



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN – 04

Ref: PSER:SCT:NKP-M1652:TCN-04

Date: 19-03-2015

Sub	Tender change notice (TCN) 04	
Job	Design, Engineering, Manufacturing, Supply/Delivery, Erection, Commissioning, Trial Run, PG tests, Handing Over, etc for the water treatment plant packages (excluding civil construction work) for 3x660 MW at North Karanpura STPP, Jharkhand.	
Ref	1.0	Tender no PSER:SCT:NKP-M1652:15
	2.0	BHEL's NIT, vide reference no PSER:SCT:NKP-M1652:4215, dated 16-02-2015
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:NKP-M1652:TCN-01, dated 20-02-2015
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:NKP-M1652:TCN-02, dated 03-03-2015.
	5.0	BHEL's TCN-03, vide reference no PSER:SCT:NKP-M1652:TCN-03, dated 09-03-2015.
	6.0	All other pertinent issues till date.

With reference to above, following points/ documents, relevant to tender, may please be noted and complied with while submitting offer.

- 1.0 Extension of due date of offer submission from 23-03-2015 to **13-04-2015 (15:00 Hrs)**
- 2.0 Clarification to bidder's queries as per attached Annexure-A.
- 3.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 4.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

SR.ENGR (SCT)

Encl

- 1.0 As above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SECTOR-II, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211691, 23211798, 23211796

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
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	2.0	BHEL's NIT, vide reference no PSER:SCT:NKP-M1652:4215, dated 16-02-2015
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:NKP-M1652:TCN-01, dated 20-02-2015.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:NKP-M1652:TCN-02, dated 03-03-2015.
	5.0	BHEL's TCN-03, vide reference no PSER:SCT:NKP-M1652:TCN-03, dated 09-03-2015.
	6.0	BHEL's TCN-04, vide reference no PSER:SCT:NKP-M1652:TCN-04, dated 19-03-2015.
	7.0	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized
representative of the bidder)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION DJ-9/1, SECTOR-II, SALTLAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

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ANNEXURE-A TO TCN-04

JOB: Design, Engineering, Manufacturing, Supply/Delivery, Erection, Commissioning, Trial Run, PG tests, Handing Over, etc for the water treatment plant packages (excluding civil construction work) for 3x660 MW at North Karanpura STPP, Jharkhand.

Tender no: PSER:SCT:NKP-M1652:15

SL. NO.	VOL.	SECTION	CLAUSE	PAGE NO	SPECIFICATION REQUIREMENT	CLARIFICATION	BHEL's Clarification/Reply
1.	II B	C1	3.2.2.	125 of 1051	"There is phase shift of 6 months for commissioning of subsequent units. Chemicals along with supervision of complete ACW treatment plant from the pre commissioning of first unit upto one year from the commissioning of last unit is also in bidder's scope. Bidder shall include chemicals required (other than sulfuric acid) for passivation of metals during commissioning of each unit also. Chemicals required after a major shutdown for re-commissioning the system shall also form part of the bidder's scope of supply"	We understand the following: Each 600 MW units shall be commissioned at an interval of 6 Months i.e. All the 3 Units shall be commissioned one after the another in succession without any time gap exceeding beyond 6 months. Requested to please delink the commissioning of Power plant Units with ACW treatment units as we are having scope for only ACW treatment & commissioning of the ACW units with rated design criteria. Accordingly we shall compute time & qty of chemicals for treatment.	Please follow technical specification.
2.	II B	C	8	236 of 1051	Laboratory Requirement	As per the reference clause "All Chemical laboratory equipments shall provided as specified elsewhere." We do not find the listing of the laboratory equipments. Please clarify the scope of laboratory equipments. This is again reproduced on page 352 of 1051. Please clarify	Chemical Laboratory equipments are excluded from scope of bidder. However, Arrangement of all instruments and lab facilities to carry out trial run/commissioning and demonstration test/Performance guarantee test shall be in the scope of bidder.
3.	II	M-1652	9,10,11 & 14	236 of 1051	CPU scope, Coal Slurry Settling pond & its Dosing System	As per the reference clause, details of CPU & its regeneration, Coal Slurry Settling Pond with its dosing system is given. We understand that the same is excluded from bidder's scope.	Bidder's understanding is correct.

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SL. NO.	VOL.	SECTION	CLAUSE	PAGE NO	SPECIFICATION REQUIREMENT	CLARIFICATION	BHEL's Clarification/Reply
4.	II-B	C1	34	58,59 of 1051	UF-RO Capacity for treating Neutralizing Waste generated from DM plant, CPU plant, power cycle blow down	<p>As per the reference clause, it is mentioned to provide UF-RO with Ro permeate capacity of 10 m3/hr with 75% recovery. Also, as per datasheet for DM plant Vol II B, Section C1, Pg 90, 91 of 1051, it is given the Feed to UF-RO system is 10 m3/hr. Please clarify the permeate capacity of the UF-RO system.</p> <p>Also, as per technical specifications for DM plant Vol II B, Section C1, Pg 59 of 1051, CI 34 (v), it is mentioned to have UF feed tank. Please confirm the requirement as in P & ID, the UF Feed pump taking suction directly from N-Pit & feeding to UF system.</p>	<p>10 m3/hr permeate water with RO recovery of 75% (min.). Further all upstream equipment shall be sized accordingly.</p> <p>The same shall per as per & P&I Diagram For DM Plant , Page no. 94 of 1051</p>
5.	II B	C1	4.0 (8)	60 of 1051	UF-RO Reject Piping N-Pit Waste Piping	<p>As per the technical specifications for DM plant Vol II B, Section C1, Pg 60 of 1051, CI 4.0 (8),, it is mentioned to provide the UF-RO reject piping of 770 meter to Ash Handling Plant. Whereas per common general technical requirement for water treatment plant Pg 235 of 1051, CI 1.01.00 (13), Reject from this RO plant shall be recycled and reused in CHP. Please clarify. Also, in the very same clause , it is mentioned Additionally provision for diverting effluent waste from N-pit to Ash Slurry sump and CMB shall also be kept. Please clarify this point when</p>	<p>The same shall per as per & P&I Diagram For DM Plant , Page no. 94 of 1051.</p>

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SL. NO.	VOL.	SECTION	CLAUSE	PAGE NO	SPECIFICATION REQUIREMENT	CLARIFICATION	BHEL's Clarification/Reply
						<p>there is separate feed pumping to UF-RO system.</p> <p>Also, it is mentioned to have N-pit waste piping of 770 meter from N-pit to Ash Handling Plant & Central Monitoring Basin. Please clarify whether this piping length is total of piping considering both to Ash Handling plant & CMB or we need to consider the piping of 770 meter each for N-pit to Ash Handling Plant & 770 meter for N-pit to CMB. Also, please clarify the bifurcation scope of piping to 2 different locations & its valves.</p>	<p>Piping length shall be as follows,</p> <ul style="list-style-type: none"> N-pit to (AHP+CMB) =1020 m RO Reject Piping From N-pit to AHP/Coal Dust suppression =970 m
6.	II B	C1	16.8	134 of 1051	Scope of Chlorine Dosing in PT plant	As per the clause, it is mentioned that Chlorine dosing is being done in raw water in PT plant (BHEL Scope).Please clarify.	Chlorine dozing in raw water PT plant shall be in the scope of bidder.
7.	DWG No. PE-DG-405-174A-A002 Rev 00; Space Available for DM Plant; Pg 95 of 1051				Drawing not clear	The key plan given for DM plant is not clear. Also, the naming of the units are not clear. The units located above the bulk tanks & that at the bulk tanks are not clear. Please furnish the legible drawing.	Please refer soft copy of the same.
8.	-	-	-	-	Air Conditioning, Ventilation & AHU	We understand that Air Conditioning & HVAC is completely excluded from our scope. Please confirm.	Please follow technical specification.
9.					Civil for Filtered water Reservoir &	We understand that we need to provide	Please follow technical

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SL. NO.	VOL.	SECTION	CLAUSE	PAGE NO	SPECIFICATION REQUIREMENT	CLARIFICATION	BHEL's Clarification/Reply
					Filter house	only hand railing around the RGF as the filtered water reservoir is below the RGF. Any other hand railing, stair case shall be excluded from bidder's scope. Please confirm.	specification.
10.	-	-	-	-	Stairs for RCC structures Hand railing for civil structures	Stairs for RCC structure is considered in civil scope. Hand railing for the RCC structures shall be depending upon the depth of each RCC structure based on which the Plan area / periphery can be calculated as only volume is given. Please furnish the minimum sizing criteria / depth for plan area.	Please follow technical specification.
11.	-	-	-	-	Delay due to factors not attributable to bidder	We understand that civil works required for completion of the project shall be in accordance to the tender stipulated milestone & shall not hinder the activity of WTP bidder due to which any delay is encountered. As such, we understand LD or any penalty clause shall not be applicable. Please confirm.	Please follow technical specification.
12.	II B	C1	13.2	101,601, 590-597, 504,134, 130 of 1051	3D modeling	As per the clause, "Commercially available 3-D modelling software and design review software (network ready, which shall include interference check, walkthrough animation, simulation for equipment placement and removal, visual effect, photo realism, etc) shall be loaded on a server with 2 work stations (latest configuration for server	Bidder to note that the, 3D modeling of water treatment system shall be done strictly in accordance with other requirements stipulated on page no. 486 of 1051. Further the details provided, at cl. no. 8.03.04,a (iv), page no. 504 of

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SL. NO.	VOL.	SECTION	CLAUSE	PAGE NO	SPECIFICATION REQUIREMENT	CLARIFICATION	BHEL's Clarification/Reply
						<p>& workstation) with one A-3 size coloured laser printer. The software shall include facility for obtaining hard copies of all the drawings/documents on standard plotter/printer.</p> <p>All software provided shall necessarily include the cost for perpetual license(s) for use on all the machines and an Annual Maintenance Contract (AMC) which shall include software upgrades as & when released by the software agency for a period of three (3) years after warranty/guarantee period.</p> <p>The engineering for entire ACW TREATMENT PLANT package will essentially be done using Intelligent P&ID, Intelligent Electrical, Intelligent Instrumentation and 3D modelling by Bidder”</p> <p>Please clarify the supply of type & number of software for Each package i.e. PT, DM, ACW, ETP, STP, Gas Chlorination. Also, please clarify the number of machines to be considered on which cost for perpetual license(s) for use on all the machines and an Annual Maintenance Contract (AMC) to be considered.</p> <p>As per the enquiry the details of the</p>	1051 are to make bidder aware w.r.t. to 3 D environment being followed for this project.

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						software supply requirement is for ETP & ACW is only given. Also, we will like to clarify that the required software shall be as per the Software Manufacturer / developer & the compatibility with the machine to be ensured by the Client.	
13.	II B	C1	13.2	102 of 1051	Software Training	"The requisite hardware and software shall be supplied and commissioned by the Bidder at BHEL & Customer Engineering Office Complex at Noida as per mutually agreed schedule. Further, training for BHEL/Customer's personnel for 100 mandays (for 10 employees in minimum 2 batches of 5 each) shall be provided at BHEL & Customer office at Noida, for the softwares being offered under the package. For this purpose, all the softwares and hardwares shall be provided before start of detail engineering so that the training can be imparted on time". Please clarify this point with respect to above point of type & number of software supply.	Please refer reply at pt. no. 12 above.
14.	-	-	-	-	Structural Steel Works	We understand that All structural steel & works required for shed / building, is excluded from bidder's scope	Bidder's understanding is correct.
15.	-	-	-	-	Walkway/Pathway	Since complete civil work is excluded, We understand that All walkway & Pathway is excluded from bidder's	Please follow technical specification.

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SL. NO.	VOL.	SECTION	CLAUSE	PAGE NO	SPECIFICATION REQUIREMENT	CLARIFICATION	BHEL's Clarification/Reply
						scope.	
16.	-	-	-	-	Civil Design only for PT, Lamella/Tube settler & for STP. For other excluded	We understand that Civil Design only for PT, Lamella/Tube settler & for STP is in bidder's scope. For other packages, the same is excluded from bidder's scope	Please follow technical specification.
17.	-	-	-	-	Supervision of civil works only for PT plant	We understand that supervision of civil works is only for PT plant. For other packages, the same is excluded from bidder's scope	Please follow technical specification.
18.	II B	C1	9.2, 14.2	51 of 1051	Sludge Pit, Filter Backwash Waste Collection Pit Capacity	Quantity for Sludge Pit, Filter Backwash Waste Collection Pit is given as 1 No. (in 2 Compartment). Effective capacity is given but it is not mentioned for 1 compartment or 2 compartments. Please confirm.	The capacity provided, is for both compartment.
19.	-	-	-	-	UF-RO-MB OR Resin Based DM	We understand that for DM plant, we need to quote for resin based DM plant & not membrane based (RO followed by resin based Mixed Bed). Please Confirm.	Bidder's understanding is correct.
20.	-	-	4 (j)	352 of 1051	Anti-scalant and Anti-oxidant as offered for RO skids	As per the clause, Supply of Anti-scalant and Anti-oxidant as offered for RO skids for a period of one (1) year from the date of successful commissioning of WTP plant. We understand that the same is excluded as per the list of exclusion for DM plant. Also, we understand that all chemicals except that for ACW is excluded from bidder's scope	This is for RO based DM plant, hence not applicable.

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SL. NO.	VOL.	SECTION	CLAUSE	PAGE NO	SPECIFICATION REQUIREMENT	CLARIFICATION	BHEL's Clarification/Reply
21.	-	-	4 (o)	352 of 1051	Portable type ladders with platform	Sufficient numbers of portable type ladders with platform to be supplied for ease of maintenance. Please clarify the scope	Any portable type ladders with platform required, shall be in bidder's scope.
22.	II B	C1	15	17 of 1051	Thickened Waste Sludge Sump	As per P & ID No. PE-DG-405-158-A001 Rev 0, for Thickened waste sump, single section is indicated whereas per technical specification it is mentioned twin section. Please clarify. Also, it is indicated that Sludge Sump Blower is used for agitation of Thickened Sludge Pit. Please furnish the capacity of Thickened Sludge Sump to be considered & whether Single section / Twin section to be considered. Since the consistency of the sludge from thickener shall be in the range of about 5 - 7%, it is recommended to install Agitator instead of air scouring. Please clarify.	Twin compartment with a capacity of 1 hour storage of each compartment. Please follow technical specification.
23.	II B	C	13.1,13.4	51 of 1051	RGF Air Scour Blower	As per the specification it is indicated to provide common Air scour blower for DM & Non DM RGF. But for the capacity it is mentioned to provide as per requirement. As per technical specification, it is not clear whether the backwashing shall be done in section wise or both the section to be backwashed simultaneously. This is required to calculate the capacity of Air scour blower. As per specification 3	Please follow technical specification.

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						Nos. Air scour blower need to be provided i.e 2Working +1Standby. So capacity of each blower shall be to scour one section of the RGF. Please confirm.	
24.	II B	C1	19	52 & 53 of 1051	Dosing tank capacity shall be designed considering 8 hrs requirement or 10m Cu. M. whereas as per Clause 5.5.i, Page – 23 & 24 of 1051, Dosing tank capacity shall be designed considering 12 hrs requirement.	Clarify the basis for sizing the dosing tanks.	10 Cum. (each) or To store alum solution (of about 10% W/V concentration) for 8 hrs req. of all clarifier operating at its design capacity and a dosing rate of 70 ppm, Whichever is maximum
25.	IIB	C1	19 & 1	55, 56, 117 & 118 of 1051	Separate Dosing tanks of Alum, Lime & PE required for PT & LET Plant, However as per clause – 5.5.i, Common Dosing tanks of Alum, Lime & PE required for PT & LET Plant Plant	Clarify the scope for various dosing tanks.	Please refer P&I Diagram For Pre-Treatment Plant , Page no. 55 of 1051 & P&I Diagram For Effluent Treatment Plant , Page no. 121 of 1051
26	IIB	C1	12	51 of 1051	Gravity Filter Capacity is given as 155 m3/hr whereas as per clause – 10.03.00, Page – 264 of 1051, Gravity Filter capacity is given as 150 m3/hr.	Clarify the Capacity of Gravity Filter to be considered.	Please follow technical specification.
27	IIB	C1	12	51 of 1051	Gravity Filter type is indicated as Vertical Cylindrical.	As per our understanding it is typographical error, it should be rectangular / Square. Kindly confirm.	Please refer cl.no.10.03.00, Page no. 264 of 1051
28	IIB	C1	1.0	90 of 1051	Capacity of UF & RO Plant is given as 10 m3/hr whereas as per Clause – 17, Page – 270 & 271 of 1051, Capacity of UF is 90 m3/hr and RO is 75 m3/hr.	Clarify the capacity of UF & RO Plant to be considered.	10 m3/hr permeate water with RO recovery of 75% (min.). Further all upstream equipment shall be sized accordingly.

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29			2.11 SCH.- 12	3 of 16	Price break for supply of Chemicals for running the whole water treatment system after trial run for maximum 12 months period.	Price break for supply of Chemicals for running the whole water treatment system after trial run for maximum 12 months period have been identified as part of Scope of Supply in the Price Schedule. However, Supply of Chemicals is excluded from the bidder's scope as specified in the specification. Kindly clarify the scope regarding supply of Chemicals.	Please refer cl.no.3.2, Page no. 125 of 1051
30			1.0	3 of 16	Total lump sum firm price on FOR site basis for design, engineering, manufacture, fabrication, assembly, inspection & testing at vendor's & sub vendor's works, painting, forwarding, supply and delivery at site including start up and commissioning spares, mandatory spares, properly packed for transportation, loading / unloading / handling and storage at site, in site transportation, assembly, erection and commissioning, trail run, preparation and submission of "As Built" drawings, site testing, carrying out performance guarantee tests at site and handover in flawless operating condition to end customer the entire Water Treatment System	Details of Condensate Polishing Plant etc. furnished in the specification is for information purpose only. Scope of Supplies / Services of the tender is only related to Pre Treatment Plant, Demineralisation (DM) Plant, Effluent Treatment Plant, Auxiliary Cooling Water (ACW) Treatment Plant, Gas Chlorination Plant & Sewage Treatment Plant. Please confirm.	Confirmed

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					consisting of Pre Treatment Plant, Demineralisation (DM) Plant, Effluent Treatment Plant, Auxiliary Cooling Water (ACW) Treatment Plant, Gas Chlorination Plant & Sewage Treatment Plant including supply of Chemicals for commissioning, trial run and running the system after trial run for maximum 12 months period & supervision for ACW treatment plant, supervision of civil works for Pre Treatment Plant & as per the details in different sections / volumes of technical specifications (PE-TS-405-158-A001) for 3x660 MW NTPC North Karanpura STPP.		
31		Technical PQR for water pre-treatment plant & liquid effluent treatment plant			The Bidder should have designed, supplied, erected and commissioned at least two (2) numbers water/waste water treatment plants, each with a capacity of not less than 1000 Cu.m/hr, comprising of clarifiers/tube settlers/ thickeners or a combination thereof Including civil works, The plants should have been in successful operation for at least one (1) year prior to the date of 28/11/2013.	We understand that since the bidders are not supposed to do civil work, This could be a typo-graphical errors, hence request to delete the asking for civil work experience from the PQ Criteria, as sated above in clause no, 1.1 and elsewhere written in the subject tender and issue the new amended PQ criteria.	The PQR requirement is clear in this regard.
32	3.0 SCOPE OF SUPPLY (MECHANICAL) POINT NO 50 , PAGE 19 OF 1051				Bidder to note that clarifiers shall be provided with full bridge.	Please note that in order to have east approach and operational accessibility	Please follow technical specification.

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						the clarifiers are provided with half bridge. Please confirm whether bidder can consider half bridge in place of full bridge.	
33		5.0 DESIGN CRITERIA AND TECHNICAL DETAILS, POINT NO 15 and 16. PAGE 21 OF 1051.			Filtered water reservoir capacity as 200 m3 (Technical specifications) . However the capacity is 150 m3 in Data sheets.	There is an ambiguity over the capacities mentioned for filtered water reservoir (Data Sheets and Technical Specifications). Please confirm which will superceed.	Please refer cl.no.15 & 16, Page no. 21 of 1051
34		5.5 CHEMICAL HOUSE , c) ALUM PREPARATION TANKS			Three nos of alum dosing tanks with 8 hrs retention.	We propose to provide 2 nos of alum dosing tanks. This will further reduce the foot prints of chemical house and civil load. Please confirm our understanding.	Please follow technical specification.
35		6.0 OTHER DESIGN AND CONSTRUCTION FEATURES , /5.3 CLARIFIERS , POINT NO 15, PAGE 23 OF 1051.			The rake bridge and agitators shall be constructed of structural steel and suitably braced to provide rigidity.	We understand that the agitators will be constructed of mild steel with epoxy paint. Please confirm our understanding.	Agitator shall be of SS 316 construction.
36		6.0 OTHER DESIGN AND CONSTRUCTION FEATURES , /5.6 GRAVITY FILTERS, PAGE 26 OF 1051.			Backwash system of Gravity Filters.	We understand that the gravity filters will be backwashed using backwash pumps taking suction from Filtered Water reservoir. Request you to confirm our understanding.	Please refer P&I Diagram For Pre-Treatment Plant , Page no. 55 of 1051
37		13.0 EXCLUSIONS , POINT NO 1, PAGE 31 OF 1051.			Acid and alkali lining for Chemical Dosing Area, Trenches for collection of waste.	We understand that since civil works are excluded from our scope the acid and alkali lining and trenches are also excluded from bidder's scope of supply. Please confirm our	Bidder's understanding is correct.

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						understanding.		
38					DATA SHEETS - A , 6.0 HIGH RATE SOLID CONTACT CLARIFIER. 8.3 , ELECTRICAL REQUIREMENTS	For each clariflouclator , one Distribution board to be located on clarifloculator bridge for all drives of bridge assembly.	We understand that it has been wrongly mentioned as clarifloculator instead of HRSCC. Please confirm our understanding.	Bidder's understanding is correct.
39					DATA SHEETS - A , 12.0 GRAVITY FILTER,12.2 , CAPACITY , EACH	Capacity for each Gravity Filter : 155 m3/hr (each)	The HRSCC for CW has been designed for 1400 m3/hr and for PT-DM it is 300 m3/hr. Keeping in view the design flow rates of HRSCC , we understand that the gravity filters flow rate has been wrongly mentioned as 155 m3/hr each. Please confirm the design flow rates to be considered for Gravity Filters.	Please follow technical specification.
40					DATA SHEETS - A , 12.0 GRAVITY FILTER,12.3 , TYPE	Gravity Filters Type : Vertical Cylindrical	We understand that the gravity filters are dual media graity type , not pressurized type and it has been wrongly mentioned that it is vertical cylindrical. Please confirm our understanding.	Please refer cl.no.10.03.00, Page no. 264 of 1051
41					DATA SHEETS - A , 12.0 GRAVITY FILTER ,12.8 , DESIGN SURFACE FLOW RATE	Design surface flow rate : 5 m3/m2/hr	As per the CPHE Manuals we can consider design surface flow rate upto 10 m3/m2/hr which will reduce the footprints and civil load. Please confirm whether higher design flow rate can be considered or not.	Please follow technical specification.
42					DATA SHEETS - A , 11.0 THICKENER ,11.6 , OUTLET SLUDGE CONSISTENCY	Outlet sludge consistency : 7%	As per our operational experience and	Please follow technical

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						vendor's recommendation the sludge consistency at the outlet of thickener shall be 6 % . Please confirm whether our understanding is correct or not.	specification.
43		DATA SHEET - A, FILTER WATER PUMPS FOR DM PLANT, NUMBER 3 X 100 %			At present 3 X 100 % pumps has been asked for DM Plant Feed Pumps.	We understand that DM plant is 2 X 100% . Based on it the DM plant feed pumps has to be 2 X 100%. Please confirm our understanding as there is no purpose in providing 3 X 100 % pumps.	Please follow technical specification.
44		DATA SHEET - A, BACKWASH SYSTEM FOR ACF			Backwash system for ACF	We understand that a separate RCC tank has to be provided for ACF backwash. Please confirm our understanding.	Please follow technical specification.
45		DATA SHEET - A, DEGASSED WATER TRANSFER PUMPS, NUMBER 3 X 100 %			At present 2 X 100 % tanks has been asked for Degassed water storage.	We suggest to provide 1 X 100 % Degassed water storage tank instead of 2 X 100 % as it will reduce the civil load and footprints.	Please follow technical specification.
46		DATA SHEET - A,37.0 , VALVES			All valves shall be double flanged type.	We understand from the PT plant specification calls for wafer lugged valves. As the end user is same , the valves can be considered as lugged wafer type. Please confirm our understanding.	Please follow technical specification.
47		DATA SHEET - A,17.0 , ACID STORAGE TANKS			Capacity of each Tank : DM Requirement +164 m3 (CPU)	We feel that the amount of acid to be stored for CPU seems to be very high. We request BHEL to check once again.	Please follow technical specification.

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48					Piping MOC for Demineralized service	It has been mentioned to consider SS 304 as piping MOC for demineralized service. We request BHEL to provide from what point the DM water will be considered. We also request BHEL to provide piping MOC for filtered water.	DM water will be considered from SAC inlet flange. Further ,piping MOC of filtered water shall be as per cl. No.36.3,Page No. 89 of 1051.
49					Flow Rate for N-Pit Effluent Treatment Plant	We understand that the flow rate mentioned (10 m3/hr) is at the outlet of RO. (RO permeate). Please confirm our understanding.	10 m3/hr permeate water with RO recovery of 75% (min.). Further all upstream equipment shall be sized accordingly.
50					MOC for UF Membranes	We suggest to consider PES also as a MOC for the UF membranes.	Please follow technical specification.
51					GENERAL	Loading for deviations & Tender evaluation: We would like to discuss the same.	Shall be as per tender.
52					GENERAL	Please confirm the order of documents to be followed. In case of any ambiguity whether BHEL specs will supercede or NTPC.	Please refer cl.no.1.7, Page no. 2 of 1051
53					Flow rate to the plant	We understand that the total flow rate to the ETP is 20 m3/hr. Please confirm.	Please follow technical specification.
54					Since the project enjoys MEGA POWER PROJECT STATUS, Excise Duty is exempted, necessary	In this case since BHEL being the Contractor arrange the required certificate in the name Sub-suppliers of the contractor to avail Excise Duty	PAC will be arranged by BHEL in name of Bidder

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					documents/papers(BHEL and Customer) will be handed over to vendor before dispatch from their factory/works	Exemption	
55		SCC Taxes and Duties	11.1.1.1	6 of 17	The Commercial Invoice should contain the name of the ultimate consignee, ie customer as specified in the order/contract as well as A/c BHEL	Please clarify whether other dispatch documents such as LR and Excise Invoice etc shall be drawn on A/c BHEL	Clear cut instruction already provided in the " Taxes and Duties " clauses . Bidder is requested go through documentation procedure
56		SCC Taxes and Duties	11.1.1.2	6 of 17	Supply of goods by main/sub-vendor shall be regarded as "Deemed Exports" under FTP - 2009-201, under 8.2 (f) of FTP is the sole responsibility of Vendor and no claim on account of such benefit will be entertained by BHEL at a later date	Please confirm the inclusion of sub-supplier name of sub-contractor in the contract agreement to avail Deemed exports benefit either of them	Replied as per SI No: 54
57		SCC Taxes and Duties	11.2.3	7 of 17	BHEL propose to make sale in transit as per Sec 6(2) of CST Act, 1956 where goods moving interstat. "C" form shall be issued and exchanged against E1/E11..... No concessional forms shall be issued for goods moving within state	Please confirm Way required under Jharkand Sales Tax for import goods from outside the state shall be issued by BHEL/Customer	Way Bill will be arranged/provided by BHEL
58		Consequential Loss			Consequential Loss is not excluded	We understand that " Neither party shall be liable to the other for loss of use of any part (or full) of the works or for loss of production,loss or profit or other indirect or consequential loss or	Loss/liability shall be governed by limitation of liability as per sl. no. 59.

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						any like damages, which may be suffered by such other party in connection with the contract. Kindly confirm	
59			Limitation of Liability		Limitation of Liability	We understand that under no circumstances can the Limitation of Liability exceed the Contract value. Kindly Confirm.	Limitation of liability shall be as per following clause : Notwithstanding anything to the contrary in the Agreement or the Purchase Order, the maximum liability for damages of the Contractor, its servants or agents, shall under no circumstances exceed an amount equal to the Agreement or the Purchase Order Price or the market price of the item/s till Handing Over of the equipment to BHEL/Customer considering the Risk Purchase provision, whichever is higher
60			CLAUSE 40.0, SCC, VOL IC AND CLAUSE 4.3, SCC, VOL IC&ID		But the two contract shall not in any way dilute the responsibility of the bidder for the successful completion of the job as per tender specification and both the contracts shall contain a cross-fall breach clause, namely that a breach in one contract shall automatically be classified as a breach on the other contract which will confer a right on BHEL to terminate the other contract at the risk and cost of the	We understand that since it is a divisible contract then breach in one contract shall not automatically be classified as a breach on the other contract. Kindly Confirm We understand that there should be a fixed time frame for suspension of Work. Kindly Confirm	This is a single contract divided into two parts as Supply and Services scope and therefore contains cross fall breach clause. In the referred tender clauses, nowhere the term "Suspension of Work" is mentioned.

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					bidder Suspension of Work		
61			Vol 1A, GCC Clause 31		FM Condition	We understand that there should be a fixed time frame for the Force Majeure event. Kindly Confirm	"The time frame" for Force Majeure is decided by factors which are beyond control of the contractor as per the referred clause.
62			Vol 1A, GCC Clause 12.1		To be entitled to impose such damage, BHEL will not be required to prove that he has incurred such amount as actual damage	We understand that this clause should be removed since it may lead to different interpretation. Kindly Confirm.	There is no ambiguity in this clause and this shall be applicable.
63			Vol 1D Clause 28.5		In the event of any emergency where, in the judgment of the engineer, delay would cause serious loss or damages, repairs or adjustment may be made by the engineer or a third party chosen by the engineer without advance notice to the contractor and the cost of such work shall be paid by the contractor.	We understand that Contractor should not be liable for the total loss, hence the clause should be removed. Kindly Confirm	Since cause of loss or damage is due to delay made by the contractor and thereby they should be liable for the total loss. Hence, this clause is valid for this contract.

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64					We would also like to share that we have observed that in Annexure – 1 (TIE – UP FORMAT/CONSORTIUM AGREEMENT FORMAT) SI.No 8 mentions “Consequential Liabilities” and therefore we request you to delete SI. No 8 from Annexure – I.	Please do note that as per our internal corporate guidelines <u>will not be in a position to bid</u> for the aforesaid tender until and unless the said clause is removed from the Tie Up Format and Consequential Loss is excluded from the Tender Scope in totality. Hence a speedy resolution to this matter is required for us to proceed with the tendering activities.	No change in the format is envisaged.
65	NIT	-	I.h	3 of 15	Integrity Pact Agreement (Duly Signed by Authorised Signatory	We have format of Integrity Pact Agreement, which is not signed by any BHEL authority and as per tender bidder's authorised representative has to sign it and submit it along with techno commercial bid. Kindly confirm our understanding is correct.	Refer TCN-03
66	NIT	-	V	3 of 15	COVER-IV (EMD)	Since EMD is not applicable as per Salient Details of NIT Clause 7 therefore cover –IV (EMD) shall be not submitted. Please confirm	Shall be as per NIT.
67	NIT	-	17	4 of 15	BHEL reserves the right to go Reverse Auction (RA).... in case BHEL decides to go for RA.	Participation in Reverse Auction should not be mandatory. It should be optional. Please allow bidders to give their choice whether they would like to participate in (RA) or not. In case any bidder opt that they may not like to participate in (RA) then please clarify whether their bid shall be considered for normal bidding process or not?	Shall be as per Tender.
68	Volume IA GCC	Part-I Instruction	1.3	2 of 22	Part –III (EMD)	Since EMD is not applicable as per Salient Details of NIT Clause 7	Shall be as per NIT.

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		to Tenderer				therefore Part-III (EMD) shall be not submitted. Please confirm	
69	NIT		Annexure - 1	7 of 15	Pre-qualification Criteria	We assume that the Bidder who is registered with BHEL – PEM for all the respective packages without any technical limit does not require to submit the credential documents. Please confirm.	Shall be as per NIT.
70	NIT Page 4 of 15 Cl. No. 17.0					Reverse Auction: We request you to go for conventional price bid opening instead of reverse auction. We would like to discuss this.	Shall be as per tender.
71	NIT page 4 of 15 Cl. No. 16.0					We request you to consider offer validity 30 days from Part-I opening.	Shall be as per tender.
72	Vol. IA-page 10 of 22 –cl. No. 8.2					We request you to issue separate orders for supply & erection, commissioning. Necessary documentation for the same shall be discussed during pre-bid meeting	Shall be as per tender.