# Name of Work: Civil, Structural & Architectural work for Main Power Block comprises of GT, GTG, STG, HRSG including its Auxillaries and BOPs for 2X 350 MW Combined cycle power plant.

|       | including its Auxillaries and BOPs for 2X 350 MW Combined cycle power plant. |  |   |  |
|-------|--|--|---|--|
|       | Tender Specification No: BHE/PW/PUR/PIPING - CVL/609                         |  |   |  |
|       | BOQ ITEM REF NO  |  | BHEL-REPLY AS BELOW SHALL BE AMNEDMENT                  |  |
| Sr.No |  | BIDDERS QUARRY                                     | TO THIS TENDER  |  |
|       | Item no. 502   | Kidnly mention thickness of polymerised mortar     | yes, Polymerised Mortar shall be applied over the 25    |  |
|       |  |  | mm thick cement mortar underbed plaster payable         |  |
| 1     |  | Cement mortar plaster will be done as per item no. | under item No. 503, However Polymerised mortar is a     |  |
| '     |  | 503 pl. clarify.                                   | part of PU based water proofing and included in Item    |  |
|       |  |  | No. 502 and shall be applied as per the                 |  |
|       |  |  | manufacturer's recommendation.                          |  |
| 2     | Item no. 1408  |  | It is changed in Revised BOQ ,being issued to all       |  |
|       |  |  | Bidders.  |  |
|       | Item no. 2301  |  | DFT mentioned for primer painting is 100 micron         |  |
|       |  | (per coat) instead of 100 micron against this ite  | only.(to be applied in two coat one at fabrication shop |  |
| 3     |  |  | and other after aErection) .Please refer TCE            |  |
|       |  |  | Document ,Vol - III ,P/985 of 1036 for further          |  |
|       | LII. 0440  | TO 6 1 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1           | clarification.  |  |
|       | Item no. 2416  |  | It is a typographical error. The Project is 2 x 350 MW  |  |
| 4     |  |  | CCPP.Hence No. of TG Foundation is Two only.Item        |  |
|       |  | instead of Hazira & number of TG has beenmentioned | INO. 2416 is modified in Revised BOQ.                   |  |
|       | Tender Specification No. are different in your                               | as 1NO. Pl. clarify.                               | NOW CORRECTED IN REVISED PRICE BID                      |  |
| 5     | covering letter and BOQ.Please Rectify.                                      |  | NOW CORRECTED IN REVISED PRICE BID                      |  |
|       | Item no. 1427  | mention micron thickness for epoxy coating.        | It will be applied in two coats of 150 Micron thickness |  |
| 6     | 110. 1427  | Intertition microin trickness for epoxy coating.   | each.   |  |
|       | Item no. 601/602/603   | mention minimum depth of foundation against these  | 0.000   |  |
| 7     | 11.611 110. 00 1/002/000   | items  | foundation has no criteria.                             |  |
|       |  | itorio   | iodilaction has no shtona.                              |  |
|       | Item no.2 & 3(part B Grading & Levelling))                                   | mention the max. depth of excavation against these | Indicative depth of excavation for Levelling and        |  |
| 8     |  | items.   | Grading purpose shall be around 2.5m ,however this is   |  |
|       |  |  | only for idea for bidders which may vary during         |  |
|       |  |  | execution.  |  |

| 9  | Vol-I,Prt-I,Section-2, Cl-2.14 Page-15 . Arbritation shall be in accordance with Indian Arbitration Act 1956                       |  | Dispute shall be resolved as per the provision of Indian Arbitration & concilaation Act1996   |
|----|--|--|---|
| 10 | Pl. provide us soil investigation report for details of soil strata and depth of water table.                                      |  | Water Table is approximatly 1.5 M from the ground level. Soil Investigation repot is not ready.   |
| 11 | Item no. 118a & 118b backfilling with selected excavated soil within lead of 1KM   |  | Item no. 118a & 118b are not same.<br>Item No 118a describes backfilling with selected<br>excavated soil directly from excavation area within a |
| 12 |  | ·  | Quoted rate shall be inclusive of glazing and painting.Respective Item s are modified.  |
| 13 | Item no. 1002 & 1003 Brick work  |  | No. 6mm dia. MS Bars shall be a part of Item No. 1002 & 1003 and quoted rate shall be inclusive of same.  |
| 14 | finish (Vineratex)   | Vineratex is granular decorative texture Coat and not<br>the paint which is applied in single layer of average<br>2.5 mm th.                                   |   |
| 15 | Item no. 1427 Epoxy Coating on RCC floor   | Details of Epoxy coating like thickness.   | It will be applied in two coats of 150 Micron thickness each.Respective item is modified in Revised BOQ.  |
| 16 | . •  | pl. provide us address and contact no. of supplier for this items.   | May be obtained from internet.  |
| 17 | Item no.3(part B Grading & Levelling)) Excavation in any type of rock with controlled blasting, chiselling or any suitable method. |  | Item is bifurcated in Revised BOQ.  |
| 18 | Item no.6(part B Grading & Levelling)) filling with selected excavated earth.  |  | Max lead will be around 1 Km.Relevant item is modified.   |
| 19 |  | Pl. provide us the Details drawings/layout structures etc. which will help us to plan and organise the resources. Pl. provided details dimentions of TG Block. | -   |

| 20 | PRICE BID, PART-II, (VOLUME-III).                                  | REINFORCEMENT STEEL WITH FUSION BONDED EPOXY COATING, TO SPEED-UP THE PROJECT WORK, AS CONSTRUCTION AND DESIGN DRAWINGS SHOWING DETAILS SHALL BE FURNISHED BY BHEL IN A GRADUALLY PHASED MANNER |  |
|----|--|---|--|
|    |  |   | Topographical survey including fixing of reference pillars (co – ordinates ) and temporary bench marks is already done by BHEL. Contractor has to take the reference of this reference points for establishing centre lines of individual equipment foundation and structures and shifting of TBM at different locations. Contractors are also required to take joint survey of the plot area before leveling and grading for computation of excavation and backfilling. The above activities are part of job and has to be done by contractor within their quoted rate. |
| 21 | PLEASE REFER PAGE NO. 17, SECTION-4.0 (b) (SCC), CLAUSE NO. 4.1.2. | SUB-VENDORS SINCE THE LIST OF   | BHEL /Customer do not have list of pre-qualified vendors. Contractor has to take approval of samples at site during execution.   |
|    | PLEASE REFER PAGE NO. 20, SECTION-4.0 (b) (SCC), CLAUSE NO. 4.5.7. | TO BE EXECUTED TO ENABLE US TO QUOTE OUR COMPETITIVE RATES  | This is an Item rate contract and certain items not appearing in approved rate schedule but necessarily required for completion of job shall be treated as an EXTRA ITEM. Hence no further elaboration is required.  |

| 23 | (SC), CLAUSE NO. 11.6.3,  | HAVE TO BE NOTIFIED TO AGENCY WELL IN ADVANCE. DUE TO THE FACT THAT IN CASE THE DETAIL DRAWINGS GETS REVISED DUE TO VARIOUS CONSIDERATIONS. THE TIME PERIOD TO BE REVIEWED AND NEEDFUL TIME EXTENSION TO BE GIVEN FOR THE WORK UNDER CONTRACT TO BE EXECUTED.               | the delay not attributable to the contractor.  |
|----|---|---|--|
|    | PLEASE REFER PAGE NO. 68, SECTION-12 (SCC), CLAUSE NO. 12.04.   | FOR SMOOTH EXECUTION OF WORK WE REQUEST BHEL THAT PAYMENT OF R/A BILLS SHOULD BE RELEASED AS FOLLOWS :-85 % OF BILLED AMOUNT WITHIN 7 DAYS AFTER SUBMISSION OF  |  |
| 25 | PLEASE REFER PAGE NO. 38 OF 43 OF PRICE<br>BID ,PART-II (VOLUME-III), ST NO. 2313, 2314.  | KINDLY PROVIDE TECHNICAL SPECIFICATION,<br>LIKE DESIGN CRITERIA, MATERIAL OF<br>CONSTRUCTION, ETC. FOR STOP LOG GATES,<br>STATIONERY SCREENS AND THEIR EMBEDDED   | NOT ACCEPTABLE  Design criteria shall be provided in the approved  Drawing to be supplied at site. However, item description is self explanatory for quoting the rate. |
|    | PLEASE REFER PAGE NO. 66 & 67, SECTION-<br>11 (SC), CLAUSE NO. 11.11 & 11.12(I)<br>RECOVERY OF ADVANCE FROM THE FIRST<br>APPLICABLE RUNNING BILL ONWARDS. | THE RECOVERABLE ADVANCE OF 5% SHOULD BE DEDUCTED AFTER WORK PROGRESS OF 10% IS ACHIEVED AND PAID, AND NOT FROM FIRST R/A BILL AS MENTIONED.WE REQUEST BHEL FOR AN ADVANCE OF 5% OF CONTRACT VALUE TO BE PAID AGAINST MOBILIZATION OF PLANT & MACHINERY AT THE PROJECT SITE. |  |

| 27 | SECTION-5 (SC), THE CONTRACTOR SHALL SATISFY HIMSELF OF THE QUALITY AND QUANTITY OF THE MATERIALS AT THE TIME OF TAKING DELIVERY FROM BHEL STORES / STORAGE YARD AND BIDDER TO ENSURE THAT NO LAMINATION MATERIALS ARE TAKEN OVER BY THEM FROM BHEL STORES.  CL.NO. 5.11.1 PAGE NO. 35 & 36. – WASTAGE | AS BHEL IS PROCURING ALL MATERIALS, BHEL TO ENSURE AND CONFIRM ALL STEEL WILL BE AS PER IS-2062. ALSO STEEL WITH ANY DEFECT LIKE, LAMINATION, ETC. SHALL BE RETURNED TO BHEL STORES. THE SAME SHOULD BE DEDUCTED FROM ISSUED STEELS AND SHALL NOT BE TO CONTRACTOR'S SCOPE.  PLEASE NOTE THAT CUT PIECES / |   |
|----|--|--|---|
| 28 | OF STEEL – ALLOWABLE WASTAGE<br>FURTHER CLASSIFIED AS CUT PIECES /<br>SERVICEABLE SCRAP PIECES OF ROLLED<br>SECTIONS LENGTH 3 MTRS. AND ABOVE.<br>AND M.S. PLATES 1.0 M <sup>2</sup> AND ABOVE<br>WITH MINIMUM WIDTH 200 MM.   |  | consist of serviceable scrap also.  |
| 29 | CL.NO. 5.9.0 PAGE NO. 37, SECTION-5 (SC) – RECONCILIATION OF BHEL ISSUED MATERIALS. THE CONTRACTOR SHALL SUBMIT RECONCILIATION STATEMENT OF STEEL ISSUED TO THEM WITH EACH RA BILL.  |  | monthly basis, however in case bidder find difficult to make reconsilation of steel on monthly basis then it has to be madetarily done in a peroid of six months. |

5

| 30 | 31, CONSTRUCTION POWER (THREE PHASE,<br>415V / 440V, 300-400 AMPS 4-WIRE) WILL BE<br>PROVIDED AT ONE POINT NEAR THE SITE<br>APPROXIMATELY 500 MTRS. FROM | PLEASE NOTE THAT CUT PIECES / SERVICEABLE SCRAP AS DEFINED IN BID DOCUMENT SHOULD BE TREATED AS GOOD STEEL AND NOT BE CONSIDERED AS WASTAGE.  CONSTRUCTION POWER LOAD MENTIONED IN THIS CLAUSE IS NOT SUFFICIENT FOR THIS TYPE OF WORK.FOR THE SMOOTH EXECUTION OF WORK, WE WOULD REQUEST BHEL TO PROVIDE POWER AT 2 POINTS AT FABRICATION YARD (1000 AMPS PER POINT) AND 2 POINTS, ONE AT | BHEL HAS PLANNED TO INSTALL SUB-STATIONS -<br>O1 NO. NEAR FAB. CUM-STORAGE YARD & 03<br>NOS. NEAR CONSTRUCTION SITES AT |
|----|--|--|---|
| 32 | AS PER PAGE NO. 75 – ANNEXURE-1 (A) :: INDICATIVE LIST OF T&P REQUIRED.  | THE LIST FURNISHED IS VERY EXHAUSTIVE AND FOR EXECUTION OF STRUCTURAL WORKS OF LARGE COAL BASED POWER PLANTS (2X250 MW OR 500 MW). THIS IS A GAS BASED POWER PROJECT, EQUIPMENTS NEEDED FOR THE WORK UNDER THIS TENDER SCOPE SHALL BE DEPLOYED AS REQUIRED AT SITE, IN CONSULTATION WITH BHEL SITE.  |   |

| 33 |   | BREAK-UP OF PAYMENT IS GIVEN ONLY<br>FOR ERECTION [ITEM NO. 2301(B)], BREAK<br>UP OF FABRICATION [ITEM NO. 2301(A)]<br>AND PAINTING [ITEM NO. 2304] IS NOT<br>GIVEN BY BHEL | The Payment tenms for Fabrication item2301(A) under section-12 Cl no 12.1.6 is ammended and shall be paid as below vide new cl no: 12.1.6.4 a) 80% ON COMPLETION OF FABRICATION b) 20% ON SAND BLASTING AND ONE COAT OF PRIMER. All other terms & condition remain unchanged. |
|----|---|---|---|
| 34 | PLEASE REFER TCE SPECIFICATION<br>NO. PART-D FOR STEEL STRUCTURES,<br>VOLUME-III, PAGE NO. 978 OF 1036,<br>SHEET-2 OF 15, CLAUSE NO. 3.3 - ALL<br>CHEQUERED PLATES AND GRATINGS<br>SHALL BE GALVANISED. | AS PER PRICE BID PART-II (VOLUME-III)<br>GRATINGS & CHEQUERED PLATES (I.E. ST<br>NO. 2301 & 2307) ARE TO BE PAINTED.  | Items modified in revised BOQ   |
| 35 | 9 (SCC), CLAUSE NO. 9.2.4 -<br>ENVIRONMENT MANAGEMENT   | PLEASE CONFIRM WHETHER STATUTORY CLEARANCES REGARDING ENVIRONMENT HAVE BEEN ACCORDED FOR THIS PROJECT OR NOT.   | this issue  |
| 36 | 7 (SCC), CLAUSE NO. 7.1.4 - NO  | BHEL HAS BEEN PROVIDING ITS CRANES<br>FOR ERECTION OF STRUCTURES FOR ALL<br>PROJECTS IN GUJARAT, VIZ. GSECL,<br>SIKKA THERMAL 2X250 MW & GSECL<br>UKAI 1X500 MW.            |   |

|    | PLEASE REFER PAGE NO. 35 OF 43,      | PLEASE CONFIRM MATERIALS FOR HAND   | Pl. see revised BOQ |
|----|--------------------------------------|-------------------------------------|---------------------|
|    | PRICE BID PART-II (VOLUME-III) ST NO | RAIL PIPES WILL BE SUPPLIED BY BHEL |                     |
|    | 2301                                 | ON FREE OF COST BASIS AT SITE. ALSO |                     |
|    |                                      | MEASUREMENT FOR FABRICATION,        |                     |
|    |                                      | ERECTION OF HAND RAILS FOR PAYMENT  |                     |
|    |                                      | PURPOSE SHOULD BE MADE ON RUNNING   |                     |
| 37 |                                      | MTR. BASIS.                         |                     |

|   |  | OTHER AMENDMENTS ARE AS BELOW  |   |
|---|--|--|---|
|   | Clause No                                      | Extisting clause   | Ammended clause                           |
|   | refer Cl No : 5.9.0 0f Section-5 of Tech Bid   |  | THE CONTRACTOR SHALL SUBMIT A             |
|   | Page -37                                       | RECONCILIATION STATEMENT OF STEEL ISSUED                                     | RECONCILIATION STATEMENT OF STEEL ISSUED  |
| 1 |  |  | TO THEM PRIOR SUBMISSION OF FINAL BILL .  |
|   | Refer Cl No : 11.2.1 0f Section-11 of Tech Bid |  | THE CONTRACTOR SHALL FURNISH THE L2/L3    |
|   | Page -62                                       | THE CONTRACTOR SHALL FURNISH THE L2/L3                                       | CONSTRUCTION SCHEDULE AREA WISE BASED     |
|   |  | CONSTRUCTION SCHEDULE AREA WISE BASED  | ON THE ABOVE MILESTONES WITHIN 30 DAYS OF |
|   |  | ON THE ABOVE MILESTONES WITHIN 30 DAYS OF                                    | ISSUE OF LOI. CONTRACTOR SHALL DRAW       |
|   |  | ISSUE OF LOI. CONTRACTOR SHALL DRAW  | MONTHLY COMPLETION PROGRAMME              |
|   |  | MONTHLY COMPLETION PROGRAMME   | ALONGWITH THE BHEL ENGINEER FOR VARIOUS   |
|   |  | ALONGWITH THE BHEL ENGINEER FOR VARIOUS                                      | ACTIVITIES. CONTRACTOR TO ARRANGE ALL     |
|   |  | ACTIVITIES. CONTRACTOR TO ARRANGE ALL  | MATERIALS IN THEIR SCORE FOR COMPLETION   |
|   |  | THE INPUTS LIKE CEMENT AND ALL OTHER MATERIALS IN THEIR SCOPE FOR COMPLETION | OF THE DOOLECT LINDED THIS CONTROL IN     |
|   |  | OF THE PROJECT UNDER THIS CONTROAT IN  |   |
|   |  |  | FABRICATION DRAWING (IF ANY) FOR          |
|   |  |  | ` '                                       |
|   |  |  | ASSOCIATED STRUCTURAL WORKS BASED         |
|   |  | ASSOCIATED STRUCTURAL WORKS BASED  | ON ENGG. DRAWING ISSUED FROM              |
|   |  | ON ENGG. DRAWING ISSUED FROM BHEL.   | BHEL.FURTHER DISTRIBUTION OF              |
|   |  | ARRANGEMENT OF CONSTRUCTION  | CONSTRUCTION POWER AND WATER FROM         |
|   |  | WATER, AND CONSTRUCTION POWER ETC.   | BHEL POINT SHALL BE CARRIED OUT BY        |
|   |  | SHALL ALSO BE ARRANGED BY  | CONTRACTOR SO AS TO COMPLETE THE          |
|   |  | CONTRACTOR IMMEDIATELY SO AS TO  | ENTIRE WORK IN <u>24 MONTHS PERIOD.</u>   |
|   |  | COMPLETE THE ENTIRE WORK IN 24   |   |
|   |  | MONTHS PERIOD.   |   |

| REFER TO CLAUSE NO. 12.1.6.2., | 12.1.6.1 STRUCTURAL WORK             | 12.1.6.1 STRUCTURAL WORK              |
|--------------------------------|--------------------------------------|---------------------------------------|
| SECTION-12 (SCC), PAGE NO. 69  | 100% OF ITEM RATE ON PRORATA BASIS   | 100% OF ITEM RATE ON PRORATA BASIS    |
|                                | AGAINST MONTHLY RA BILLS AS FOLLOWS. | AGAINST MONTHLY RA BILLS AS FOLLOWS.  |
|                                | AS PER SCHEDULE OF RATE FOR ITEM NO  | AS PER SCHEDULE OF RATE FOR ITEM NO   |
|                                | 2301 (b) COMPOSITE RATE FOR ERECTION | 2301 (b) COMPOSITE RATE FOR ERECTION  |
|                                | CAN BE FURTHER BREAK UP AS FOLLOWS:- | CAN BE FURTHER BREAK UP AS FOLLOWS:-  |
|                                | ` '                                  | (a) ERECTION: ON COMPLETION OF        |
|                                | ·                                    | ERECTION 80% OF THE QUOTED RATE       |
|                                | (b) COMPLETION OF WELDING &          | (b) COMPLETION OF WELDING &           |
|                                | ALIGNMENT: 20% OF THE QUOTED RATE    | ALIGNMENT WITH ONE COAT OF PRIMER OF  |
|                                |                                      | 50 MICRON DFT: 20% OF THE QUOTED RATE |
|                                |                                      | AS PER SCHEDULE OF RATE FOR           |
|                                |                                      | 2301 (a) COMPOSITE RATE FOR           |
|                                |                                      | FABRICATION CAN BE FURTHER BREAK UP   |
|                                |                                      | AS FOLLOWS:-                          |
|                                |                                      | (a) 80% OF THE QUOTED RATE ON         |
|                                |                                      | COMPLETION OF FABRICATION             |
|                                |                                      | (b) 20% OF THE QUOTED RATE ON SAND    |
|                                |                                      | BLASTING WITH ONE COAT OF PRIMER OF   |
|                                |                                      | 50 MICRON DFT.                        |
|                                |                                      |                                       |
|                                |                                      |                                       |
|                                |                                      |                                       |
| 3                              |                                      |                                       |

|   | REFER TO CLAUSE NO. 11.6.6,                     | THE ABOVE PVC SHALL BE  | THE ABOVE PVC SHALL BE   |
|---|---|---|--|
|   | SECTION-11 (SCC), PAGE NO. 65                   | APPLICABLE FOR TOTAL CONTRACT                                       | APPLICABLE FOR TOTAL CONTRACT  |
|   |   | PERIOD OF 12 MONTHS PLUS ACCEPTED                                   | PERIOD OF 24 MONTHS PLUS ACCEPTED  |
|   |   |   | EXTENDED PERIOD, IF ANY, DUE TO NO FAULT   |
|   |   | OF CONTRACTOR. PRICE VARIATION DURING THE ENTIRE EXTENDED PERIOD ON | OF CONTRACTOR. PRICE VARIATION DURING THE ENTIRE EXTENDED PERIOD ON  |
|   |   | COTRACTOR'S ACCOUNT, IF ANY, WILL BE                                | COTRACTOR'S ACCOUNT, IF ANY, WILL BE   |
|   |   | APPLIED ON THE INDEX FROZEN FOR THE                                 | APPLIED ON THE INDEX FROZEN FOR THE  |
|   |   |   | MONTH PRECEDING START OF SUCH EXTENDED   |
|   |   | PERIOD ATTRIBUTABLE TO THE CONTRACTOR.                              | PERIOD ATTRIBUTABLE TO THE CONTRACTOR.   |
|   |   |   |  |
| 4 |   |   |  |
|   |   |   |  |
|   | Refer Section-4 , cl no 4.0(A)for Scope of      |   | The following structure are included in the  |
|   | Refer Section-4 , cl no 4.0(A)for Scope of Work |   | The following structure are included in the existing scope of work   |
|   |   |   | 8  |
|   |   |   | existing scope of work   |
|   |   |   | existing scope of work<br>45) ETP ( Effluent Treatment plant )   |
| 5 | Work  |   | existing scope of work 45) ETP ( Effluent Treatment plant ) 46) RODM Plant   |
| 5 |   |   | existing scope of work 45) ETP ( Effluent Treatment plant ) 46) RODM Plant  For excavation of rock by blasting , the contracter has  |
| 5 | Work  |   | existing scope of work 45) ETP ( Effluent Treatment plant ) 46) RODM Plant  For excavation of rock by blasting , the contracter has to obtain necessary approvals from concerend |
| 5 | Work  |   | existing scope of work 45) ETP ( Effluent Treatment plant ) 46) RODM Plant  For excavation of rock by blasting , the contracter has  |

|   | Refer Item No.2308(b) ,P/32 | Extra over above Item No. 2301 for finishing the         | Extra over above Item No. 2301 for finishing the         |
|---|-----------------------------|--|--|
|   |                             | fabricated Chequered plate with hot dipped               | fabricated Chequered plate with hot dipped               |
|   |                             | galvanisation @900gm/Sqm over blast cleaned steel        | galvanisation @900gm/Sqm over blast cleaned steel        |
|   |                             | surface as per specification, drawing and instruction of | surface as per specification, drawing and instruction of |
|   |                             | Engineer instead of primer painting.                     | Engineer instead of primer painting.(Contractor has      |
|   |                             |  | to take out fabricated chequered plate outside the       |
|   |                             |  | plant to galvanisation shop at their own expenses        |
|   |                             |  | with permission of BHEL and bring back the same          |
|   |                             |  | to site ,quoted rate shall comprise of                   |
|   |                             |  | transportation to and fro,loading ,unloading             |
|   |                             |  | galvanising etc. complete.)                              |
|   |                             |  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,                   |
|   |                             |  |  |
| 7 |                             |  |  |