**Corrigendum - 3 dated 29/04/2026 to CPC Tender No. BHEL/CPC/KRW/EPC_WTP/27/008 for the work of "EPC PACKAGE FOR WATER TREATMENT PACKAGE AT 2 x 660 MW CSPGCL KORBA WEST TPP (CHHATISGARH, INDIA)".**

**A) Some of the Bidders had asked queries in the published tender specification. The clarifications issued by BHEL are as below;**

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| | | **CIVIL** | | | | |
| 1 | | 36_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part28 | 4.03.01 | "Complete levelling of entire plant area as shown in drawing Titled 'Site Levelling Plan' shall be done by the Bidder…." | We understand that site levelling of Island-4 is only in bidder's scope. For other Islands-1,2,3,5 & 6, graded site will be made available to bidder. Please confirm. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 2 | 45 of 81 | 37_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part29 | 5.23.25 | Waterproofing Underground Structures | Please confirm whether these specifications are also applicable for Underground tanks also. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 3 | 61 of 81 | 37_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part29 | 6.02.08 | Differential Settlement Loads | We undestand that differential settlement load to be considered for design of footings & structures of Boiler & Mill Bunker, ESP supporting structure and Main Power House building only. | Noted and confirmed. |
| 4 | 15 of 81 | 39_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part31 | D-1-12(E) | Seismic Design Code IS 1893 (Part 1 to 4) | There has been recent revision in Code IS 1893 (Part 1) - 2025. Pleasse confirm whether we have to consider latest code for design | Bidder to follow technical specifications. It may be noted that IS 1893 (Part 1) -2025 has been withdrawn by BIS. |
| | | **PT** | | | | |
| 5 | 931 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR PRETREATMENT PLANT | 1. AERATOR<br>2. STILLING CHAMBER | The designed capacity of the Aerator and Stilling Chamber is 3850 $m^3$/hr, whereas the total flowrate is 4950 $m^3$/hr. Kindly Confirm the Capacity for Aerator & Stilling chamber | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| | | **UF-RO MB OPTION 2** | | | | |
| 6 | 108 | Part 2 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | a. Three (3) numbers (3X100%) (1Working+2Standby) DM Plant Supply (Feed) pumps (Filtered Water Pumps/ UF Feed Pumps) along with motors, piping, valves, fittings, instrumentation & all other accessories as required. | We understand that, Quantity of UF Feed Pumps wil be (3X50%) (2Working+1Standby). As UF skids are 2W+1S. Please confirm | DM plant supply feed pumps shall be 3 x 100% only as mentioned in Scope of Supply & Data Sheet. The referred UF feed pumps (15.1/15.2) are for post MB UF system (OPTION - 1). Bidder to follow the technical specificaiton requirement. |
| 7 | 950 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATA SHEET – A FOR DM PLANT | 15.0 UF FEED PUMPS<br>15.1 Type Horizontal Centrifugal<br>15.2 Number 3 x 50% (2W+1S) | | |
| 8 | 108 | Part 2 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | UF backwash pumps (3X150%) along with flushing tanks and pumps, CEB & CIP systems which will comprise storage tank & dosing pumps, other chemical dosing systems (as applicable) with required storage tank etc. | We understand that, Quantity of UF Backwash Pumps wil be (2X100%) (1Working+1Standby). Please confirm | UF Backwash Pumps for Option-1 and Option-2 shall be 2X100% and 3X50% respectively. |
| 9 | 950 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATA SHEET – A FOR DM PLANT | 18.0 UF BACKWASH, UF FAST FLUSH PUMPS (as Applicable)<br>18.1 Type Horizontal Centrifugal<br>18.2 Number 2x100% (1W+1S) | | |
| 10 | 108 | Part 2 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | b. Ultra-filtration system membranes skids (UF) (3X50%) (Pressurized type) along with simplex basket strainers (3X50%) for each stream and necessary valves, piping, instrumentation, fittings etc. as required. | Kindly confirm the Quantity of basket Strainer & UF Skid | UF skids requirement for Option-1 and Option-2 shall be 2X100% and 3X50% respectively as indicated in the technical specification. 3X100% and 3X50% Basket strainers shall be provided for Option-1 and Option-2 respectively. |
| 11 | 951 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATA SHEET – A FOR DM PLANT | 16.0 BASKET STRAINER FOR UF (FOR DM PLANT OPTION – I/ II)<br>Two (2x100%) (1W+1S) for Option 2<br>17.0 UF SKID Two (2x100%) (1W+1S) for Option 2 | | |

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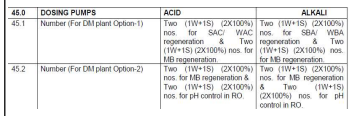
| 12 | 109 | Part 2 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | ➢ Two (3X100%) number of Degassed water/ RO permeate transfer pumps of required capacity with electrical motor drives, suction & discharge pipe, valves, fittings, instruments and its accessories etc.as required. | We understand that, Quantity of Degassed water/ RO permeate transfer pumps wil be 3x50 % (2W+1S). Please confirm | Technical specification requirement is clear. Bidder to follow the same. |
| 13 | 945 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATA SHEET – A FOR DM PLANT | 8.0 DEGASSED WATER TRANSFER PUMPS (FOR OPTION – I)/ RO PERMEATE TRANSFER PUMPS (FOR OPTION – II)<br>8.2 Number 3x100 % (1W+2S) | | |
| 14 | 110 | Part 2 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | b. Four (4x50%) numbers of Mixed Bed units along with two (2X100%) numbers MB air blowers with its drives and all accessories. The regeneration system shall be designed to regenerate two (2) MB units simultaneously. Complete piping, valve, fittings, instruments and its accessories required for Mixed bed units and its regeneration system. | We hereby request you to kindly confirm the Qty of MB Unit as (3X 50%). | Bidder to follow the technical specificaiton requirement. |
| 15 | 112/113 | Part 2 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | aa. Supply of Anti-Scalant and Antioxidant applicable as offered for RO skids for a period of one (1) year from the date of successful commissioning of the proposed water treatment plant.<br><br>C) CHEMICAL STORAGE & DOSING SYSTEM (AS APPLICABLE FOR OPTION – 1&2)<br>a. Bulk Anti-Scalant storage tank(s), required numbers of Anti-Scalant preparation tanks & its accessories,<br><br>b. Bulk antioxidant storage tank(s), required numbers of Anti-oxidant preparation tanks & its accessories | As per P&ID for RO Plant is only provided with Antiscalent & Antixoidant Dosing with Tank (2 Nos.) with dosing pumps.<br><br>We request confirmation on the requirement of bulk storage tanks.<br><br>Bulk storage tanks are not envisaged, as chemicals will be supplied periodically for one (1) year, and the provided dosing tanks are adequate for operational storage and dosing. | Bidder to refer clause no. IV & V @ page no. 112 of 3511 for Anti-scalant and Anti-oxidant storage tanks requirement. Technical specification requirements are clear and bidder to follow the same. |
| 16 | 749 | Part10 SUB SECTION-IA SECTION - I, Rev 00 | P&ID FOR RO PLANT | As per P&ID for RO Plant,<br>1) Antiscalent Dosing Tank (2Nos) + Dosing Pump (2Nos.)<br>2) Antioxidant Dosing Tank (2Nos) + Dosing Pump (2Nos.) | | |
| 17 | 960 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | 45.0 DOSING PUMPS ACID//ALKALI<br>  <br>45.0 DOSING PUMPS ACID ALKALI<br>45.1 Number (For DM plant Option-1) Two (1W+1S) (2X100%) nos. for SAC/ WAC regeneration & Two (1W+1S) (2X100%) nos. for MB regeneration. Two (1W+1S) (2X100%) nos. for SBA/ WBA regeneration & Two (1W+1S) (2X100%) nos. for MB regeneration.<br>45.2 Number (For DM plant Option-2) Two (1W+1S) (2X100%) nos. for MB regeneration & Two (1W+1S) (2X100%) nos. for pH control in RO. Two (1W+1S) (2X100%) nos. for MB regeneration & Two (1W+1S) (2X100%) nos. for pH control in RO. | We have considered Ejector base regenearation for DM Plant. | Kindly note that for Option -2 DM Plant (UF+RO+MB), acid & alkali dosing for MB regeneratioin shall be done through Ejectors. |
| 18 | 960 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | 13.0 BLOWER FOR MB & N-PIT (FOR DM PLANT OPTION – I/ II)<br>13.1 Type Rotary Twin Lobe type, Oil free type<br>13.2 Number 2x100% (1W+1S). | We have understand that, dedicated blower to be considered for MB & N-Pit | Bidder to refer clause no. b & c @ page no. 110 of 3511. Technical specification requirements are clear and bidder to follow the same. |
| 19 | 952 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | B) OPTION - 2 (UF+RO+MB BASED DM PLANT) | 20.4 Capacity of each compartment (Net) Total requirement of N-pit for DM and CPU regeneration shall have a holding capacity of 150% of waste effluent<br>generated from one regeneration of complete stream of cation, anion, MB, any other waste and CPU service Vessel or minimum 250 m3 (each compartment)<br>Whichever is higher.<br>In addition to the above, BHEL's HVAC softener waste (5.5 m3/hr, TDS 4000 mg/lit) shall be terminated by BHEL in N Pit | We understand that, Softener waste of 5.5m3/day will be terminated by BHEL in N-Pit | Technical specification requirement is clear in this regard. Bidder to follow the same. |
| | | **CLO2 System** | | | | |
| 20 | 38 | Part1 SUB SECTION-IA SECTION - I, Rev 00 | 3.2 CONTROL PHILOSOPHY OF CHLORINE DI OXIDE DOSING SYSTEM | Chlorine-dioxide dosing system shall be controlled from DDCMIS (BHEL scope). | Please confirm Distance to be considered from JB to DDCMIS. | Bidder to refer page no. 1826 of 3511 of technical specification, in which location of DCS panels is mentioned. Distance between JB and DDCMIS to be decided by Bidder. |

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| 21 | 41 | Part1 SUB SECTION-IA<br>SECTION - I, Rev 00 | 3.6 PIPING | Complete piping of Chlorine-dioxide dosing system is in bidder's scope. In addition, any additional piping required to make the system complete shall also in bidder's scope. Pipe length inside WTP Island 1 & 5 has to be considered by bidder in their scope as per layout. Accordingly, suitable pump capacity and pipe sizes, meeting minimum design requirements stipulated elsewhere in the specification shall be selected/ provided by the bidder. | Pipe length inside WTP Island 1 & 5 is to be considered by bidder but what piping is to be considered for Island 5<br>Distance between Chlorine-dioxide dosing area and WTP Island 1 shall be approximately 550 m.<br><br>As per P &ID no. PE-DG-530-154-13000-W001 there are 6 different dosing points for PT System. Please provide the distances to be considered up to PT dosing point from CLO2 Building. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 22 | 41 | Part1 SUB SECTION-IA<br>SECTION - I, Rev 00 | 3.6.1 | Distance between Chlorine di oxide dosing area and CW fore bay channel is approximately 60 m and piping for the same is in bidder's scope. Further, Bidder to refer plot plan attached with this specification and consider additional piping distribution in side CW cooling tower basin and fore bay as per dimension given elsewhere in this specification. Piping for ClO2 dosing from ClO2 area up to both cooling tower basins is also in bidder's scope, if CLO2 dosing is required in cooling tower basins, further distance shall be considered by bidder as per plot plan attached. | Please provide Layout to consider additional piping distribution in side CW cooling tower basin. | Dimensions of CW Cooling Tower basin is already provided in Annexure X - WATER ANALYSIS AND INFLUENT QUALITY. Bidder to refer same. |
| | | **ETP** | | | | |
| 23 | 53 of 3511 | PART -1, SUB SECTION-IA<br>SECTION - I, Rev 00 | 6.1 - (6.1.47 ) | One (1) nos. (1W) LAMELLA CLARIFIER/TUBE SETTLER – II each complete with flocculation tank, flash mixer tank, oil skimming chamber, fittings, media, plate packs and all accessories | We hereby proposed High Rated Solid Contact Clarifier instead of Lamella Clarifier/ Tube settler -II for the lime soda treatment to achieve effective removal of Hardness & Reactive Silica. | Technical Specifications is clear in this regard. Kindly follow technical specification. |
| 24 | | PART - 10 SUB SECTION-IA<br>SECTION - I, Rev 00 | P&ID Diagram For Effluent Treatment Plant | Oil Skimming Chamber (WW+ UF +RO) after Lamella Clarifier | We hereby proposed to provide an oil skimmer chamber upstream of the stilling chamber to enhance the operational performance of the High-Rate Solids Contact Clarifier (HRSCC). | Technical Specifications is clear in this regard. Kindly follow technical specification. |
| 25 | 53 of 3511 | SUB SECTION-IA<br>SECTION - I, Rev 00 | 6.1 - (6.1.37) | EQMS for online monitoring of Zero Liquid Discharge quality. | We understand that the EQMS system will be at outlet of Treated water | Bidder understanding is correct. |
| 26 | 874 of 3511 | PART -11 ,SUB SECTION-IA<br>SECTION - I, Rev 00 - DATASHEET A FOR EFFLUENT TREATMENT PLANT | 29. WASTE SERVICE WATER SUMP (WSWS) | WASTE SERVICE WATER SUMP (WSWS)<br>h) Oil Skimmer (each to be installed in each compartment of WSWS)<br>Type: Drum<br>Capacity: As per system requirements<br>Inlet Oil Level: 50ppm<br>Oil Outlet guarantee: <5ppm<br>MOC: As per system requirements<br>Accessories: Power pack, motor, valves, control panel | We hereby request you to kindly confirm the type of Oil. It is Emulsified Oil or Floaty Oil | Technical Specifications is clear in this regard. Kindly follow technical specification. |
| 27 | 874 of 3511 | PART -11 ,SUB SECTION-IA<br>SECTION - I, Rev 00 - DATASHEET FOR EFFLUENT TREATMENT PLANT | Sl. No. 71 | Sl. No. 71. BIO DISPERSANT DOSING SYSTEM FOR UF<br>C. BIO DISPERSANT DOSING TANK - 1 no.<br>D. BIO DISPERSANT DOSING PUMP - 2 X 100% | We hereby consider the NaOCL Dosing for UF CEB System instead of Bio dispersant dosing system. Request you to please confirm the same. | Technical Specifications is clear in this regard. Kindly follow technical specification. |
| 28 | 874 of 3511 | PART -12, SUB SECTION-IA<br>SECTION - I, Rev 00- DATASHEET FOR EFFLUENT TREATMENT PLANT | Sl. No. 75 | Sl. No. 75. Na2CO3 DOSING SYSTEM FOR RO<br>A. Na2CO3 MEASURING TANK - 1No.<br>B. Na2CO3 DOSING PUMP - 2 X 100% | Please clarify the scope of Na2CO3 dosing system for RO | Technical Specifications is clear in this regard. Kindly follow technical specification. |
| 29 | 57 of 3511 | PART -1 , SUB SECTION-IA<br>SECTION - I, Rev 00 | 6.1.115 | Any statutory clearance required for the system from MOEF or local pollution control board in bidder's scope. | Bidder understand that documentory support to be provided for Statutory clearance. | Bidder understanding is correct. |
| 30 | 885 of 3511 | PART -11, SUB SECTION-IA<br>SECTION - I, Rev 00- DATASHEET FOR EFFLUENT TREATMENT PLANT | Sl. No. 53 | Sl. No. 53 ULTRAFILTRATION (UF) SKID<br>( C ) Recovery - 95%<br>(K) Design Guarantees - iii. For the guaranteed water quality and the permeate water capacity, UF plant shall give an undiminished recovery of 92% up to the end of 5 years of operation with replacement guarantee of membrane elements. | We hereby consider UF recovery for wastewater 92% as per the design guarantees. | Technical Specifications is clear in this regard. Kindly follow technical specification. |

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| 31 | | General | - | Chemical Storage for ACID & Alkali | As per the Clause 6.1 SCOPE OF SUPPLY EFFLUENT TREATMENT PLANT Acid alkali Stoarge not provided , We have consider separate Bulk Storage Tank (1 W) & Unloading Transfer Pump ( 2No.(1W+1S) for the Acid & Alakli Dosing System. | Minimum requirement has been mentioned in Technical Specifications. However, bidder may consider any additional system as envisaged by bidder for making system complete and operational. |
| 32 | 53 of 3511<br><br>874 of 3511 | PART -1, SUB SECTION-IA<br>SECTION - I, Rev 00<br><br>PART -11 ,SUB SECTION-IA<br>SECTION - I, Rev 00 - DATASHEET A FOR EFFLUENT TREATMENT PLANT | 6.1 SCOPE OF SUPPLY EFFLUENT TREATMENT PLANT<br><br>DATASHEET A FOR EFFLUENT TREATMENT PLANT | **(1)**6.1.33Two (2) nos. (2W) Drum type Oil Skimmers each complete with all instrumentation, valve, piping, fittings etc., along with MS oil drum of 200 litre capacity.<br><br>**(2)** Sl. No. 29 (f) - WASE WATER WASTE SUMP<br><br>f) Oil removal arrangement — Two (2x100%) numbers Drum Type Oil skimmers and Two (2x100%) numbers trolley mounted Portable Oil Centrifuge.<br>g) Oil collection drum (type/ capacity) — One (1) nos. MS Oil Drum (capacity: 200 litre)<br>h) Oil Skimmer (each to be installed in each compartment of WSWS) — Type: Drum<br>Capacity: As per system requirements<br>Inlet Oil Level: 50ppm<br>Oil Outlet guarantee: <5ppm<br>MOC: As per system requirements<br>Accessories: Power pack, motor, valves, control panel | As per datasheet( Sl. 29, (f) - Oil removal arrangement ) 2 No.(2x 100%) Drum type oil skimmers or in scope of supply 2No. (2W) Drum type oil skimmer provided please confirm the quantity it is 2No.(1w +1s) or 2W only. | Two (2) nos. (1W+1S) Drum type Oil Skimmers each complete with all instrumentation, valve, piping, fittings etc., along with MS oil drum of 200 litre capacity shall be in Bidder's scope. |
| 33 | 42 | Tech Specs Part -3 | ANNEXURE X<br><br>WATER ANALYSIS AND INFLUENT QUALITY | RAW WATER ANALYSIS - Note: Clarified water analysis shall be derived by bidder from above raw water analysis and dosing<br>rate considered in PT plant, by bidder. Accordingly, bidder to consider circulating water analysis with<br>minimum COC = 5.0 for designing of respective water treatment systems etc. | Based on the RWA feed TSS value in raw water is 10 ppm as per the note provided with 5 COC we have consider 50 ppm feed TSS value for the design of HRSCC in Waste water RO plant. Please confirm | Bidder to note that Lamella Clarifier has been envisaged for Waste Water RO System. Further, Bidder to note that different effluents has been routed to CMB. Bidder shall consider creteria defined in Annexure X - WATER ANALYSIS AND INFLUENT QUALITY for designing of Waste Water RO system. |
| 34 | 877 of 3511 | PART - 10 SUB SECTION-IA<br>SECTION - I, Rev 00<br><br>PART -11 ,SUB SECTION-IA<br>SECTION - I, Rev 00 - DATASHEET A FOR EFFLUENT TREATMENT PLANT | P&ID - Effluent Treatment Plant | P&ID - ETP - Control Monitoring Basin (CMB)<br><br>Datasheet - 38. Control Monitoring Basin(CMB) -<br>(b) - Effective capacity (each compartment )m3 - 30 min. holding capacity<br>  | We hereby understand that the capacity of CMB will be 150 m3 for each compartment. Please confirm. | Bidder to note that effective capacity of each compatment of CMB shall be 30 mins for all the effluents coming into CMB or 150m3 (whichever is higher). |
| 35 | 884 of 3511 | PART -11 ,SUB SECTION-IA<br>SECTION - I, Rev 00 - DATASHEET A FOR EFFLUENT TREATMENT PLANT<br><br>PART - 10 SUB SECTION-IA<br>SECTION - I, Rev 00 | DATASHEET A FOR EFFLUENT TREATMENT PLANT<br><br>P&ID Diagram For Effluent Treatment Plant | Datasheet<br>49. Filter Water Tank -(a) 1 No. (In Two compartment)<br>(b) Effective Capacity ( each compartment m3) - 1 hr holding capacity of each compartment<br><br>P&ID - ETP Plant<br>FILTER WATER TANK<br>MOC: RCC<br>(UNDER GROUND ,IN TWO COMPARTMENTS)<br>CAPACITY : 55 M3 EACH COMPARTMENT | We hereby consider the net output capacity of the DMF as 86 $m^3$/hr. Accordingly, the filter water tank has been designed with a 1-hour holding capacity, i.e., 86 $m^3$ for each compartment.<br><br>Also we hrereby request you to kindly confirm the requirement of Filter Water storage tank before UF System. | Bidder to note that effective capacity of Filter Water tank shall be 1 hrs holding capacity of each compartment. |
| 36 | 55 of 3511<br><br>884 of 3511 | PART -1, SUB SECTION-IA<br>SECTION - I, Rev 00<br><br>PART -11 ,SUB SECTION-IA<br>SECTION - I, Rev 00 - DATASHEET A FOR EFFLUENT TREATMENT PLANT | 6.1 SCOPE OF SUPPLY EFFLUENT TREATMENT PLANT<br><br>DATASHEET A FOR EFFLUENT TREATMENT PLANT | 6.1.71 One no. (1W) of Filtered Water Tank of RCC Construction (in two compartments) above<br>ground with common inlet and outlet chamber interconnected through isolation gates along with<br>valves, piping, fittings, instruments and required accessories.<br><br>Datasheet<br>49. Filter Water Tank (d) Type - Rectangular with flat bottom, Undergound. | As per the scope of supply Filter water tank mentioned above ground & in datasheet given underground please confirm. | One no. (1W) of Filter Water Tank of RCC Construction (in two compartments) under ground with common inlet and outlet chamber interconnected through isolation gates along with valves, piping, fittings, instruments and required accessories shall be in bidder's scope. |

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| 37 | 55 of 3511<br><br>884 of 3511 | PART -1, SUB SECTION-IA SECTION - I, Rev 00<br><br>PART -11 ,SUB SECTION-IA SECTION - I, Rev 00 - DATASHEET A FOR EFFLUENT TREATMENT PLANT | 6.1 SCOPE OF SUPPLY EFFLUENT TREATMENT PLANT<br><br>DATASHEET A FOR EFFLUENT TREATMENT PLANT | 6.1.89 One no. (1W) of RO Reject Sump Tank of RCC Construction (in two compartments) above ground with common inlet and outlet chamber interconnected through isolation gates along with valves, piping, fittings, instruments and required accessories<br><br>Datasheet<br>67. RO Reject Disposal Sump -(b) Compartment - Two, below ground | As per the scope of supply RO reject sump mentioned above ground & in datasheet given below ground please confirm. | One no. (1W) of RO reject sump of RCC Construction (in two compartments) under ground with common inlet and outlet chamber interconnected through isolation gates along with valves, piping, fittings, instruments and required accessories shall be in bidder's scope. |
| 38 | 890 of 3511 | PART -11 ,SUB SECTION-IA SECTION - I, Rev 00 - DATASHEET A FOR EFFLUENT TREATMENT PLANT | DATASHEET A FOR EFFLUENT TREATMENT PLANT | Acid Dosing System for UF & RO<br>Acid Dosing Tanks - Quantity - 2 Numbers | In UF CEB & RO Dosing System Dosing tanks quatity is 1 Number except Acid dosing tank i.e. 2 Number. Request you to kindly confirm the same. | Technical Specifications is clear in this regard. Kindly follow technical specification. |
| 39 | 884 of 3511 | PART -11 ,SUB SECTION-IA SECTION - I, Rev 00 - DATASHEET A FOR EFFLUENT TREATMENT PLANT | DATASHEET A FOR EFFLUENT TREATMENT PLANT | Sl. No. 50.) UF FEED PUMPS- a) Number required Three (2W+1S) nos.<br><br>As per scope of supply, 6.1.73 Two (2) (1W+1S) Nos. UF Feed Pumps complete with drives, valves, piping, instruments, VFD (variable frequency drive) along with panel, and all other accessories required. | We hereby request you to kindly confirm the requirement of VFD for UF Feed pump. | Three (3) (2W+1S) Nos. UF Feed Pumps complete with drives, valves, piping, instruments, VFD (variable frequency drive) along with panel, and all other accessories required shall be in bidder's scope. |
| | | **CW CHEMICAL TREATMENT & SSF** | | | | |
| 40 | 926 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR CW TREATMENT PLANT | ACID DILUTION WATER PUMPS | As we are using H2SO4 acid, acid dilution water pump is not required and we have not considered the same. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 41 | 968 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR SIDE STREAM FILTRATION | Inlet (TSS) & inlet Turbidity - 60 PPM & 60 NTU<br><br>Service Cycle (Filter backwashing and air scouring requirement) - Not less than 24 hrs | Service cycle will be 24 hrs, if TSS value is 50 ppm and 60 ppm at peak.<br><br>However if TSS value is 60 ppm on continuous basis then service cycle will be 16 hrs. Max. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 42 | 970 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR SIDE STREAM FILTRATION | Backwash Sump | Kindly confirm, shed is required or not for SSF Feed Sump & Backwash Sump | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 43 | 970 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR SIDE STREAM FILTRATION | Back wash water pump | The design of an AVGF is specifically intended to operate automatically, using the principles of gravity to initiate and complete its own backwash cycle. Hence Backwash Water Pump is not required. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 44 | 971 | Part12 SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR SIDE STREAM FILTRATION | Blowers | We have not considered Air Blower as per specification as AVGF have not required air blower. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| | | **CHP Run off** | | | | |
| 45 | 972 | SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR CHP RUN OFF WTP | CLARIFIER FEED PUMP - 2X50% | As per tender standby is required for rotary equipment. Bidder request to confirm, 2X50% or 2X100% pumps are requred. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 46 | 975 | SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR CHP RUN OFF WTP | Filter Press - 2 Nos. | Bidder request to confirm whether 2X50% or 2X100% Filter Press required | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 47 | 977 | SUB SECTION-IA SECTION - I, Rev 00 | DATASHEET A FOR CHP RUN OFF WTP | Chemical Tanks | Bidder request to confirm required holding capacity for dosing thanks, 12 hr or 24 hrs. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 48 | | | | | Please confirm inlet TSS value for CHP Run Off plant. Currently we have considered 100 ppm TSS value for design purpose. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| | | **CPU** | | | | |
| 49 | Part 2 - 64 of 81<br>Part 5 - 24 of 81 | PE-TS-530-404-W001 - Tech spec - Tech spec part 8 - TECH DATA SHEET CPU 3.1 - I),II),III) | 7.1 SCOPE OF SUPPLY- B-1,2,3 | REGENERATION SYSTEM - One (1) common external regeneration system for regeneration Two (2) set Resin Separation & Cation Regeneration Vessel, Two (2) set Anion resin regeneration vessel, Two (2) set Number Mixed resin storage vessel | We request you to kindly re-confirm the quantity of regeneration vessels for SPT / ART / CRT.<br>As per our assessment, one set of regeneration vessels is sufficient to meet the required CPU design capacity, and hence two sets of regeneration vessels may not be required. Kindly confirm | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |

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| 50 | Part 2 - 66 of 81 | PE-TS-530-404-W001 - Tech spec part 2 | 7.1 SCOPE OF SUPPLY- B-23 | Acid / alkali bulk tanks<br>There shall be common Bulk Acid and Bulk Alkali storage tanks along with acid and alkali unloading pumps for CPU Regeneration system & DM plant and same shall be in bidder's scope | We hereby considered common bulk tanks and unloading pumps for acid and alkali for CPU regneration system & DM plant and the same is located in DM plant area. No any dedicated bulk tanks and pumps system considered for CPU. Kindly confirm | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 51 | Part 2 - 66 of 81 | PE-TS-530-404-W001 - Tech spec part 2 | 7.1 SCOPE OF SUPPLY- B-24 | DM Water storage tank<br>There shall be common DM water storage tanks for CPU Regeneration system & DM plant and<br>same shall be in bidder's scope. | We hereby considered common DM water storage tank for DM plant and CPU regneration system. DM water storage tank for CPU are of 2800 m3 capacity - 2 nos. and same has been located in DM plant. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 52 | Part 2 - 66 of 81 | PE-TS-530-404-W001 - Tech spec part 2 | 7.1 SCOPE OF SUPPLY- B-25 | N-PIT<br>There shall be common Neutralisation Pit (N pit) for CPU regeneration and DM plant. | We hereby considered common N-PIT for DM plant and CPU regneration system. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 53 | Part 2 - 67 of 81 | PE-TS-530-404-W001 - Tech spec part 2 | 7.1 SCOPE OF SUPPLY- C-8 | Oneway piping distance for resin Transfer Piping between farthest service vessel and regeneration area shall be 600 meters approx. | We hereby assume 600 mtrs distance between service vessel area and regeneration area. Kindly re-confirm | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 54 | Part 2 - 63 of 81 | PE-TS-530-404-W001 - Tech spec part 2 - 7.1 - CL. A 13) | 7.1 SCOPE OF SUPPLY- A-13 | Resin charges :<br>Nine (9) complete charges of resins | We have considered a total of nine (9) regeneration charges for the CPU design. In case any additional regeneration charges are required during commissioning, kindly confirm the same. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 55 | Part 2 - 71 of 81<br>Part 5 - 22 of 81 | PE-TS-530-404-W001 - Tech spec Part 2 - 7.2.3 / TECH DATA SHEET CPU - 2.0 - ix) | 7.2 DESIGN REQUIREMENTS FOR CPU<br>D-7.2.3 | Total head loss:<br>• Clean condition: 2.1kg/cm²<br>• Dirty condition: 3.5 kg/cm². | We shall confirm the same during detail engineering only | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 56 | Part 2 - 75 of 81 | PE-TS-530-404-W001 - Tech spec Part 2 | 7.2.13 | Shed :<br>Prefilters, Condensate Polisher Service vessels, blowers etc. will be located indoor in TG hall.<br>Regeneration system equipment shall be kept under structural steel shed. | We hereby presume the required shed for regneration will be BHEL scope however further civil work will be in IEIL scope as per Civil section specifications. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 57 | Part 2 - 68 of 81 | PE-TS-530-404-W001 - Tech spec Part 2 | 7.1 - C - 21) | The resin transfer pipeline shall be sized for a flow velocity of between 2.3 and 3.0 meters/sec | The resin transfer flow rate has been considered by accounting for both the resin transfer flow and the required flushing flow, ensuring complete removal of any resin traces from the pipelines. The line size shall be design for proper resin movement and meets the requirement for complete resin transfer which is also in line of our previously executed project which are running successfully. Hence veloccity less than 2.3 m/s can be accepted. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 58 | Part 2 - 64 of 81<br>Part 5 - 21 of 81 | PE-TS-530-404-W001 - Tech spec part 2 - / Tech spec part 8 - TECH DATA SHEET CPU | 7.1 - CL. B<br>3.1 - I),II),III) | REGENERATION SYSTEM - One (1) common external regeneration system for regeneration Two (2) set Resin Separation & Cation Regeneration Vessel, Two (2) set Anion resin regeneration vessel, Two (2) set Number Mixed resin storage vessel | We hereby propose below vessels in regeneration system :<br>1. SPT - Resin seperation vessel - 1 no.<br>2. ART - Anion Regeneration Vessel - 1 no.<br>3. CRT - Cation regeneration unit cum mixed resin storage tank - 1 no.<br>We herby follow the same regeneration methods and vessels as per our on going CPU projects. Kindly confirm the same. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 59 | Part 8 - 22 of 81 | Tech spec part 8 - TECH DATA SHEET CPU | 2.0 - vi) | Design pressure - 51.7 kg/cm2 | We hereby request you to re-confirm design pressure & actual shutt off pressure to design CPU accordingly. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 60 | Part 8 - 22 of 81 | Tech spec part 8 - TECH DATA SHEET CPU - 2.0 - vi) | 2.0 - vi) | Design pressure - 51.7 kg/cm2<br>Design Temperature - 70 Deg C | We hereby request you to re-confirm design pressure & Temperature to design CPU accordingly. Also confirm pressure class rating to be consider (Class 300 or class 600) | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 61 | Part 8 - 28 of 81 | Tech spec part 8 - TECH DATA SHEET CPU | 3.6 - i) | Air blower for resin mixing (regneration area)<br>AIR BLOWER - 4 nos. (2 W + 2S)<br>2 x 100% FOR EACH SERVICE VESSELS AREA (4 nos. Total, 2 nos. for Each Unit) | We hereby request you to clarify qty of air blower.<br>We hereby presume 2 Nos. (1W+1S) for common regneration area. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 62 | Part 8 - 29 of 81 | Tech spec part 8 - TECH DATA SHEET CPU | 3.9 | Lime tank for N-pit | We have considered Lime tank for N-pit in the scope of DM plant which is common for CPU and DM plant and same has been located in DM plant only as per given plot plan | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 63 | Part 2 - 72 of 81 | PE-TS-530-404-W001 - Tech spec Part 2 | 7.2.9 | Exchange RESIN | As per on going CPU projects, our offer shall be based on IEI make resins only. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |

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| 64 | Part 2 - 72 of 81 | PE-TS-530-404-W001 - Tech spec - Part 2 | 7.1 - C - 23) | All the pipeline in service vessels area where pressure and temperature may attain same as service vessel shall be designed for 300 lb class minimum. | We hereby request you to confirm pressure class rating to be considered. Given pressure (51.7 kg/cm2) and temperature (70deg C) since as per given data high pressure line piping and valves will be comes under class 600 | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 65 | Part 16 - 1 of 81 | PE-TS-530-404-W001 - Tech spec - Part 16 - | | PG test for CPU | We hereby request you to confirm final treated water parameters for CPU | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 66 | | | | General | We shall designed our system based on raw water analysis mentioned given tender. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 67 | | | | General | Our Offer shall be based on the INDION resin which is being used in the CPU. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 68 | | | | General | We hereby consider Distance between service area & regeneration area is 600 meter (farthest)<br>Kindly confirm and share cad copy of plot plan for the same. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 69 | | TERMINATION POINTS : | | Service Vessel Inlet | Single piping connection 5 m from the service vessel in T.G Building | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 70 | | TERMINATION POINTS : | | Service vessel Outlet | Single piping connection 5 m from the service vessel in T.G Building | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 71 | | TERMINATION POINTS : | | Rinse water outlet | At the outlet of service vessel | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 72 | | TERMINATION POINTS : | | Gland sealing /Cooling water supply | At 5 m distance from service vessel area | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 73 | | TERMINATION POINTS : | | All chemicals | At the Suction of Acid/Alkali unloading pumps | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 74 | | TERMINATION POINTS : | | DM water supply | At the inlet of DM water storage tank | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 75 | | TERMINATION POINTS : | | Waste water from N-pit | At 5 m from discharge flange of N pit transfer pump. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 76 | | TERMINATION POINTS : | | Drain/Vent | At the nearest drain trench | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 77 | | TERMINATION POINTS : | | Service air / Instrument air | At 5 m distance from the service vessel area @5-7 kg/cm2 | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 78 | | TERMINATION POINTS : | | Potable water | At one point within battery limit | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| | **ELECTRICAL** | | | | | |
| 79 | 245 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II TECHNICAL SPECIFICATION FOR ELECTRICAL | For 6.6kV HT Motors feeding , following will be applicable<br>1. Uncabled feeder for 6.6kV DMCW-TG, DMCW-SG & ACW Pump Motors located in Main Plant Power House will be provided by BHEL from 6.6kV HT boards located in Main Plant swgr. room of Unit-1 & Unit-2 as applicable. However, cables, cable laying, termination, Erection and testing & commissioning will be in BOP scope.<br>2. Uncabled feeder for 6.6kV APH/ESP Wash Pump Motor at Clarified P/H will be provided by BHEL from 6.6kV HT boards located in in Fire Water PH (as located at S.No.36 in the Plot Plan). However, cables, cable laying, termination, Erection and testing & commissioning will be in BOP scope. | 1.As per the agreed scope, uncabled HT feeders shall be provided by BHEL from the respective switchgear boards, while supply, laying, termination, erection, testing, and commissioning of HT cables are within BOP scope.<br>2.In order to accurately estimate the cable quantities, cable trays/supports, and associated installation works, we request you to kindly provide the exact routing distances from the respective HT switchgear boards to the following load locations:<br>A.6.6 kV HT Motors (DMCW-TG, DMCW-SG, ACW Pump Motors) – Main Plant<br>B.6.6 kV APH / ESP Wash Pump Motor – Clarified Pump House<br>3. The 6.6 kV HT motors (DMCW-TG, DMCW-SG, ACW Pump Motors, and APH / ESP Wash Pump Motor) are not included in BOP scope and shall be provided by BHEL. | 1. Kindly refer Electrical Scope Matrix.<br>2. A. Bidder to note that 6.6 kV HT Motors of Main Plant and Main Plant Switchgear are already marked in the Plot Plan & Equipment Layout EL 0.0M already included in the Technical Specification (Page 742 of 3511).<br>B. Kindly refer Annexure E.12 of the Technical Specification for tentative route length from Fire Water to TP-1A.<br>3. As per remark column of Scope Split, "6.6kV HT Motors located outside BOP battery/island limit(Viz.-DMCW-TG & SG, ACW Pump Motor) will be free issue by BHEL". |
| 80 | 246 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II TECHNICAL SPECIFICATION FOR ELECTRICAL | 1. Uncabled feeder for LT Drive/Feeders for CPU Service Vessel area loads(located in Main Power House) will be provided by BHEL from main Power house swgr. However, cables, cable laying, termination, erection and testing & commissioning will be in BOP scope. | Kindly confirm whether the scope of cable laying from CPU service vessel is up to main power house swgr MCC or up to individual drives/motors. | Kindly refer Technical Specification.<br>As per Technical Specification, "Cables, cable laying, termination, erection and testing & commissioning of LT Drive/Feeders for CPU Service Vessel area loads(located in Main Power House) will be in BOP scope". |

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| 81 | 247 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II<br>TECHNICAL SPECIFICATION FOR ELECTRICAL | 6.6kV HT Motors located outside BOP battery/island limit(Viz.-DMCW-TG & SG, ACW Pump Motor)<br>will be free issue by BHEL. However, cables, cable laying, termination, erection and testing &<br>commissioning will be in BOP scope. Refer further details in Mechanical specification. | 1.Kindly confirm the approximate distance / cable route length from the client's 6.6 kV HT panel/switchgear to each respective HT motor location, for estimation of HT cables, cable trays, supports, and associated installation works.<br>2.Kindly provide detailed 6.6 kV HT motor electrical data such as motor rating (kW/kVA), full load current, starting method, and service factor, to facilitate proper HT cable sizing and selection. | 1. Refer reply at point no. 79<br>2. As per Specification, HT Motor Rating is to be selected by Bidder based upon the respective Pump parameters and criteria defined in Technical Specification. HT Motor GA Drawing/Datasheet shall be shared with successful Bidder after finalization of HT Motor Rating by Bidder. |
| 82 | 22 | KORBA WEST_WTP_Tech Specs Part 1 of 11 | INTENT OF SPECIFICATION | Six (6) nos. islands (Island-1, 2, 3, 4, 5 & 6) have been identified and demarcated in the Plot Plan<br>PE-DG-530-100-M001 for water treatment EPC package as per following major details. | We understand that a total of six (6) islands are envisaged, and each island shall be provided with a separate transformer and MCC. Kindly confirm. | Kindly refer Technical Specification and ESLD. |
| 83 | *** | General | *** | Requirement of HT feeder | The number of HT feeders required shall be provided/confirmed by the Customer based on the total connected load and the distribution of load across each area. | Kindly refer Technical Specification and ESLD.<br>As per Note no.1 of ESLD,<br>"1. BHEL WILL PROVIDE ONLY 6 NOS. UNCABLED 11kV HT FEEDER(FROM 11KV STN. BOARDS LOCATED IN MAIN POWER HOUSE SWGR. ROOMS) AND 415V (FROM 415V BIOMASS PMCC LOCATED AT S.No.61 IN THE PLOT PLAN) AS SHOWN HERE AND 6.6kV UNCABLED FEEDERS FOR MOTORS AS PER SCOPE MATRIX. FURTHER COMPLETE DISTRIBUTION WILL BE IN BIDDER SCOPE." |
| 84 | *** | General | *** | Rack height of cable tray | Kindly confirm | Rack height along with cross sectional details shall be provided after award oc contract. |
| 85 | *** | General | *** | Drawing | Kindly provide the drawing of the Main Power House located in Plot Plan No. 4, required for finalizing cable routing and cable sizing. | Plot Plan (Page 727 of 3511) & Equipment Layout EL 0.0M (Page 742 of 3511) already included in the Technical Specification. |
| 86 | 245 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II<br>TECHNICAL SPECIFICATION FOR ELECTRICAL | LT Service Transformer (11/0.433kV, Oil Filled).<br>Electrical SLD(Minimum requirement is enclosed with specification as Annexure-E.7). | As per the provided SLD, BHEL is supplying 6 nos. HT feeders from the BHEL HT panel.<br><br>However, due to process requirements, area-wise load distribution may change. In such a case, if additional HT feeders are required beyond the 6 nos. indicated in the SLD, kindly confirm whether the same shall be provided by BHEL.. | Kindly refer Technical Specification and ESLD.<br>As per Note no.1 of ESLD,<br>"1. BHEL WILL PROVIDE ONLY 6 NOS. UNCABLED 11kV HT FEEDER(FROM 11KV STN. BOARDS LOCATED IN MAIN POWER HOUSE SWGR. ROOMS) AND 415V (FROM 415V BIOMASS PMCC LOCATED AT S.No.61 IN THE PLOT PLAN) AS SHOWN HERE AND 6.6kV UNCABLED FEEDERS FOR MOTORS AS PER SCOPE MATRIX. FURTHER COMPLETE DISTRIBUTION WILL BE IN BIDDER SCOPE." |
| 87 | 246 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II<br>TECHNICAL SPECIFICATION FOR ELECTRICAL | 6. Uncabled feeder for LT Drive/Feeders for loads located out side BOP battery /Island limit and<br>located in Main Power House will be provided by BHEL from Power house swgr. However, cables,<br>cable laying, termination, erection and testing & commissioning will be in BOP scope. | Unable to understood kindly clarify. | As per Technical Specification and scope split, if any LT Drive/Feeders of BOP scope is located in Main Power House then uncabled feeder for LT Drive/Feeders for such loads will be provided by BHEL from Power House Switchgear.<br><br>However, cables, cable laying, termination, erection and testing & commissioning will be in BOP scope. |

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| 88 | 246 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II TECHNICAL SPECIFICATION FOR ELECTRICAL | 2. Uncabled feeder for LT Drive/Feeders for STP-1 area (Island-6) as marked in plot plan will be provided by BHEL from FOPH PMCC (as located at S.No.17 in the Plot Plan). However, cables, cable laying, termination, Erection and testing & commissioning will be in BOP scope. Terminal point for Cabling Material shall be TP-6. | Kindly confirm whether the scope of cable laying from Sr. No. 17 is up to STP-1 MCC or up to individual drives/motors. | As per scope split, Uncabled feeder for LT Drive/Feeders for STP-1 area (Island-6) as marked in plot plan will be provided by BHEL from FOPH PMCC (as located at S.No.17 in the Plot Plan).<br><br>However, cables, cable laying, termination, Erection and testing & commissioning will be in BOP scope. Terminal point for Cabling Material shall be TP-6. |
| 89 | 246 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II TECHNICAL SPECIFICATION FOR ELECTRICAL | 3. Uncabled feeder for LT Drive/Feeders for loads located only in Island-2 (as same is near Main Power House) will be provided by BHEL from Power house swgr. However, cables, cable laying, termination, erection and testing & commissioning will be in BOP scope.Terminal point for Cabling Material shall be TP-2. | Kindly confirm whether the scope of cable laying from power house swgr is up to Island-2 MCC or up to individual drives/motors. | Kindly refer the Technical Specification and ESLD:<br>" Uncabled feeder for LT Drive/Feeders for loads located only in Island-2 (as same is near Main Power House) will be provided by BHEL from Power house swgr. However, cables, cable laying, termination, erection and testing & commissioning will be in BOP scope.Terminal point for Cabling Material shall be TP-2." |
| 90 | 248 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II TECHNICAL SPECIFICATION FOR ELECTRICAL | Load & feeder requirement to be informed by BOP vendor for sizing of BTG scope Transformers. | Unable to understood kindly clarify. | As per Technical Specification, bidder to provide "Load & feeder requirement to be informed by BOP vendor for sizing of BTG scope Transformers." |
| 91 | *** | General | *** | CPU regeneration area is shown in 83 no. (Island-1) | Kindly confirm who giving the incoming supply of CPU regeneration area drive. | Kindly refer the ESLD where the incoming supply arrangement is clearly indicated. |
| 92 | *** | General | *** | MCC configuration | Kindly confirm Conventional MCC or Intelligent MCC | Kindly refer the Technical Specification. |
| 93 | 245 | KORBA WEST_WTP_Tech Specs Part 6 of 11 | SECTION – II TECHNICAL SPECIFICATION FOR ELECTRICAL | LT Service Transformer (11/0.433kV, Oil Filled).<br>Electrical SLD(Minimum requirement is enclosed with specification as Annexure-E.7). | With reference to the approved Single Line Diagram (SLD), plot plan, and BOQ/scope matrix, our understanding of the transformer requirement and power supply arrangement is as follows<br>1. Transformer Scope<br>DM/PT (Island-1): 2 Nos. transformers<br>ETP/$CLO_2$ (Island-2) and SSF (Island-5): 2 Nos. transformers<br>CPU & Services (Island-2): 2 Nos. transformers.<br>2.Island-6 (STP-1 Area)<br>LT drives/feeders for STP-1 area shall be fed through an uncabled feeder from FOPH PMCC, located at S. No. 17 of the plot plan, under BHEL scope.<br>Accordingly, no separate transformer is envisaged / considered in BOQ for Island-6..<br>3.Island-4 (CHP / WTP Area)<br>Power supply shall be through an uncabled feeder from the 415 V Biomass Board, located at S. No. 61 of the plot plan (CHP WTP MCC), under BHEL scope.<br>Cables, cable laying, termination, erection, testing, and commissioning shall be under BOP scope.<br>Hence, no separate transformer is considered in BOQ for Island-4..<br>Kindly confirm the above interpretation of scope and BOQ alignment to avoid any future commercial or contractual implications.<br><br>**Please refer to Sr. No. 4 and Sr. No. 15 and confirm which scheme is to be followed by the BOP vendor** | Kindly refer the ESLD. As per ESLD Note No.2, "ELECTRICAL DISTRIBUTION SHOWN IS MINIMUM REQUIREMENT W.R.T RATING AND NUMBER OF LT PMCC/MCC/BOARDS."<br><br>Bidder querry, "<br>Please refer to Sr. No. 4 and Sr. No. 15 and confirm which scheme is to be followed by the BOP vendor" is not clear. |
| 94 | *** | General | *** | Transformer requirement | As per the SLD, separate transformers are indicated for the Clarified Water System, Service Water System, and CPU. However, as per the plot plan, the Clarified Water and Service Water systems are shown under Island-1.<br>Kindly clarify the transformer requirement Neccesary or not. | Kindly refer the Technical Specification and ESLD. |

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| | **CONTROL & INSTRUMENTATION** | | | | | |
| 95 | 22 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | INTENT OF SPECIFICATION | 2. Following islands have been identified for water system package:<br>Six (6) nos. islands (Island-1, 2, 3, 4, 5 & 6) have been identified and demarcated in the Plot Plan<br>PE-DG-530-100-M001 for water treatment EPC package as per following major details | As per this clause, six (6) nos. islands (Island-1 to Island-6) are identified for the Water Treatment Package.<br><br>Bidder understands that the main DDCMIS system supplied by client shall be located in WTP Control Room No.-26.<br><br>Further, it is understood that each island shall be provided with a dedicated DCS Remote I/O (RIO) panel (supplied by client) for interfacing field instruments and actuators, and the same shall be integrated with the main DDCMIS located in Control Room No.-26.<br><br>Kindly confirm the above understanding and also clarify whether all interconnecting communication / fiber optic cabling between island-wise RIO panels and main DDCMIS is within bidder's scope or client scope. | Specification requirement is clear.<br>Bidder to follow specification. |
| 96 | 22 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | INTENT OF SPECIFICATION | 2. Following islands have been identified for water system package:<br>Six (6) nos. islands (Island-1, 2, 3, 4, 5 & 6) have been identified and demarcated in the Plot Plan<br>PE-DG-530-100-M001 for water treatment EPC package as per following major details | In line with the island-wise concept for the Water Treatment Package, bidder understands that transformer(s) and MCC(s) shall be provided by the bidder at each identified island location (Island-1 to Island-6).<br><br>Further, complete power and control cable distribution from transformer to respective MCCs and from MCCs to field-mounted equipment within each island is considered in bidder's scope.<br><br>Kindly confirm the above understanding. | Kindly refer the Technical Specification and ESLD. |
| 97 | 22 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | INTENT OF SPECIFICATION | 2. Following islands have been identified for water system package:<br>Six (6) nos. islands (Island-1, 2, 3, 4, 5 & 6) have been identified and demarcated in the Plot Plan<br>PE-DG-530-100-M001 for water treatment EPC package as per following major details | Bidder understands that the DDCMIS shall be supplied by Client / BHEL and shall be located in WTP Control Room No.-26.<br><br>In view of the above, kindly clarify the scope responsibility for interconnecting cabling / wiring between island-wise MCCs and the DDCMIS, including supply, laying, termination, and testing.<br><br>Kindly confirm whether the above scope is under bidder's scope or under Client / BHEL scope. | Specification requirement is clear.<br>Bidder to follow specification. |
| 98 | 22 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | INTENT OF SPECIFICATION | b. Island-2: DM/CST tanks & PH, Control/ RIO Room, MCC (MV/LV as applicable), Sewage Collection<br>Sumps, battery room, Sewage networking, transformers, Analyzer room, Roads, drains (process<br>drains & storm water drains), Paving, Misc. foundations for equipment & piping, Cable Rack,<br>Cable vault, HVAC & its building (if applicable), toilet blocks, associated material handling e.g.<br>Cranes, electric hoists & Chain pulley block etc. | As per equipment layout Plot no. 24 to be consider as Island-2, kinldy confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 99 | 22 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | INTENT OF SPECIFICATION | 2. Following islands have been identified for water system package:<br>Six (6) nos. islands (Island-1, 2, 3, 4, 5 & 6) have been identified and demarcated in the Plot Plan<br>PE-DG-530-100-M001 for water treatment EPC package as per following major details | Bidder understands that the CPU Service Area and CPU Regeneration Area are not included in the identified six (6) nos. islands (Island-1 to Island-6) for the Water Treatment Package.<br><br>It is further understood that:<br>CPU Service Area shall be located at Main Plant Boiler Plot No.-5 (2 nos.), and<br>CPU Regeneration Area shall be located at a separate designated 83 no. plot area .<br>Kindly confirm the above understanding. | Specification requirement is clear.<br>Bidder to follow specification. |
| | | | | | Bidder understands that DCS Remote I/O (DCS-RIO) panels shall be supplied by Client / BHEL at:<br><br>Each CPU Service Area, and<br>CPU Regeneration Area.<br>Kindly confirm the above understanding. | Specification requirement is clear.<br>Bidder to follow specification. |

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| | | | | | Bidder understands that the approximate distance between CPU Service Area and CPU Regeneration Area is more than 600 meters.<br>In view of the above separation and distance, kindly clarify the scope responsibility for supply, laying, erection, termination, testing, and commissioning of interconnecting power / control / communication cables, including cable trays and supporting structures, between MCC(s) and DCS-RIO panels at:<br><br>CPU Service Area, and<br>CPU Regeneration Area.<br>Kindly confirm whether the above scope is under Bidder's scope or Client / BHEL scope. | Specification requirement is clear.<br>Bidder to follow specification. |
| 100 | 27 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | 1.1.1 AMMONIA DOSING SYSTEM: (TOTAL NO. OF SKIDS= 2 NO.)<br>(Refer Drawing no. PE-DG-530-154-W001, SHEET 01 OF 01)<br>CONTROL PHILOSPOHY FOR AMMONIA DOSING SYSTEM | A local panel comprising of 'START' push button, 'STOP' push button along with 'ON/OFF/TRIP' indication, local/ remote indication, stroke position indicator, raise/ lower push button for stroke position and local annunciation shall be provided for local operation. The 'START' push button and 'STOP' push button shall be routed to DDCMIS. | Each stroke controller is provided with a dedicated field-mounted controller system, and a separate local push button station is also provided for each dosing pump for local operation.<br><br>All signals such as START / STOP / ON / OFF / TRIP are considered from MCC to DDCMIS.<br><br>Additionally, each stroke controller shall have communication to DDCMIS for stroke position monitoring as well as control.<br><br>In view of the above control philosophy, a separate Local Control Panel (LCP) as mentioned in the tender clause may not be required.<br><br>Kindly advise / confirm acceptance | Specification requirement is clear.<br>Bidder to follow specification. |
| 101 | 29 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | 1.1.2 NaOH DOSING SYSTEM FOR ECW SYSTEM: (TOTAL NO. OF SKID = 4 NOS)<br>(Refer Drawing. No. PE-DG-530-154-W002, SHEET 02 OF 02) | | | |
| 102 | 50 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | 5.3 OPERATION AND CONTROL | Control of Complete Sewage treatment plant 1, 2 & 3 located in WTP Island 1, 2, 3, 4, 5 & 6 shall be from Micro processer-based control system and same shall be in bidder's scope<br><br>However, STP plant can also be controlled from DDCMIS (DCS) based control system.<br>DDCMIS (DCS) shall be in BHEL scope. | 1. We hereby understand that complete control operation of STP packages will be done through locally mounted Micro processer-based control system.<br>2. Also be controlled through DDCMIS (client supplied) and communication between these two control system with accessories will be done by BHEL/client. | Specification requirement is clear.<br>Bidder to follow specification. |
| 103 | 65/66 of 81 | BHEL DOCUMENTS NO.:<br>9_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part1 | B. REGENERATION SYSTEM | 22) All weather Local Panel fitted with integral Air Conditioner shall be provided by bidder for housing analyzers (pH, conductivity, concentration etc), if the same are not kept in AC rooms. | Please confirm that pH, conductivity, ORP and concentration analyzers can be installed in outdoor IP65 / IP66 panels without integral AC, whereas integral AC is required only for special analyzers such as silica and sodium. | Specification requirement is clear.<br>Bidder to follow specification. |
| | 24 of 81 | CONTROL AND INSTRUMENTATION<br>FOR<br>WATER TREATMENT PACKAGE<br>31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III<br>TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION<br>GENERAL TECHNICAL REQUIREMENTS (C&I) | 10. Analyser shall be placed in AC room. AC Room size (including maintenance space) shall be provided by bidder on required basis. | | |

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| 104 | 63 of 81 | TECHNICAL SPECIFICATION<br>SECTION - VI<br>PART-B<br>SUB-SECTION-B 05B<br>25_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part17 | SUB-SECTION-B 05B | MV SWITCHGEAR PROTECTION CONTROL AND METERING. DIAGRAM | It is noted that FO/Ethernet communication is shown between Control System and MV/LV switchgear in the Control & Monitoring diagram. This communication is understood to be for switchgear/breaker-level monitoring only and does not indicate Intelligent MCC (IMCC), as motor feeders are shown with hardwired start/stop and status signals. Further, since the Control System (DCS/SCADA/DDCMIS) is in Client's scope of work, any communication interface between Control System and MV/LV switchgear shall also be in Client's scope and is not included in Bidder's scope of supply. Bidder's scope is limited to conventional hardwired motor control and monitoring as per drawings. Kindly confirm | Kindly refer the Technical Specification. As per Clause no.7.00.00 of Sub-Section B-06, "Each motor/heater feeder shall consists of MPCB/MCCB (with S/C release only), Power Contactor & intelligent motor controller (IMC) to ensure type-2 co-ordination". Further, please refer Clause no.47, Section III, Sub-Section: C&I also. |
| 105 | 28 of 81 | TECHNICAL SPECIFICATION FOR ELECTRICAL<br>SECTION - VI<br>PART-B<br>24_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part16 | SCOPE MATRIX [ELECTRICAL SYSTEM / EQUIPMENTS]-point 17 | Cables (LT Power, LT Control, Screen, Instrumentation, Special type of cable like compensating cable, Co-axial cable, prefab cable, MICC cable, FO cable & any other type of cable, etc.) | 1. With this scope matrix we understand that instrumentation cable from conventional instruments to JB and from conventional JB to DDCMIS including cable, cable trays and structural steel within battery limit of island1 to 6 are in scope of bidder kinldy confirm.<br>2. With this scope matrix we understand that instrumentation cable from profibus instruments to profibus JB and from profibus JB to DDCMIS including cable, cable trays and structural steel within battery limit of island 1 to 6 are in scope of bidder kinldy confirm<br>3. only Profibus JB will be supplied by BHEL/client.<br>4.As per the remark stating "For Both end as well as Single end BOP equipments/loads. (Either supply or E&C or both)", our understanding is as follows:<br><br>For BOP equipment/loads where both ends of the instrumentation cable fall under BOP vendor scope, the complete instrumentation cable shall be supplied by the BOP vendor.<br><br>For BOP equipment/loads where only one end of the instrumentation cable falls under BOP vendor scope and the other end is under Owner / Main Contractor scope, the complete instrumentation cable shall still be supplied by the BOP vendor, with termination at interfaces as applicable.<br><br>Kindly confirm the above understanding for bidding purposes. | 1. Kindly refer the Technical Specification and Scope Matrix.<br>2. Kindly refer the Technical Specification and Scope Matrix.<br>3. Kindly note that this point is not pertaining to Scope Matrix. Kindly refer Clause no.47, Section-III, Sub-Section: C&I.<br>4. Kindly refer the Technical Specification and Scope Matrix. |
| 106 | 26 of 81 | TECHNICAL SPECIFICATION FOR ELECTRICAL<br>SECTION - VI<br>PART-B<br>24_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part16 | SCOPE MATRIX [ELECTRICAL SYSTEM / EQUIPMENTS]-point-4 | Electrical breaker control location and scope shall be same as followed for process/C & I control.<br>Electrical breaker/Panel control & logic shall be part of DCS of Water treatment package and shall be<br>in BOP Vendor Scope. Communication for Water treatment package DCS with Main Plant DCS is in<br>BHEL scope. | 1. We herby understand that there is no separate DCS for water treament package, all signal of water package are goes to Main plant DCS kinldy confirm<br>2. As per layout the kinldy confirm if water block pacakge separate DCS and each Island we need to considerd RIO-DCS will be supplied by BHEL with location and plot number.<br>3. Also requesting to you kinldy provide clear scope of C&I for water block package. | Technical Specification requirement is clear in this regard. Bidder to follow technical specifications. |
| 107 | 28 of 81 | TECHNICAL SPECIFICATION FOR ELECTRICAL<br>SECTION - VI<br>PART-B<br>24_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part16 | SCOPE MATRIX [ELECTRICAL SYSTEM / EQUIPMENTS]-point 18 | As per exclusion<br>1. Cable Trays and cable tray support within main power house for BOP loads located within Main Power House.<br>"2. Cable Trays and cable tray support to interconnect Island-3 and Island-5 upto BOP battery limit. (Connection shall be between TP-3 to TP-3E as marked in the Plot Plan)" | 1. Main power house means plot no.4 as per plot plant.2<br>2. Unable to find out TP-3E | 1 & 2. Already included in the Plot Plan (Page 727 of 3511) which is already part of the Technical Specification. |
| 108 | 16 of 81 | BHEL DOCUMENTS NO.:<br>10_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part2 | 10.1 SCOPE OF SUPPLY (MECHANICAL | 10.1.50 All motorized valves to be supplied with Non-intrusive Profibus based Electric Actuator for PT plant package along with necessary interface units for linking to corresponding Control System as<br>applicable. | Clause 10.1.50 specifies non-intrusive Profibus based electric actuators for PT Plant package only.<br>Clause 13.9.26 specifies integral starter for all motorized valves.<br><br>We understand that:<br><br>For PT Plant package, motorized valves shall be provided with Profibus-based non-intrusive actuators without integral starter.<br><br>For all other packages, motorized valves shall be provided with conventional electric actuators with integral starter. | Bidder to refer C & I specification w.r.t. profibus type instruments, analyzers and electric actuators requirement applicable for all water treatment packages. |
| | 52 of 81 | BHEL DOCUMENTS NO.:<br>10_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part2 | 13.9 ADDITIONAL SCOPE OF BIDDER AND DETAILS | 13.9.26 All motorized valves shall be provided with integral starter. | | |

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| 109 | 23 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION GENERAL TECHNICAL REQUIREMENTS (C&I) | 3. The control system for Water packages shall be as per C&I Annexure-I (enclosed with this specification). Profibus based controls and conventional controls (hardwired 4-20mA/DI/DO) are envisaged for these packages. The usage of these two types of controls and devices is indicated below:<br>i) Close Loop controls: For all applications of offsite areas PROFIBUS-based control system,<br>PROFIBUS-based actuators, PROFIBUS-based control valve positioner and PROFIBUSbased<br>PT/DPT/TT shall be provided.<br>ii) Open loop controls: For open loop control of offsite areas PROFIBUS-based control system,<br>PROFIBUS-based actuators, Profibus DP based IMC in LV SWGR/MCC and<br>PROFIBUS-based PT/DPT/TT shall be provided. Contractor to note that Solenoid<br>operated pneumatic open close actuators, HT/LV SWGR/MCC where IMC is not<br>envisaged and instruments other than PT/DPT/TT envisaged under this package are<br>conventional, i.e. not based on PROFIBUS system. Hence, in DDCMIS, mix of<br>conventional and PROFIBUS-based control system is envisaged. | As per tender clause, in Water (Offsite) Package, all PT/DPT/TT used in closed-loop and open-loop control and all modulating control valves/actuators shall be PROFIBUS-based. All other instruments, solenoid operated ON/OFF valves, and motors with conventional MCC (without IMC) shall be hardwired conventional type. kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 110 | 24 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION GENERAL TECHNICAL REQUIREMENTS (C&I) | 17. Bidder to provide PROFIBUS PA protocol compatible PT (Pressure Transmitters), DPT (Differential Pressure Transmitters), TT (Temperature Transmitters) and Flow/Level Transmitters (DP type) for entire Water treatment/Water system packages. | With reference to Clause 17, we understand that PROFIBUS PA protocol compatibility is required for PT, TT and all DP-based transmitters (DPT), including DP type Flow and Level transmitters. Non-DP type Flow and Level transmitters (e.g. electromagnetic, ultrasonic, radar) and other instruments shall be conventional, in line with control philosophy clause. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 111 | 23 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION GENERAL TECHNICAL REQUIREMENTS (C&I) | 5. All the primary Instruments as indicated in enclosed flow schemes/diagrams and relevant tender drawings/ BOQ, corresponding Mechanical sections and meeting redundancy and other requirements specified under technical specifications are to be provided as a minimum. | With respect to Clause 5, we understand that primary instruments and redundancy requirements shall be considered strictly as indicated in the approved P&IDs / flow schemes / tender drawings and BOQ. No additional redundancy shall be assumed unless explicitly specified elsewhere in the technical specifications. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 112 | 24 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION GENERAL TECHNICAL REQUIREMENTS (C&I) | 15. Power supply derived for Transmitters, contact interrogation, interposing relay and solenoid shall generally be ungrounded 24V D.C only. In all cases redundancy in power modules shall be considered. | 1. For Water Package, only PT/DPT/TT and modulating control valves shall be PROFIBUS type. All other instruments, solenoid valves, motors and ON/OFF valves shall be conventional. Instrument redundancy shall be as per P&IDs only. Control system and its power supply redundancy are in Client scope.<br>2. Since control system including DCS and its power supplies is in Client's scope, it is understood that redundancy mentioned under Clause 15 refers to client-provided 24V DC power modules. Contractor's scope is limited to supply of field instruments only, with redundancy considered strictly as per P&IDs. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |

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| 113 | 25 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION GENERAL TECHNICAL REQUIREMENTS (C&I) | 23. Redundancy of instruments to be provided by bidder shall be as follows: -<br>(i) Triple redundancy for all analog and binary inputs required for protection of system/drives.<br>(ii) For all other control functions dual redundancy of the sensors shall be provided by the<br>bidder. | With reference to Clause 23 on instrument redundancy, we understand that redundancy requirements shall be implemented strictly as indicated in tender P&IDs / BOQ and approved drawings. No additional dual or triple redundant sensors have been assumed unless explicitly shown or specified. Further, protection and voting logic being part of Client's control system, redundancy philosophy shall be governed by Client's design. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 114 | 25 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION GENERAL TECHNICAL REQUIREMENTS (C&I) | 25. Bidder shall provide the following configuration/ diagnostic tool for all Profibus based instruments<br>– 2 Nos of each make.<br>26. Configuration/ diagnostic tool (if applicable) for non-intrusive actuators-5 Nos. or 5% of total<br>quantity of actuator whichever is more.<br>27. Contractor shall provide all required software (life time licensed) and hardware (cables/connectors,<br>Tablet/ Laptop etc.) along with these tools. | Configuration/diagnostic tools mentioned under Clauses 25–27 are understood to be<br>manufacturer specific field device and actuator configuration tools only. Control system/DCS engineering, configuration and diagnostic software are in Client's scope and are excluded from Bidder's scope. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 115 | 26 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION GENERAL TECHNICAL REQUIREMENTS (C&I) | 39. 230 V AC UPS Power supply shall be provided by BHEL at water system control room, further<br>distribution to various instruments/equipment of the system shall be in bidder scope. Bidder to<br>include necessary power distribution board in his scope. Any power supply other than the above, if<br>required by any instrument/equipment has to be derived by the bidder from the above supply & all<br>necessary hardware for the same shall be in bidder scope. | With reference to Clause 39, it is understood that 230 V AC UPS power supply shall be provided by BHEL at each Water System control room / island (Island-1 to Island-6). Bidder's scope is limited to provision of local power distribution boards and further internal distribution to instruments and equipment within each respective island only. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 116 | 27 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | SECTION – III TECHNICAL SPECIFICATION FOR CONTROL & INSTRUMENTATION GENERAL TECHNICAL REQUIREMENTS (C&I) | 46. All electrical devices like switches/ transmitters/ controller/ analyzer/ solenoid valves which are<br>located in the in hazardous areas like hydrogen gas area, seal oil area etc. shall be made<br>intrinsically safe by providing suitable type of transformer isolated barrier/ Zener barrier of<br>standard make & shall be provided with explosion proof enclosure suitable for hazardous areas<br>described in National Electric Code (USA), Article 500, Class-I, Division-I or EN60079-14 or<br>shall comply with the essential requirements of ATEX directives. | We hereby understand that water block island 1 to island 6 are comes under safe area classification, kinldy confirm | Bidder's understanding is correct. |
| 117 | 28 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for ClO2 package: | 1) ClO2 Plant shall be operated from DCS (DCS is in BHEL's scope) through operator work<br>stations located in ClO2/CWT Plant control room. | With reference to Clause (1), we understand that $ClO_2$ Plant shall be operated from BHEL-scope DCS through operator workstations located in the $ClO_2$ / CWT Plant Control Room. Further, it is understood that CWT Plant falls under Island-3 and the $ClO_2$ / CWT Control Room is located at Plot No. 32, as per Equipment Layout / General Arrangement drawings. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 118 | 29 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for Side stream filteration package: | 1) Side stream filteration package shall be operated from DCS (DCS is in BHEL's scope) through<br>operator work stations located in ClO2/CWT Plant control room. | With reference to Clause (1), we understand that $ClO_2$ Plant shall be operated from BHEL-scope DCS through operator workstations located in the $ClO_2$ / CWT Plant Control Room. Further, it is understood that CWT Plant falls under Island-3 and the $ClO_2$ / CWT Control Room is located at Plot No. 32, as per Equipment Layout / General Arrangement drawings. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |

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| 119 | 30 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for DM plant system: | 1) DM Plant shall be operated from DCS (DCS is in BHEL's scope) through operator work stations located in Water system control room. | 1. With reference to Clause (1), we understand that DM Plant shall be operated from BHEL-scope DCS through operator workstations located in the Water System Control Room. Further, it is understood that DM Plant falls under Island-6 and the Water System Control Room is located at Plot No. 26, as per Equipment Layout / General Arrangement drawings.<br><br>2. It is also noted that the main DCS is located in TG Building (Plot No. 5); accordingly, Remote I/O (RIO) DCS panels at the Water System Control Room (Island-6) shall be provided in BHEL's scope, and Bidder's scope shall be limited to field cabling up to the respective RIO panels only. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 120 | 30 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for DM plant system: | 1) Condensate polishing unit packages shall be operated from DCS (DCS is in BHEL's scope) through operator work stations located in Water system control room | 1. Whether DCS Remote I/O (RIO) panels for the CPU service area shall be provided under BHEL's DCS scope.<br>2. For the CPU regeneration area (≈600 m away), kindly clarify:<br>2.a Whether a separate DCS RIO panel shall be provided by BHEL locally at the regeneration area, OR<br>2.b All field instruments and actuators from regeneration area are to be wired to the CPU service area RIO through long-distance cabling.<br>3. Kindly clarify the MCC configuration for CPU service area and regeneration area:<br>3.a Whether separate MCCs are envisaged for both areas, and<br>3.b The mode of interface between MCCs and DCS (hardwired / communication based).<br>4 Kindly confirm the intended signal cabling philosophy between CPU service area and regeneration area to avoid ambiguity in RIO, MCC, and cabling scope. | Specification requirement is clear.<br>Bidder to follow specification. |
| 121 | 31 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for PT Plant: | 1) Pre-treatment plant packages shall be operated from DCS (DCS is in BHEL's scope) through operator work stations located in Water system control room. | It is understood that the Pre-Treatment (PT) plant falls under Island-1 and, as per Equipment Layout Drawing Plot No. 19, the client/BHEL-supplied DCS is proposed to be located in WTP Control Room Plot No. 26. The term water system control room means which control room.<br><br>In this regard, kindly confirm the above understanding and clarify whether all PT plant package controls shall be integrated with the DCS located in WTP Control Room (Plot No. 26). | Specification requirement is clear.<br>Bidder to follow specification. |
| 122 | 32 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for CW Treatment package: | 1) CW treatment packages shall be operated from DCS (DCS is in BHEL's scope) through operator work stations located in ClO2/CWT Plant control room. | With reference to this Clause , we understand that $ClO_2$/CWT Plant shall be operated from BHEL-scope DCS through operator workstations located in the $ClO_2$ / CWT Plant Control Room. Further, it is understood that CWT Plant falls under Island-3 and the $ClO_2$ / CWT Control Room is located at Plot No. 32, as per Equipment Layout / General Arrangement drawings. Kindly confirm | Specification requirement is clear.<br>Bidder to follow specification. |
| 123 | 32 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for ETP package: | 1) Effluent treatment packages shall be operated from DCS (DCS is in BHEL's scope) through operator work stations located in in ClO2/CWT Plant control room. | It is understood that the Effluent Treatment Plant (ETP) falls under Island-3, located at Plot No. 42, whereas the $ClO_2$ / CWT Plant Control Room is located at Plot No. 32.<br><br>In this regard, kindly confirm whether all ETP package controls shall be integrated with the DCS located in $ClO_2$ / CWT Control Room (Plot No. 32), as per tender requirement. | Specification requirement is clear.<br>Bidder to follow specification. |

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| 124 | 32 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for ETP package: | 4) Bidder shall provide the Effluent quality monitoring system (EQMS) which include analysers<br>(PH, Conductivity, COD/BOD, Oil in Water, TSS) as per specification | In this regard, kindly confirm the list of approved/acceptable vendors for the complete Effluent Quality Monitoring System (EQMS) package, as the same could not be identified from the approved vendor list provided with the tender.<br><br>Based on experience from previous similar projects, it is observed that availability of compliant EQMS vendors is limited, and in some cases only a single vendor was acceptable for the same scope.<br><br>Hence, to avoid vendor dependency and commercial constraints, request BHEL to specify at least 2–3 approved EQMS vendors for bidding and execution purposes. | Specification requirement is clear.<br>Bidder to follow specification. |
| 125 | 34 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for HVAC system for Water System Control Room: | 1) HVAC system for Water System Control Room shall be operated from DCS (DCS is in<br>BHEL's scope) through operator work stations located in Water system control room. | It is understood that DCS Remote I/O (RIO) panels shall be located island-wise, and accordingly separate DCS-RIO rooms are envisaged in each island.<br><br>In this regard, kindly confirm whether HVAC / air-conditioning for each DCS-RIO room in respective islands shall be provided under Client / BHEL scope, and that the Bidder's scope is limited to DCS-based operation and monitoring only | Specification requirement is clear.<br>Bidder to follow specification. |
| 126 | 34 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for HVAC system for Water System Control Room: | 1) HVAC system for Water System Control Room shall be operated from DCS (DCS is in<br>BHEL's scope) through operator work stations located in Water system control room. | Kindly confirm that supply, installation, testing and commissioning of HVAC / air-conditioning systems (including chillers, AHUs, ducting, piping, power supply and local control panels) for Water System Control Room and all island-wise DCS-RIO rooms are under Client / BHEL scope, and that Bidder's scope is limited to instrumentation and DCS interfacing only, as per tender clauses. | Specification requirement is clear.<br>Bidder to follow specification. |
| 127 | 34 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for HVAC system for Water System Control Room: | 3) Bidder to provide configuration diagram of the chiller (if applicable) showing its interface with<br>DCS. Critical signals like start/stop from DCS to the chiller panel, ON/OFF/TRIP feedbacks<br>and other analog signals etc. shall be hardwired to DCS. Further, the signals shall be<br>communicated to DCS through redundant soft link over TCP/IP. Bidder to furnish signal<br>exchange list between DCS and chiller system in BHEL format during detailed engineering.<br>Optical fibre cable, if applicable, for chiller system shall be in bidder's scope of supply.<br>Further details shall be decided during detailed engineering. | For HVAC systems involving chillers, kindly confirm that:<br><br>Chiller shall have standalone local control by HVAC vendor.<br><br>DCS shall be used only for supervisory control and monitoring (Start/Stop, status, trips, alarms, analog values).<br><br>No closed-loop or capacity control of chiller through DCS is envisaged. | Chiller is not applicable for HVAC system. |

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| 128 | 34 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for HVAC system for Water System Control Room: | 3) Bidder to provide configuration diagram of the chiller (if applicable) showing its interface with DCS. Critical signals like start/stop from DCS to the chiller panel, ON/OFF/TRIP feedbacks and other analog signals etc. shall be hardwired to DCS. Further, the signals shall be communicated to DCS through redundant soft link over TCP/IP. Bidder to furnish signal exchange list between DCS and chiller system in BHEL format during detailed engineering.<br>Optical fibre cable, if applicable, for chiller system shall be in bidder's scope of supply.<br>Further details shall be decided during detailed engineering. | With reference to HVAC system interface with DCS, kindly clarify the signal interface limits as below:<br><br>Kindly confirm that all critical hardwired signals (such as Start/Stop commands, ON/OFF status, TRIP/Fault feedbacks and essential analog signals) shall be wired from HVAC / chiller local control panel to the nearest DCS Remote I/O (RIO) panel only, and not directly up to the main DCS control room.<br><br>Kindly confirm that all non-critical monitoring signals shall be communicated from HVAC / chiller control panel to DCS through redundant TCP/IP communication via optical fibre.<br><br>Kindly confirm that no long-distance point-to-point hardwiring between HVAC / chiller panels and main DCS control room is envisaged, and that local RIO-based architecture shall be adopted.<br><br>This clarification is requested to clearly establish hardwired signal routing, communication architecture, and cabling scope. | Specification requirement is clear.<br>Bidder to follow specification. |
| 129 | 34 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for HVAC system for Water System Control Room: | 3) Bidder to provide configuration diagram of the chiller (if applicable) showing its interface with DCS. Critical signals like start/stop from DCS to the chiller panel, ON/OFF/TRIP feedbacks and other analog signals etc. shall be hardwired to DCS. Further, the signals shall be communicated to DCS through redundant soft link over TCP/IP. Bidder to furnish signal exchange list between DCS and chiller system in BHEL format during detailed engineering.<br>Optical fibre cable, if applicable, for chiller system shall be in bidder's scope of supply.<br>Further details shall be decided during detailed engineering. | Kindly confirm that:<br><br>Optical fibre cable from chiller panel up to DCS marshalling / RIO panel shall be in Bidder's scope.<br><br>FO termination at DCS panel / RIO end, including LIU mounting and DCS panel modifications (if any), shall be under BHEL scope.<br><br>Kindly confirm that:<br><br>Power supply, UPS, and power cabling for HVAC equipment, chiller panels, and interface devices shall be under Client / BHEL scope.<br><br>Bidder scope excludes provision of any UPS or power backup for HVAC system. | Specification requirement is clear.<br>Bidder to follow specification. |

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| 130 | 38 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | Specific Points applicable for CHP Run-off System: | 1) CHP-Run off System shall be operated from DCS (DCS is in BHEL's scope) through operator work stations located in CHP-WTP control room. | It is understood that:<br><br>Plot No. 59 (CHP-WTP) falls under Island-4, however the control room number for Island-4 is not explicitly mentioned in the tender documents.<br><br>Plot No. 61, identified as “CHP Electrical Building / Control Room”, is located far away from Island-4 and its association with CHP Run-off System operation is not clear.<br><br>In this regard, kindly clarify and confirm:<br><br>The exact control room location (plot number) from which the CHP Run-off System (Island-4) shall be operated through DCS.<br><br>Whether Plot No. 59 (CHP-WTP) shall be considered as the CHP Run-off System control room under Island-4, and<br><br>That Plot No. 61 (CHP Electrical Building / Control Room) has no role in DCS operation, RIO installation, or control of CHP Run-off System.<br><br>Clarification is requested to clearly establish Island-4 control room definition, DCS location, and signal routing scope. | Specification requirement is clear.<br>Bidder to follow specification. |
| 131 | 42 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | CONTROL SYSTEM FOR WATER SYSTEM PACKAGES (2 X 660 MW CSPGCL KORBA WEST)-point-1 | STP-1-Microprocessor/Relay based control panel with Motor starter-ESP Control Room | It is understood that:<br><br>STP-1 falls under Island-6, and its location is Plot No. 41.<br><br>The microprocessor/relay based control panel for STP-1 is envisaged to be kept locally at Plot No. 41.<br><br>However, as per Annexure-I, Sr. No. 01, the term “ESP Control Room” is mentioned, and its plot number and island association are not specified.<br><br>In this regard, kindly clarify and confirm:<br><br>The exact location / plot number of the ESP Control Room for STP-1.<br><br>Whether the ESP Control Room is part of Island-6 and Plot No. 41, or if it is located separately.<br><br>The scope of DCS/remote operation (if any) from the ESP Control Room versus the local microprocessor/relay panel at Plot No. 41.<br><br>This clarification is requested to clearly establish control panel location, island boundaries, and DCS/ESP interface scope, to avoid any ambiguity in execution. | Specification requirement is clear.<br>Bidder to follow specification. |

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| 132 | 42 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | CONTROL SYSTEM FOR WATER SYSTEM PACKAGES (2 X 660 MW CSPGCL KORBA WEST)-point-2 | STP-2-Microprocessor/Relay based control panel with Motor starter-CWTP/CLO2 AREA CONTROL ROOM | It is understood that:<br><br>STP-2 falls under Island-3 and is located at Plot No. 40.<br><br>The microprocessor/relay based control panel for STP-2 is envisaged to be installed locally at Plot No. 40.<br><br>However, the exact location (plot number) of the CWTP/$ClO_2$ Area Control Room and the associated DCS Remote I/O (RIO) for STP-2 operation is not clearly specified in the tender documents.<br><br>In this regard, kindly clarify and confirm:<br><br>The plot number of the CWTP/$ClO_2$ Area Control Room applicable for STP-2 (Island-3).<br><br>The plot number and location where the RIO-based DCS panel for STP-2 shall be installed.<br><br>Whether the DCS-RIO for STP-2 shall be located within Island-3 (near Plot No. 40), and no long-distance hardwiring to a remote control room is envisaged.<br><br>Clarification is requested to clearly establish control panel placement, DCS-RIO location, island boundaries, and cabling scope. | Specification requirement is clear.<br>Bidder to follow specification. |
| 133 | 42 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | CONTROL SYSTEM FOR WATER SYSTEM PACKAGES (2 X 660 MW CSPGCL KORBA WEST)-point-3 | STP-3-Microprocessor/Relay based control panel with Motor starter-CHP, ETP, WTP CONTROL ROOM | It is understood that:<br><br>STP-3 falls under Island-4 and is located at Plot No. 39.<br><br>The microprocessor/relay based control panel for STP-3 is envisaged to be installed locally at Plot No. 39.<br><br>However, the exact location (plot number) of the Area Control Room applicable for STP-3 and the associated DCS Remote I/O (RIO) is not clearly specified in the tender documents.<br><br>In this regard, kindly clarify and confirm:<br><br>The plot number and island of the Area Control Room applicable for STP-3 (Island-4).<br><br>The plot number and location where the RIO-based DCS panel for STP-3 shall be installed.<br><br>Whether the DCS-RIO for STP-3 shall be located within Island-4 (near Plot No. 39), and that no long-distance hardwiring to a remote control room is envisaged.<br><br>Clarification is requested to clearly establish control panel location, DCS-RIO placement, island boundaries, and cabling scope. | Specification requirement is clear.<br>Bidder to follow specification. |

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| 134 | 42 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | CONTROL SYSTEM FOR WATER SYSTEM PACKAGES (2 X 660 MW CSPGCL KORBA WEST)-point-4 | Effluent Treatment Plant-Water system DDCMIS-CWTP/CLO2 AREA CONTROL ROOM | It is understood that:<br><br>The Effluent Treatment Plant (ETP) falls under Island-3 and is located at Plot No. 42.<br><br>The CWTP/$ClO_2$ Area Control Room is located at Plot No. 32.<br><br>However, the exact scope and location of Water System DDCMIS / DCS-RIO applicable for ETP operation is not clearly defined in the tender documents.<br><br>In this regard, kindly clarify and confirm:<br><br>Whether the ETP Water System DDCMIS shall be operated from the CWTP/$ClO_2$ Area Control Room (Plot No. 32).<br><br>The plot number and island where the DCS-RIO / DDCMIS panels for ETP (Island-3) shall be installed.<br><br>Whether the DCS-RIO for ETP shall be located within Island-3 (near Plot No. 42), and that no long-distance hardwiring to a remote control room is envisaged.<br><br>Clarification is requested to clearly establish DDCMIS scope, control room location, DCS-RIO placement, island boundaries, and cabling scope | Specification requirement is clear.<br>Bidder to follow specification. |
| 135 | 42 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | CONTROL SYSTEM FOR WATER SYSTEM PACKAGES (2 X 660 MW CSPGCL KORBA WEST)-point-5 | CW makeup pumps, APH wash water pumps, HVAC makeup pumps,FGD Gypsum Wash Pump, Service water pumps | As pre clause location of DCS mentioned herein Water system control Room, kinldy provide the plot number of Water system control Room | Specification requirement is clear.<br>Bidder to follow specification. |
| 136 | 42 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | CONTROL SYSTEM FOR WATER SYSTEM PACKAGES (2 X 660 MW CSPGCL KORBA WEST)-point-6 | Condensate Polishing Unit (Regeneration Area) | 1. As per clause we understand that DCS-RIO will be placed in CPU-Regeneration area<br>2. Regeneration area as per plot number is 83 in island-1 so we understand that DCS-RIO will be placed anywhere withing the plot of 83.<br>3. DCS-RIO Location mentiond in the scope that is water system control room, kinldy confirm the plot number of water system control room.<br>4. DCS/DCS-RIO will be supplied by BHEL/client | Specification requirement is clear.<br>Bidder to follow specification. |
| 137 | 42 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | CONTROL SYSTEM FOR WATER SYSTEM PACKAGES (2 X 660 MW CSPGCL KORBA WEST)-point-7 | Condensate Polishing Unit (Service Vessel Area) | 1. With the scope we understand that, for CPU service area DCS-RIO will be supplied by BHEL/client and location of the same will be kept in CER room kinldy mention the plot number of CER room.<br>2. Or we can assume the CER room is at ground floor of TG building.No.5 as per plot plan. | The DCS panels for service vessel area shall be located at 8.5 M or 17 M elevation of TG buliding which shal be finalised during detailed engineering. |

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| 138 | 73 of 81 | CONTROL AND INSTRUMENTATION FOR WATER TREATMENT PACKAGE 31_TECHNICAL SPECIFICATIONS FOR WATER TREATMENT PACKAGES 2 X 660 MW KORBA WEST 17.03.2026_Part23 | 22.07.00 ENCLOSURE/CABINETS / PANELS FOR EQMS AND ANALYSERS OF PT, LET, CHLORINATION, DM/RO, CWT AND CPU PLANT | The enclosure shall accommodate all EQMS Analyzers. The enclosure of all analyzers shall provide protection from dust, humidity, precipitations, sunlight and environmental pollution. The material for the enclosure shall be of steel plate (SS304) with minimum 2 mm thick frame and minimum 2 mm thick steel (SS-304) sheet of protection IP 65 or better with safety lock of good quality. The lighting provision in the cabinet is to be provided. The cabinets shall be designed such that the wet section and dry section are separate, the exact details shall be finalized during detailed engineering. The panel shall be free standing type constructed of suitable 3 mm thick channel frame of SS and shall be provided with a canopy to protect the equipment mounted in racks from falling objects, water etc. The canopy shall not be less than 3 mm thick steel and extended beyond the ends of the rack. | We herby understand that this clause is applicable only for EQMS only other analyzer like PH, conductivity, ORP and concentration analyzers etc can be installed in outdoor IP65 / IP66 panels with the body matrial of display enclosure will be polycarbonate and powder-coated aluminum, | Specification requirement is clear. Bidder to follow specification. |
| | **General** | | | | | |
| 139 | | General | NIT008,PRE QUALIFYING REQUIREMENTS (PQR), Clause No. C (Financial PQR), C-1: Turnover | Bidder must have achieved an average annual financial turnover (Audited) in the preceding three (3) financial years [i.e., (2022-23, 2023-24 & 2024-25) OR (2023-24, 2024-25 & 2025-26)] as on the date of techno-commercial bid opening should be Rs. 71.4 Crore . | We request you to kindly consider the combined financial statements (Profit & Loss Account and Balance Sheet for the last three financial years) of the company along with its subsidiary, in which it holds a 51% equity (shareholding) as on the date of bid submission, for the purpose of meeting the financial qualification criteria of the tender. | Tender Conditions shall prevail |
| 140 | | General | NIT008,PRE QUALIFYING REQUIREMENTS (PQR), Clause B (Technical PQR), B 1.1: Pre-Treatment Plant (PTP) | The Bidder should have designed, supplied, erected/supervised erection and commissioned/ supervised commissioning at least one (1) number water/waste water treatment plant having capacity of not less than 1000 Cu. m/ hr, comprising of clarifiers/tube settlers/thickeners or a combination thereof including civil works. The plant should have been in successful operation for at least one (1) year as on the date of 03.04.2025. | We request you to kindly allow the experience of upgradation works executed in EPC mode under a Joint Venture, wherein the company acted as the Lead Contractor, to be considered for meeting the technical qualification criteria, since such upgradation works involve similar or higher complexity than standard EPC works, and the Lead Contractor is responsible for the complete design, engineering, and execution of the project. | Tender Conditions shall prevail |

**Note:**

**1) All other terms and conditions against this NIT shall remain unchanged.**

**2) This corrigendum is to be submitted duly signed and stamped along with the Techno-commercial bid (Part- I).**

**for BHARAT HEAVY ELECTRICALS LIMITED**

**Sr. Manager/ SCT**