Kennedy type) is generally installed in the tapings provided in the spiral casing. Request MePGCL to confirm whether tapings for the same is presently available or not.	The bidder should visit site and obtain the data, as per the bid document.
84	Please provide of the existing machines for reference. Please provide drawings of water path from Dam to Power House. In addition to above, we request MePGCL to provide latest load throw-off test report and allowable Speed rise & Pressure rise limits to enable Bidder to submit speed rise & pressure rise calculation as requested in clause no. S.2.7 of the tender.	The bidder should visit site and obtain the data, as per the bid document.
85	We propose replacement of Pressure Accumulators and oil Sump Tanks. In place of refurbishment of Oil Sump tank, we propose to supply new Oil Sump Tank. Similarly, in place of overhauling of Pressure Accumulator, new one shall be supplied by Bidder. These new Accumulator & PP Sets shall be designed suiting to existing space available. Further it is to be noted that with these new equipments, it would be possible to integrate them with Plant SCADA.	The bid document is final and no modification will be entertained.
86	i. We understand that control & protection panels of other bays (except feeders and bus coupler) is not scope of this tender. Please confirm. We understand that local back up control panel is required for feeder and bus coupler bay at switchyard control room. Please confirm.	As per the bid document.
87	Kindly provide the specification of Isolator, CT, PT LA.	The bidder should visit site and obtain the data, as per the bid document.
88	We understand that existing structure shall be used for replaced equipment. Any new structure is not required. Please confirm.	As per the bid document.
89	Kindly clarify the scope of conductor. We assume that existing conductor shall be used. Please confirm.	The bidder should visit site and obtain the data, as per the bid document.

	If any conductor is to be replaced then clarify the scope and provide the type of conductor required.	
90	i. We understand that two lifts are required to reach switchyard. Kindly confirm. ii. Kindly specify the level difference between power house and switchyard or specify the lifting height of lift. iii. Kindly specify the number of persons to be lifted at a time. Kindly provide the detailed specification of lift.	The bidder should visit site and obtain the data, as per the bid document.
91	i) We understand that existing cable shall be used for switchyard. Replacement of existing cable is not required. Please confirm. ii) Also we assume that any trench work is not in scope of bidder. Please confirm.	The bid document is final and no modification will be entertained.
92	Kindly provide the following drawing: i. Overall plot plan. ii. Single line diagram of 132/33kV switchyard. iii. Layout and section drawing of 132/33kV Switchyard. Cable trench drawing of switchyard.	The bidder should visit site and obtain the data, as per the bid document.
93	We understand that no civil work is required in this tender. Please confirm.	Wherever some civil works are required for completion of E & M works, provision for the same should be kept in the bid.
94	We understand that no mandatory spares are required for switchyard items. Please confirm.	As per the bid document, the mandatory spares required for switchyard items should be provided.
95	We understand that any supply & services related to earthing system is not in scope of this tender. Please confirm.	Grounding System/ ground mat/ equipment earthing are vital for successful completion of the Project, which will be the responsibility of the bidder.
Additional Queries:		
1	1. While one Penstock Valve chamber is accessible from existing road, other valve chamber at far end is not accessible for movement of Crane for material transportation, assembly and final installation as penstocks are over ground and no separate road exists. We request M/s MePGCL to clarify whether separate approach road shall be made by M/s MePGCL to access the other Valve chamber	1- It will be the responsibility of the Contractor to plan and execute various works required for the Project.

	2. We request M/s MePGCL to confirm, whether civil work relating to replacement of Penstock Valves and its associated components shall be taken up by M/s MePGCL.	2- Wherever some civil works are required for completion of E & M works, provision for the same should be kept in the bid.
2	1. We request M/s MePGCL to confirm, whether any particular route has been identified for material transportation to Power House site, if identified please furnish details. 2. We request M/s MePGCL to confirm, whether existing bridges in the identified road are having capacity to handle heavy equipments to be transported to site.	The bidder shall assess such informations before sending the consignments.
3	1. We request M/s MePGCL to confirm whether existing excitation transformer shall be used or new one to be supplied. 2. In case existing transformer to be used for this project then we request M/s MePGCL to furnish the excitation transformer data.	As per the bid document.
4	As per standard practice implemented in other hydro projects, two auto channels each with in-built manual channel is provided for DAVR. We request M/s MePGCL to confirm the acceptance.	Design/ specifications shall be in the scope of the bidders.
5	All Excitation cubicles require proper cooling. Normally IP40 class of protection is provided for all cubicles except excitation transformer cubicle. Excitation transformer cubicle shall have IP20 class of protection, as it is natural cooled. We request M/s MePGCL to confirm acceptance.	
6	We understand that supply of Spares, services and repair beyond warranty period shall be on chargeable basis. We request M/s MePGCL to confirm our understanding.	Yes.
7	1. We request M/s MePGCL to provide cable route length between power house, DAM, VH & administrative building at project colony. Kindly furnish the tender drawings indicating the correct route length due to terrain issues 2. We request M/s MePGCL to provide details on the type of optic fibre required (suitable for underground / on poles / on transmission line etc.) as the commercial implications are different for each type. 3. We request M/s MePGCL to confirm that all civil works like digging& covering of trenches / making of ducts shall be carried out by M/s. MePGCL 4. We request M/s MePGCL to confirm that necessary permissions from owners of the property through which the OFC need to be laid shall be obtained by M/s MePGCL.	1 & 2- The bidder should visit site, survey / assess the requirement for the purpose. 3- Wherever some civil works are required for completion of E & M works, provision for the same should be kept in the bid. 4- MePGCL shall look into the matter.
8	We request M/s MePGCL to confirm that VSAT / Leased line / PLCC are in M/s MePGCL's scope	Please refer clause No.S.23. of the bid document.
9	We request M/s MePGCL to confirm whether new master clock system to be supplied for time synchronisation.	As per Bid document.

10	We request M/s MePGCL to specify the acceptable make/ type of energy meters in case same to be replaced. (energy meters are available in the market with widely varying features and prices).	The meters to be supplied should be as per CEA meter installation regulations, as amended from time to time.
11	Normally training simulators are standalone PCs with necessary software. We request M/s MePGCL to confirm whether the training simulator is required or not.	Training provisions as per the bid document.
12	We request M/s MePGCL to provide the distance between RTU's (At Dam & BFV) and central Control room.	The bidder should visit site and obtain data, as per bid document.
13	We request M/s MePGCL to confirm whether new packages like AGC, Remote monitoring and controls are to be envisaged or not.	As per the bid document.
14	We request M/s MePGCL to specify existing switchyard control make and model.	As per the bid document.
15	We request M/s MePGCL to confirm the type of EPABX/telephone system specified for this project.	As per the bid document.
16	We request M/s MePGCL to furnish the configuration diagram along with required HMI, Plant computers, LVS, UCB, LCB &other RTU interface requirement in control room.	As per the bid document.
17	Price Adjustment Formula – M/s MePGCL will appreciate that, for Transformer, the formula provided in tender does not capture the material involved in the manufacturing of Generator Transformer and other transformers and the rise in their prices. In view of above, we request M/s MePGCL to consider IEEMA formula for Generator Transformer and other transformers as it is widely accepted in industry.	The bid document is final and no modification will be entertained.
18	Price adjustment is a provision available in tender to mitigate some extent the increase in prices of items/ materials covered in scope of E&M works. Price adjustment does not reimburse the increase of actual cost of material / items. There is substantial rising trend in material prices. Therefore, we request M/s NHPC consider the value of "a"-the constant numeric value appearing in adjustment formula as 0 (Zero).	