

**DM PLANT - 1 x 800 MW GSECL, WANAKBORI STPP, UNIT NO.8**  
**REPLIES OF PRE-BID CLARIFICATION - CORRIGENDUM/ADDENDUM-03**  
**Enq. No:- PE/PG/WAN/E-4931/2015 dtd. 15.07.2015**

| Sl.No | SECTION    | CLAUSE NO.  | PAGE NO.      | STATEMENT OF THE REFERRED CLAUSE   | CLARIFICATION REQUIRED  | BHEL REPLY   |
|-------|------------|---|---------------|--|---|--|
| 1     | Section-C1 | 3. Scope of Supply                                    | Pg 26 of 681  | Three (3) numbers (3X50%) (2Working+1Standby) DM Feed pumps along with motors.                                 | In P&ID DMF Feed Pump is mentioned as 3 x100% not less than 120 m <sup>3</sup> /hr. please confirm the capacity of DMF Feed pump.   | Three (3) numbers (3X100%) (1Working+2Standby) DM Feed pumps along with motors, piping, valves, fittings, instrumentation & all other accessories as required shall be provided by the Bidder. |
| 2     | Section-C1 | 4. Piping   | Pg 31 of 681  | 200 meter DM water piping from DM plant to each DM Water storage tanks   | In P&ID DM water piping from DM plant to each DM Water storage tank is mentioned as 100 meters each. Please confirm the distance.   | Please refer Amendment # 1.  |
| 3     | Section-C1 | 4. Piping   | Pg 31 of 681  | 200 meter DM water piping from common suction header of DM Water storage tanks to DM water regeneration pumps. | Please confirm the location of DM water Regeneration Pump.  | Please follow technical specification.   |
| 4     | Section-C1 | 4. Piping   | Pg 31 of 681  | DM Water Storage Tank & DM water Regeneration Pump.  | In Layout is shown like DM plant, DM Water Storage Tank & DM regeneration pump are located nearby. Maximum 50-60 meter distance but in P&ID piping mentioned as 200 meter distance. Please confirm the location and distance of each. | Please follow technical specification.   |
| 5     | Section-C1 | 4. Piping   | Pg 31 of 681  | Potable Water Plant  | Please confirm the location of Potable Water Plant. In layout it is not there.  | Please follow technical specification.   |
| 6     | Section-C1 | Data Sheet for DM Plant                               | Pg 44 of 681  | Overhead Backwash Water Storage Tank   | Please confirm the location of Overhead Backwash Water Storage Tank because it is common for both DM plant and Potable Water plant. Please mention the distance of DM plant and potable water plant.                                  | Please follow technical specification.   |
| 7     | Section-C1 | Scope of Supply (Mechanical)                          | Pg 28 of 681  | One (1) no. Central Sampling Rack (to be located at centralized laboratory).                                   | Please clarify and confirm the scope. Please confirm the scope of Laboratory and Instruments for Analysis.  | Please follow technical specification.   |
| 8     | Section-C1 | Scope of Supply and Services                          | Pg 116 of 681 | All civil work shall be done by bidder.  | Please confirm the scope of civil work. In tender some place mentioned as Civil design and drawing only bidder scope like that.   | Scope of civil work shall be as mentioned in Section C1 of technical specification.  |
| 9     | Section-C1 | Scope of Supply (Mechanical)                          | Pg 29 of 681  | All Motorized valves with integral starter as per requirement and as indicated in the P&ID.                    | In P&ID motorized valves not shown. Please mention the location of motorized valves.  | Please follow technical specification.   |
| 10    | Section-C1 | Annexure-I  | Pg 199 of 681 | List of Location of monorail hoist   | In tender Pg 199 mentioned location is not in bidder scope. Please confirm the location of monorail hoist.  | Please follow technical specification.   |
| 11    | Section-C1 | List of makes of Sub vendor items                     | Pg 610 of 681 | Resins   | In tender approved vendor list resin make is not given. Please mention the make for resin.  | List of Make of resin shall be provided in Amendment # 1.  |
| 12    | Section-C1 | P&ID DM makeup water system                           | Pg 682 of 683 | P&ID DM makeup water system  | We understood that DM Makeup water system is not in Bidder scope. Please confirm the same.  | Please follow technical specification.   |
| 13    | Section-C1 | 13. Drawings and documents to be furnished by bidder. | Pg 110 of 681 | Drawings and documents to be furnished by bidder.  | Please confirm the documents to be submitted with bid. In Tender Pg 671 list of documents to be submitted with bid mentioned is different list.   | Please follow technical specification.   |
| 14    | General    | --  | --            | --   | Kindly confirm whether separate orders are issued for Supply & Service Portions.  | Separate orders will be placed for (i) Main Supply, (ii) Mandatory Spares and (iii) E& C and PG Test.  |
| 15    | General    | --  | --            | --   | Kindly clarify that Road permits & Way bills for materials purchased outside Gujarat shall be provided by BHEL.   | Waybills as applicable as per Gujarat Commercial Taxes, shall be issued from End Customer M/s GSECL for Supplies to the Project.   |
| 16    | General    | --  | --            | --   | Kindly clarify Whether Service Tax applicable on Services part would be paid extra .  | Refer SCC Rev 01 Rev 01 clause no. 19.0.   |

**DM PLANT - 1 x 800 MW GSECL, WANAKBORI STPP, UNIT NO.8**  
**REPLIES OF PRE-BID CLARIFICATION - CORRIGENDUM/ADDENDUM-03**  
**Enq. No:- PE/PG/WAN/E-4931/2015 dtd. 15.07.2015**

| SI.No | SECTION | CLAUSE NO. | PAGE NO. | STATEMENT OF THE REFERRED CLAUSE | CLARIFICATION REQUIRED  | BHEL REPLY  |
|-------|---------|------------|----------|----------------------------------|---|---|
| 17    | General | --         | --       | --                               | Kindly confirm that Form C shall be issued by BHEL on Quarterly basis before the end of subsequent Quarter for both CST 2% sales & Sale in transit (E1 sales)   | Refer SCC Rev 01 Rev 01 clause no. 19.0. [Pl. note sequence of activities: Vendor will furnish C-Form requisition quarterwise, subsequently, BHEL will verify the invoice details, obtain the C-Form from Sales Tax Auth., issue Photocopy of C-Form to Vendor, Vendor will provide original E1/E2 forms to BHEL upon receipt of which, Original C-form shall be provided to Vendor. This is as per standard practice being followed. |
| 18    | General | --         | --       | --                               | Kindly provide us BHEL VAT registration number for Gujarat. As per tender docs UP VAT / CST nos. are given.   | Refer SCC Rev-01 clause no.-12(a) for BHEL-PSER TIN No.   |
| 19    | General | --         | --       | --                               | Kindly clarify if BHEL would sign High Sea Sales agreement for import purchases and whether applicable certificates and import & export registration codes for the same would be provided.  | Since CIF content is not applicable as specified in NIT, no facilitation of Essentiality Certificate / High Sea Sales agreement/Import & Export Registration Codes will be done by BHEL to Indian Vendor. Foreign Vendor will anyway be quoting on FOB basis.   |
| 20    | General | --         | --       | --                               | Kindly clarify if Insurance coverage during transit, storage, erection & commissioning is under the scope of BHEL and hence Insurance premium costs would not be in the Scope of Contractor.  | BHEL has taken Comprehensive SCE cum Marine Insurance Policy for supplies made to the Project.  |
| 21    | General | --         | --       | --                               | Kindly confirm if Any concessions / Benefits /Exemptions on Taxes & Duties would be available for this job. If so whether such exemption certificates would be obtained / issued by BHEL.   | Refer SCC Rev 01 clause no. 19.0.   |
| 22    | General | --         | --       | --                               | Kindly clarify whether service tax (reverse charge) applicable on freight would be reimbursed or it should be loaded in the price bid.  | Only quoted Freight (incl. service tax) as per Price format (as percentage of Ex-works) Shall be reimbursed upon documentary evidence (money receipt etc. from transporter). Any liability of reverse charge to BHEL shall be to bidders account.   |
| 23    | General | --         | --       | --                               | Kindly clarify if two separate orders are issued for supply & services whether TDS under Gujarat VAT would not be applicable. For supply part tax invoice would be submitted and for service part, service tax invoice would be submitted.Only for civil job,TDS under Gujarat VAT would be applicable. Kindly specify whether rate of TDS under Gujarat VAT to be deducted | Separate orders will be placed for (i) Main Supply, (ii) Mandatory Spares and (iii) E& C including Civil works & PG Test.<br>Refer Clause No. 9( e) of our GCC rev 06, which says, Taxes and duties if not specified clearly as extra shall be considered as included in the basic price and therefore, shall not be reimbursed.<br>Bidder to note any statutory deductions of TDS etc. shall be made as per prevailing Govt. Acts.   |
| 25    | General | --         | --       | --                               | Kindly clarify that VAT registration under Gujarat would not be required for the Contractor since Supply invoice would be submitted using Tamil Nadu VAT / CST registration since all the materials would be purchased outside the state of Gujarat.  | Bidder to comply with applicable Statutory regulations and arrange for VAT registration in case specified as per Act.   |
| 26    | General | --         | --       | --                               | Kindly clarify Whether the Billing Schedule of the order be jointly signed by Purchaser and Contractor for the contract price.  | Billing Schedule is mutually agreed document, which shall be finalized after placement of P.O   |

**DM PLANT - 1 x 800 MW GSECL, WANAKBORI STPP, UNIT NO.8**  
**REPLIES OF PRE-BID CLARIFICATION - CORRIGENDUM/ADDENDUM-03**  
**Enq. No:- PE/PG/WAN/E-4931/2015 dtd. 15.07.2015**

| SI.No | SECTION                                     | CLAUSE NO.  | PAGE NO.      | STATEMENT OF THE REFERRED CLAUSE   | CLARIFICATION REQUIRED  | BHEL REPLY  |
|-------|---|---|---------------|--|---|---|
| 27    | General                                     | --  | --            | --   | Kindly indicate us whether Octroi and Entry Tax are applicable in the state of Gujarat. If applicable whether same would be reimbursed by BHEL.   | Refer Clause No.4.4 under other taxes & levies<br>Also Refer SCC Rev 01 clause no. 19.0 for taxes and duties.   |
| 28    | Section-C1                                  | 13. Drawings and documents to be furnished by bidder. | Pg 110 of 681 | Technical Specification IIA,IIB,IIC,IID  | IIC & IID not available with tender document. Please share the same.  | Please follow technical specification.  |
| 29    | Section-C1                                  | Performance Guarantee                                 | Pg 278 of 681 | Performance Guarantee  | Please share Power guarantee format sheet and also mention what are all the pumps we need to give power guarantee.  | Please follow technical specification.  |
| 30    | Section C: C&I                              | PLC System Configuration                              | ----          | PLC System Configuration.  | The Bidder has understood that the Bidder will provide Ethernet Port with Fibre Optic Port. The Fibre Optic cable for communication from DM Plant PLC to Plant DCS will be provided by Client. Please confirm | Please refer Amendment # 1.   |
| 31    | Section C: C&I                              | Specific Technical Requirement                        | Pg 427 of 681 | In addition to OWS operation, hardware based monitoring / control / annunciation shall be provided for the systems where HMI workstations are not envisaged or need for such back up is strongly recommended by Bidder for the safe shutdown of the system.  | Should the Bidder provide a Control/ Annunciator Desk, as all the systems are monitored from DM Plant PLC and OWS. And also a separate Control Desk/ Annunciator is not shown in th PLC System Configuration. | Please follow technical specification.  |
| 32    | Section IV-Tech Spec for Cables             |   | Pg 401 of 681 | Power and Control Cables shall cover the requirement of entire Plant including the switchyard. The cables shall be furnished in accordance with this specification and annexure  | This particular clause is not applicable. The Bidder will follow only the Electrical Scope Matrix furnished in Pg 263/581. Please confirm.  | Kindly note that as per scope matrix fore DM plant Power cables, control cables and screened control cables are in BHEL scope of supply. However, any special type of cable like compensating, co-axial, prefab, MICC, optical fibre etc. shall be vendor scope of supply/ E&C. Refer C&I portion of specification for scope of fibre Optical cables if used between PLC/ microprocessor & DCS. |
| 33    | Section IV-Tech Spec for Cables             | 6.02.00   | Pg 409 of 681 | Cables : Documents to be submitted with Bid  | The Documents mentioned in this clause are not applicable for the Bidder, as they are not in Bidder's scope.  |   |
| 34    | General                                     | --  | --            | Reverse Auction  | Reverse auction acceptance letter format not available with tender. Please share the same.Please clarify about online sealed bid.   | Follow NIT.   |
| 35    | General                                     | --  | --            | Bid Evaluation Criteria  | Please confirm the Bid Evaluation Criteria.   | Refer SCC-01 Clause no.-19.   |
| 36    | Section: C4, Sub Section: C&I Sheet-5 of 17 | 5   | Pg 427 of 681 | The communication between PLC and Main Plant DCS shall be OPC compliant (Data Access 2.0) TCP/IP on Fibre Optic link. The communication link between PLC and Main Plant DCS shall be redundant. The necessary hardware/ software including LIU (Light Interface Unit) at PLC end shall be in bidder's scope. Repeaters, if required for interfacing shall also be provided by the bidder. For communication between Main Plant DCS and PLC, the PLC end shall be considered as Server and DCS shall be considered as client. | Distance between DM Plant Control Room and Main Plant CCR / DCS Room (For Estimation of Cables)   | Please refer Amendment # 1.   |

**DM PLANT - 1 x 800 MW GSECL, WANAKBORI STPP, UNIT NO.8**  
**REPLIES OF PRE-BID CLARIFICATION - CORRIGENDUM/ADDENDUM-03**  
**Enq. No:- PE/PG/WAN/E-4931/2015 dtd. 15.07.2015**

| Sl.No | SECTION                            | CLAUSE NO.            | PAGE NO.      | STATEMENT OF THE REFERRED CLAUSE   | CLARIFICATION REQUIRED  | BHEL REPLY   |
|-------|------------------------------------|-----------------------|---------------|--|---|--|
| 37    | Section-C3                         | 3                     | Pg 366 of 681 | Power Cables, Control Cables and screened Control Cables for:<br>a) both end equipment in BHEL's scope<br>b) both end equipment in vendor's scope<br>c) one end equipment in vendor's scope  | We understand instrumentation cable is also not in our scope of supply  | Please follow technical specification.   |
| 38    | Section-C5                         | 16.2                  | Pg 36 of 681  | Service water shall be available near DM Plant / System Building / Area at approximately 1.5 to 2.0 kg/cm <sup>2</sup> . Hence, bidder to take care for cooling / lubrication of the pumps being supplied by the bidder under this technical specification. If Service Water Pressure requirement is more than available pressure, Bidder to consider two (2) Nos. Cooling Pump for package. | There is no Specification for Cooling Pumps. Please clarify   | Please follow technical specification.   |
| 39    | DATASHEET A FOR DM PLANT           | 2.00.00 (X)           | Pg 44 OF 683  | DMF OUTLET SUSPENDED SOLIDS NOT MORE THAN 1.0 PPM  | IT WILL BE DIFFICULT TO ACHIEVE TSS < 1 PPM at DMF OUTLET ( CONSIDERING INLET TSS AS 20 PPM).WE SUGGEST SUSPENDED SOLIDS ≤ 2 PPM at DMF OUTLET  | Please follow technical specification.   |
| 41    | EXCLUSIONS                         |                       | ---           | SCOPE OF EXCLUSION   | THERE IS CONTRADICTORY STATEMENTS IN TENDER DOCUMENT EXCLUSION LIST IS GIVEN ON PAGE NO 34 OF 683 POINT NO 10 HOWEVER ON PAGE NO. 96 OF 683 POINT NO 3.00.00 : EXCLUSION IS SHOWING : NOT APPLICABLE. PLEASE CONFIRM THE SCOPE OF EXCLUSION   | For mechanical items Exclusions shall be as indicated in section C1 of technical specification. For C&I and electrical items, please refer Electrical and C&I specification in technical specification |
| 42    | C1- SPECIFIC TECHNICAL REQUIREMENT | 4 - PIPING POINT NO 3 | Pg 33 OF 683  | DM PLANT FEED PIPING 200 M   | PLEASE CLARIFY PIPING LYING IS ABOVE-GROUND OR UNDERGROUND.IF LYING OF PIPING IS ABOVE GROUND THAN PLEASE CONFIRM THE SCOPE OF SUPPORTS OUT SIDE B/ L , WE ASSUMED THAT EXSSTING PIPE RACK/ STRECTURAL IS AVAILABLE AND CAN BE USED.IF LYING OF PIPING IS ON GROUND THAN THE SCOPE OF PEDESTAL WILL BE BY CIVIL CONTRACTOR ( BY OTHER).IF IT IS UNDERGROUND WE ASSUMED THAT SCOPE OF EXCAVATION, BACK FILLING AND BEDDING ETC WILL BE BY CIVIL CONTRACTOR ( BY OTHER) | Bidder to consider entire piping as under ground piping.   |
| 43    | C1- SPECIFIC TECHNICAL REQUIREMENT | 4 - PIPING POINT NO 4 | Pg 33 OF 683  | DM WATER PIPINGFROM DM PLANT TO EACH DMWST - 200 M   | PLEASE CLARIFY PIPING LYING IS ABOVE-GROUND OR UNDERGROUND.IF LYING OF PIPING IS ABOVE GROUND THAN PLEASE CONFIRM THE SCOPE OF SUPPORTS OUT SIDE B/ L , WE ASSUMED THAT EXSSTING PIPE RACK/ STRECTURAL IS AVAILABLE AND CAN BE USED.IF LYING OF PIPING IS ON GROUND THAN THE SCOPE OF PEDESTAL WILL BE BY CIVIL CONTRACTOR ( BY OTHER).IF IT IS UNDERGROUND WE ASSUMED THAT SCOPE OF EXCAVATION, BACK FILLING AND BEDDING ETC WILL BE BY CIVIL CONTRACTOR ( BY OTHER) | Bidder to consider entire piping as under ground piping.   |
| 44    | C1- SPECIFIC TECHNICAL REQUIREMENT | 4 - PIPING POINT NO 5 | Pg 33 OF 683  | DM WATER PIPING FROM COMMON SUCTION HEADER OF DM WATER STORAGE TANK TO DM WATER REGENERATION PUMPS -200 M  | PLEASE CLARIFY PIPING LYING IS ABOVE-GROUND OR UNDERGROUND.IF LYING OF PIPING IS ABOVE GROUND THAN PLEASE CONFIRM THE SCOPE OF SUPPORTS OUT SIDE B/ L , WE ASSUMED THAT EXSSTING PIPE RACK/ STRECTURAL IS AVAILABLE AND CAN BE USED.IF LYING OF PIPING IS ON GROUND THAN THE SCOPE OF PEDESTAL WILL BE BY CIVIL CONTRACTOR ( BY OTHER).IF IT IS UNDERGROUND WE ASSUMED THAT SCOPE OF EXCAVATION, BACK FILLING AND BEDDING ETC WILL BE BY CIVIL CONTRACTOR ( BY OTHER) | Bidder to consider entire piping as under ground piping.   |

**DM PLANT - 1 x 800 MW GSECL, WANAKBORI STPP, UNIT NO.8**  
**REPLIES OF PRE-BID CLARIFICATION - CORRIGENDUM/ADDENDUM-03**  
**Enq. No:- PE/PG/WAN/E-4931/2015 dtd. 15.07.2015**

| SI.No | SECTION                            | CLAUSE NO.            | PAGE NO.     | STATEMENT OF THE REFERRED CLAUSE                | CLARIFICATION REQUIRED   | BHEL REPLY   |
|-------|------------------------------------|-----------------------|--------------|---|--|--|
| 45    | C1- SPECIFIC TECHNICAL REQUIREMENT | 4 - PIPING POINT NO 6 | Pg 33 OF 683 | DM WATER RECIRCULATION PIPING 250 M             | PLEASE CLARIFY PIPING LYING IS ABOVE-GROUND OR UNDERGROUND.IF LYING OF PIPING IS ABOVE GROUND THAN PLEASE CONFIRM THE SCOPE OF SUPPORTS OUT SIDE B/ L , WE ASSUMED THAT EXSSTING PIPE RACK/ STRECTURAL IS AVAILABLE AND CAN BE USED.IF LYING OF PIPING IS ON GROUND THAN THE SCOPE OF PEDESTAL WILL BE BY CIVIL CONTRACTOR ( BY OTHER).IF IT IS UNDERGROUND WE ASSSUMED THAT SCOPE OF EXCAVATION, BACK FILLING AND BEDDING ETC WILL BE BY CIVIL CONTRACTOR ( BY OTHER) | Bidder to consider entire piping as under ground piping. |
| 46    | C1- SPECIFIC TECHNICAL REQUIREMENT | 4 - PIPING POINT NO 7 | Pg 33 OF 683 | NPIT PIPING TO CMB - 800 M                      | PLEASE CLARIFY PIPING LYING IS ABOVE-GROUND OR UNDERGROUND.IF LYING OF PIPING IS ABOVE GROUND THAN PLEASE CONFIRM THE SCOPE OF SUPPORTS OUT SIDE B/ L , WE ASSUMED THAT EXSSTING PIPE RACK/ STRECTURAL IS AVAILABLE AND CAN BE USED.IF LYING OF PIPING IS ON GROUND THAN THE SCOPE OF PEDESTAL WILL BE BY CIVIL CONTRACTOR ( BY OTHER).IF IT IS UNDERGROUND WE ASSSUMED THAT SCOPE OF EXCAVATION, BACK FILLING AND BEDDING ETC WILL BE BY CIVIL CONTRACTOR ( BY OTHER) | Bidder to consider entire piping as under ground piping. |
| 47    | C1- SPECIFIC TECHNICAL REQUIREMENT | 4 - PIPING POINT NO 8 | Pg 33 OF 683 | PIPING BACKWASH SUMP TO STILLING CHAMBER - 350M | PLEASE CLARIFY PIPING LYING IS ABOVE-GROUND OR UNDERGROUND.IF LYING OF PIPING IS ABOVE GROUND THAN PLEASE CONFIRM THE SCOPE OF SUPPORTS OUT SIDE B/ L , WE ASSUMED THAT EXSSTING PIPE RACK/ STRECTURAL IS AVAILABLE AND CAN BE USED.IF LYING OF PIPING IS ON GROUND THAN THE SCOPE OF PEDESTAL WILL BE BY CIVIL CONTRACTOR ( BY OTHER).IF IT IS UNDERGROUND WE ASSSUMED THAT SCOPE OF EXCAVATION, BACK FILLING AND BEDDING ETC WILL BE BY CIVIL CONTRACTOR ( BY OTHER) | Bidder to consider entire piping as under ground piping. |

**DM PLANT - 1 x 800 MW GSECL, WANAKBORI STPP, UNIT NO.8**  
**REPLIES OF PRE-BID CLARIFICATION - CORRIGENDUM/ADDENDUM-03**  
**Enq. No:- PE/PG/WAN/E-4931/2015 dtd. 15.07.2015**

| Sl.No | SECTION  | CLAUSE NO.                         | PAGE NO.      | STATEMENT OF THE REFERRED CLAUSE                        | CLARIFICATION REQUIRED   | BHEL REPLY  |
|-------|--|------------------------------------|---------------|---|--|---|
| 48    | VOLUME IIB & III OF / SPECIFICATION NO. PR-TS-408-163-A001-REV0 / TECHNICAL SPECIFICATION FOR DM PLANT | POINT NO F                         | Pg 97 OF 683  | SODIUM SLIPPAGE 0.1 PPM                                 | THERE IS CONTRADICTION IN SPECIFICATION; WE CAN NOT CONFIRM SODIUM SLIPPAGE 0.1 PPM AT OUTLET OF SAC , PLEASE NOTE SAC SODIUM SLIPPAGE WILL BE < 1.0 PPM AS CaCO3 OUTLET OF SAC AS MENTIONED IN THE PAGE NO 111 OF 683.  | Please follow technical specification.  |
| 49    | C2-A- TECHNICAL REQUIREMENT  | POINT NO 11.00.00                  | Pg 112 OF 683 | MANDATORY SPARES INDICATED IN ANNEXURE I UNDER VOL. IIA | PLEASE PROVIDE ANNEXURE I UNDER VOLL. IIA, PLEASE NOTE THAT MANDATORY SPARE LIST IS ALSO MENTIONED ANNEXURE II UNDER VOL.IIB SEC C, HENCE PLEASE PROVIDE ANNEXURE I UNDER VOLL. IIA FOR MANDATORY SPARE LIST OR WE WILL ASSUME THAT MANDATORY SPARE LIST IS ALSO MENTIONED ANNEXURE II UNDER VOL.IIB SEC C IF FINAL.   | Please follow technical specification.  |
| 50    | C & I Specification PE-TS-408-163-A001 Vol. IIB Sec. C4 R0   | ----                               | -----         | Area Classification                                     | Please confirm that the DM plant area is SAFE area and accordingly all the field instruments shall be suitable for installation in SAFE Area with enclosure protection WP IP 65. Intrinsically safe or flameproof enclosures are not required. Also IS barriers are not required at PLC end.   | Please follow technical specification.  |
| 51    | C & I Specification PE-TS-408-163-A001 Vol. IIB Sec. C4 R0   |                                    | Pg 5 of 185   | IO for signals from waste water treatment plant         | It is indicated that Bidder to consider IO for hard wire connectivity of selected parameters from waste water treatment plant. Please inform us no. of IO type wise i.e. AI/AO/DI/DO to be considered for waste water treatment plant signals.   | Bidder to consider following minimum number of IOs: · AI-20 nos. · DI-30 nos. |
| 52    | C & I Specification PE-TS-408-163-A001 Vol. IIB Sec. C4 R0   |                                    | Pg 5 of 185   | Communication between PLC and Main plant DCS            | It is indicated that the communication between PLC and Main plant DCS shall be on Fibre Optic Link.As per Electrical Scope between BHEL & Vendor the optical fibre cable is in scope of bidder.Since the location of Main plant DCS is not known we request to take the FO cable in client scope we will make necessary provision in the PLC for the interface of DCS.Please confirm your acceptance.If the above is not acceptable we request you to indicate the location of Main plant DCS on Overall layout so that we can estimate the required cable length. | Please refer Amendment # 1.   |
| 53    | C & I Specification PE-TS-408-163-A001 Vol. IIB Sec. C4 R0   | Electrical Scope b/w BHEL & vendor | Pg 366 of 681 | Scope of Instrumentation Cables                         | It is indicated at Sr. No. 3 that "Power cables, control cables and screened control cables are in scope of BHEL. Hence we understand that the Cable between individual field instrument and JB & Cable between JB and PLC are in BHEL scope. Please confirm our understanding.Also the cables between PLC & MCC for signals from MCC are in BHEL scope. Please confirm our understanding.   | Please follow technical specification.  |
| 54    | C & I Specification PE-TS-408-163-A001 Vol. IIB Sec. C4 R0   | Electrical Scope b/w BHEL & vendor | Pg 366 of 681 | Scope of Cable trays for Instrumentation cables         | As per the scope indicated at Sr. 6 for cable trays, we understand that the cable trays between Junction box and Control room (For main/trunk cable) are in scope of BHEL. The cable trays for branch/local cable between Junction box and field instrument are in scope of bidder. Please confirm our understanding.  | Noted.  |
| 55    | General  |                                    | ----          | Mandatory spares for Instrumentation Items              | The requirement of Mandatory spares for Instrumentation items have not been specified in the tender document. Hence we understand that Mandatory spares are not required for Instrumentation items   | Please follow technical specification.  |

**DM PLANT - 1 x 800 MW GSECL, WANAKBORI STPP, UNIT NO.8**  
**REPLIES OF PRE-BID CLARIFICATION - CORRIGENDUM/ADDENDUM-03**  
**Enq. No:- PE/PG/WAN/E-4931/2015 dtd. 15.07.2015**

| Sl.No | SECTION                | CLAUSE NO.    | PAGE NO.      | STATEMENT OF THE REFERRED CLAUSE   | CLARIFICATION REQUIRED   | BHEL REPLY  |
|-------|------------------------|---------------|---------------|--|--|---|
| 56    | VOLUME-IIB, SECTION-C1 | 4             | Pg 31 of 681  | Piping   | Kindly clarify the 200 meter DM Plant Feed Piping from Clarified water pump house where (DM Feed pumps are located) to DM plant is above or under ground                                       | Bidder to consider entire piping as under ground piping.  |
| 57    | VOLUME-IIB, SECTION-C1 | 4             | Pg 31 of 681  | Piping   | Kindly clarify the 800 meter Piping from N-Pit to Central Monitoring Basin is above or under ground  | Bidder to consider entire piping as under ground piping.  |
| 58    | VOLUME-IIB, SECTION-C1 | 1.00 (X)      | Pg 41 of 681  | DM Feed Pumps  | Range of operation mention as 20% to 120%  | Please follow technical specification.  |
| 59    | VOLUME-IIB, SECTION-C1 | 4-H           | Pg 45 of 681  | Overhead Backwash Storage Tank   | Kindly confirm Overhead Backwash Storage Tank Staircase will be in RCC or MS   | Please follow technical specification.  |
| 60    | VOLUME-IIB, SECTION-C1 | 11.00.00 (XI) | Pg 53 of 681  | Degassed Water Transfer Pumps  | Range of operation mention as 20% to 120%  | Please follow technical specification.  |
| 61    | VOLUME-IIB, SECTION-C1 | 2.04.00       | Pg 91 of 681  | Overhead Backwash Storage Tank   | Overhead Backwash Storage Tank is in RCC & will be provided by BHEL  | Noted.  |
| 62    | VOLUME-IIB, SECTION-C1 | 2.33.00       | Pg 93 of 681  | One No. Neutralization Pit (with two compartment)  | Kindly confirm that one No. Neutralization Pit (with two compartment) is in RCC & will be Provided By BHEL   | Noted.  |
| 63    | VOLUME-IIB, SECTION-C1 | 3.00.00       | Pg 94 of 681  | Exclusion  | Kindly clarify that all Exclusions are considered, as per Vol II-B, C1, pg no. 32 of 681 Clause no. 10.  | For mechanical items Exclusions shall be as indicated in section C1 of technical specification. For C&I and electrical items, please refer Electrical and C&I specification in technical specification  |
| 64    | VOLUME-IIB, SECTION-C1 | 4.00.00       | Pg 94 of 681  | Interface Points   | All Interface/Terminal Points are considered, as per Vol II-B, C1, pg no. 32 of 681 Clause no. 9.  | Please follow technical specification.  |
| 65    | VOLUME-IIB, SECTION-C2 | 5.03.00 B     | Pg 95 of 681  | Resin Shall be withstand a temperature of 60 Deg C Minimum                                   | As per manufacturing stanadrad Anion Resin Shall withstand a temperature of 60 Deg C Maximum.  | Please follow technical specification.  |
| 66    | VOLUME-IIB, SECTION-C1 | 5.03.00 F     | Pg 95 of 681  | SAC Resin in Sodium Form & Micrporous  | SAC Resin will be in Sodium or H+ Form & Gel type.   | Please follow technical specification.  |
| 67    | VOLUME-IIB, SECTION-C1 | 5.03.00 G     | Pg 96 of 681  | Silica Slip less than 0.1 ppm as SiO2 in the effluent (From SBA Outlet)                      | Reactive Silica Slip less than 0.1 ppm as SiO2 in the effluent (From SBA Outlet)   | Please follow technical specification.  |
| 68    | VOLUME-IIB, SECTION-C1 | 5.03.18 C     | Pg 98 of 681  | Valves   | Valves on rubberlined Pipes as either Diaphragm or Butterfly   | Please follow technical specification.  |
| 69    | VOLUME-IIB, SECTION-C1 | 8.04.00       | Pg 109 of 681 | Performance Gurantee Parameters e-iii Water Quality at the outlet of SBA SiO2 < 0.1 ppm SiO2 | Water Quality at the outlet of SBA Reactive SiO2 < 0.1 ppm SiO2  | Please follow technical specification.  |
| 70    | VOLUME-IIB, SECTION-C1 | 13.00.00      | Pg 110 of 681 | Drawings / Documents to be furnished by the Bidder   | Kindly clarify There are two different Clause for submitting the Documents .<br><br>1. As per Vol II-B, C1, pg no. 112 of 681 Clause no. 13 &<br><br>2. As per Vol III, C1, pg no. 671 of 681. | List of documents to be submitted by bidder along with the bid shall be as indicated at page no. 671 of 681. Bidder to also refer NIT in this context.  |
| 71    | VOLUME-IIB, SECTION-C1 | 3.00.00       | Pg 117 of 681 | Exclusion  | Kindly clarify that All Exclusions are considered, as per Vol II-B, C1, pg no. 32 of 681 Clause no. 10.  | For mechanical items Exclusions shall be as indicated in section C1 of technical specification. For C&I and electrical items, please refer Electrical and C&I specification in technical specification. |
| 72    | VOLUME-IIB, SECTION-C1 | 4.00.00       | Pg 117 of 681 | Interface Points   | All Interface/Terminal Points are considered, as per Vol II-B, C1, pg no. 32 of 681 Clause no. 9.  | Please follow technical specification.  |
| 73    | VOLUME-IIB, SECTION-C3 | 19.01.00      | Pg 217 of 681 | Training at Contractor's Premises  | Training at Contractor's Premises  | Please follow technical specification.  |
| 74    | VOLUME-IIB, SECTION-C4 | 11.2          | Pg 277 of 681 | Failure to meet Performance Gurantees  | Failure to meet Performance Gurantees  | Please follow technical specification.  |