

 Bhopal	TITLE:- PURCHASE SPECIFICATION (TECHNICAL) FOR FALSE FLOOR	DOC. NO. HPE/TPV/PS/08	REV 00
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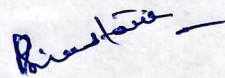
PURCHASE SPECIFICATION (TECHNICAL)

FOR

FALSE FLOOR

PROJECT: - TAPOVAN VISHNUGAD H.E.P. (4 X 130 MW)

CUSTOMER: - NTPC LTD

	Prepared  PRERNA SRIVASTAVA	Checked  VKG	Approved  RMP 03/08/19
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1.0 SCOPE:

The scope covers design, manufacturing, shop testing, delivery to site, installation, testing & commissioning of False Floor as per the following specification and scope of supply **(Annexure-C)**.

Vendor has to supply all items even if not specifically mentioned in the purchase specification to satisfactorily complete the job.

2.0 REFERENCE STANDARDS:

All equipment and shall comply with the latest revision of standards.

If requested by BHEL, the vendor shall supply at his own expense, one copy in English & one in the original language of standard applicable to the contract.

(The reference standard should be clearly mentioned in the offer)

3.0 DESIGN, CONSTRUCTION & TECHNICAL SPECIFICATION:

3.1 GENERAL REQUIRMENTS:

False floor are made using 600 x 600 mm removable tiles. The frame is made of pressed steel with a composite material infill and a polyvinyl chloride or steel plate finish covering. They are placed on adjustable height jacks.

The vendor shall obtain all necessary information about the imposed loads required by BHEL to define the mechanical properties of the slabs and the support jacks.

The materials used to make these floors shall be treated against static electricity.

PLACEMENT:

The tiles shall be placed so that they are perfectly adjacent to each other on the jacks. Cuts shall be made at the edges and edge tiles shall be placed on the edge jacks connected by stiffener cross pieces. These jacks shall be consolidated by angles and struts when the side walls consists of a thin partition. The edge waterproofing is made by a foam joint between the walls and the edge of the tiles.

Cutouts and waterproofing around columns, foundation or other penetrations shall be dealt with using the same method as at the edges. Cutouts and perforations for building in switchgear (miscellaneous boxes, cable penetrations, various stands, etc.) shall be done by the vendor.

CUTOUTS AND MACHINNG OF PLATES AND SPACERS:

After all welding or cutting operations have been carried out, continuity of the protection primer coat is repaired by the application of a paint coat containing not less than 92% of its weight of zinc powder.

EQUIPOTENTIAL LINK AND EARTHING OF THE METAL STRUCTURE:

The equipotential link shall be made using a copper braid connecting a number of jacks to each other. This network is earthed on the general building earth connection.

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MATERIALS:

Tiles used for false floor shall be supplied and placed by the supplier. They shall include:

- A structure forming 30 mm high removable cells made of hot galvanized steel with a minimum thickness of 0.8 mm.
- An infill made of chipboard particles or any other high density material (synthetic materials).
- A vinyl coating without undercoat on all surfaces. Edges shall be treated with polyvinyl chloride sections.
- If they support heavy loads, they shall be covered with a hot galvanized steel plate cover not less than 0.6 mm thick.
- Panel/ board foundation fixing hardwires.

JACKS:

Jacks are made of hot galvanised steel with a adjustment so that the height can be varied by ± 25 mm. their height shall be about 500 mm. They shall be composed of:

- A head including a ribbed plate with centring pins fixing the tiles in place.
- An adjustment system with blockage for adjusting the planeness of the floor.
- A base comprising of a flat plate fitting perfectly on the support.

STIFFENER AND WATERPROOFING CROSS PIECES:

Stiffener cross pieces shall be made of 'U' sections of a hot galvanised steel plate. They shall be provided with slots at each end so that they can be placed by fitting them on jack positioning pins.

They shall be fitted with conducting polyvinyl chloride joints that make the floor waterproof and form an electrical connection between elements.

MINIMUM MECHANICAL STRENGTH:

The minimum mechanical strength of the false floor is determined by the supplier as a function of imposed loads. The maximum allowable deflection is 2 mm along the largest dimension of the loaded tile. The size of the jacks shall be determined based on imposed loads.

3.2 TECHNICAL SPECIFICATION:

Flooring shall be laid with false-floor panels as specified in the technical specification i.e. control room at the 1297.0 m level. Drawing attached

False floor shall be laid on raised framework consisting of pedestal and stringers forming laid evenly and smooth finished base. False flooring shall be approved proprietary make agreed by NTPC, fully removable, fire resistant floor system and shall be installed by an approved specialist agency.

False floor shall be modular in construction having modules of panel dimension as specified/ detailed in construction drawings. The construction method shall give complete lateral restraint. There shall not be any gap in the panel joints and each panel shall be removable separately without disturbing adjacent panels. The panels shall be supported on all four edges, and capable of sustaining a point load of 450 kg on 645 mm² on any part of the panel with a deflection of not more than 2 mm, except if specified more by NTPC. Panels will not rock on their supports and tolerances in level between top surface of adjacent panels shall not be more than 1 mm. the floor panes shall be

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levelled to a tolerance not more than 3 mm in 12 meters. All exposed steel parts shall be galvanized.

PEDESTAL:

Pedestal shall be made of 20/25 mm diameter mild steel Zinc electroplated, with chromate passivation welded, with 100 mm x 100 mm x 8 mm thick base plate, with top head attachment made out of pressure diecast zinc aluminium alloy in shape. Thickness and size as per details shall be proposed to NTPC, for approval, depending on the choice of the manufacturer. The top head attachment shall be adjusted by means of check nuts movable up and down for level adjustment. The pedestal shall have level adjustment of 25 mm up and down for levelling, except if specified more by NTPC. Pedestal shall be fixed firmly to the floor with raw plugs and chromium plated brass screws and Araldite. Pedestals shall be fixed at 600 mm, centre to centre, both ways.

SUPPORTING FRAME WORK:

Stringers shall be of pressed cold rolled steel channel sections (zinc electroplate) with chromate passivation. Their size shall be 40 mm x 40 mm x 3.15 mm thick. They shall be fixed on the top head attachment in both directions to form grid frame work of 600 mm x 600 mm to support the false floor panels along all edges.

FLOOR PANELS:

The floor panels shall be generally square of sizes 600 mm x 600 mm made of 35 mm thick particle board of approved equivalent faced material on top, with 2 mm thick fire retardant flooring grade FRFG (Fire Retardant Flooring Grade) or approved equivalent like Antistatic Vinyl flooring tiles FRFG as required. The floor panel shall be laminated on the underside with 0.05 mm thick aluminium foil. The edges of panels shall have lipping of hard PVC, fixed with adhesive. The finished panels shall be in perfect size, shape, alignment, free from any undulation/ warping and properly numbered and directional arrow marked on the underside for identification. The floor panels and stringers shall be completely removable and shall remain in position without screwing or bolting. The joints between finished floor panels shall be air tight. The floor panels shall be removable by pulling upward with a suction device, to be provided by the supplier to NTPC at the end of the works (at least two suction devices).

TOLERANCE:

- a) Thickness : $\pm 2.5\%$
- b) Width/ Length
- 600 mm square panel : ± 0.6 mm

3.3 LAYING AND FIXING:

- a) Before starting the laying operations, the sub floor shall be examined by the supplier for evenness. The floor shall then be cleaned with dry cloth and dryness shall be attained.
- b) The layout of flooring shall be marked on sub floor with guiding/ reference lines. The flooring shall be first laid for trial, without fixing pedestals, according to the required layout.
- c) The pedestal shall be securely fixed to the sub floor with raw plugs, brass screws and Araldite glue.
- d) The channel stringers shall be placed over top head attachment of pedestal.
- e) The alignment and level shall be checked, after fixing of channel stringers is completed.
- f) The floor panels shall be carefully taken and placed in position from one end onwards. The panels shall have very little gap between joints.

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4.0 TESTS AND INSPECTION:

Inspection and testing at Manufacturer's works shall be done as per approved Quality Assurance Plan. Routine Tests, Type Tests & Acceptance Tests shall be carried out at manufacturer's works as per relevant latest IS/IEC specification. List of such tests shall be given in the offer by the The Vendor/ Bidder/ Supplier. Format of QAP is enclosed herewith as **Annexure-G** for supplier's reference. The Vendor/ Bidder/ Supplier has to fill QAP containing all the tests on Raw materials, In-process and finished equipment (Type, Routine & Acceptance tests) duly filled as witness & submit for approval of BHEL/Customer. Final inspection and tests as per approved QAP, GTP & Specification shall be witnessed by BHEL & BHEL's Customer before dispatch.

The Vendor/ Bidder/ Supplier must clearly indicate the details of testing equipment's and other testing facilities available in their works.

The tests reports shall be got approved from the BHEL's Customer before dispatch of the material.

The The Vendor/ Bidder/ Supplier shall submit the copies of test certificates for the type tests as stipulated in relevant/applicable IS/IEC standards for similar type of equipment, carried out either in the manufacturer's works and witnessed by third party or conducted in any approved laboratory and certified & issued by reputed certifying agency, for BHEL's review.

In either the absence of required type tests certificates/reports or in the non-acceptance of the submitted reports by our customer then the The Vendor/ Bidder/ Supplier has to conduct the type tests (if intended by customer) in line with relevant/applicable IS/IEC standards on one sample of equipment without any extra price implication to BHEL. The Vendor/ Bidder/ Supplier is bound to accept this. If any non-compliance in this regards then the The Vendor/ Bidder/ Supplier to clearly indicate in the technical deviation.

The acceptance tests shall be carried out by manufacturer as per the tests stipulated in relevant/applicable IS/IEC standards and approved QAP for witnessing by BHEL & BHEL's Customer during final inspection on one sample of the material.

Sequence of electrical test shall be as per the relevant Indian/International Standards. The Vendor/ Bidder/ Supplier shall submit the sequence of test for the approval of the purchase before conducting the tests. The purchaser reserves the right to modify any tests.

The routine tests shall be performed by the manufacturer as per the tests specified in relevant IS/IEC Standards. Vendor / Bidder / Supplier shall submit the test reports for review of BHEL & BHEL's Customer at least 15 days advance of final inspection call. Dimensional checks etc. shall also be carried out as routine tests.

5.0 GENERAL REQUIREMENTS:

5.1 ENVIRONMENTAL REQUIREMENTS:

In compliance with ISO 140001 & OHSAS 18001, the equipment supplied shall not contain any material, which is detrimental to the safety of environment. Guidelines for the end user for handling & disposal of any harmful packing material shall be given in the instruction manual.

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5.2 GUARANTEE:

Equipment shall be guaranteed for the specified period as mentioned in commercial terms & conditions against any defect or damage due to wrong workmanship/manufacturing process, defective or improper material used or omission in design. The Vendor/ Bidder/ Supplier shall be responsible for replacing the defective material by new one at his own cost.

5.3 TECHNICAL DEVIATION:

The Vendor/ Bidder/ Supplier shall indicate the technical deviations, if any together with the justification as per format attached (**Annexure-E**, Schedule of technical Deviations). **If no technical deviation is indicated by The Vendor/ Bidder/ Supplier in their offer then it will be presumed that the The Vendor/ Bidder/ Supplier will be fully complying with all the clauses of this specification. Deviations indicated elsewhere in the offer would be ignored by BHEL and will not be entertained.**

5.4 PACKING:

Equipment shall be packed and shipped in non-returnable wooden boxes with adequate strength to avoid any damage to the material and to withstand rough handling during transportation and long-term storage.

Each package shall carry the proper identification tag such as name of manufacturer, name of purchaser, address, order no. item number, type, size, quantity, net and gross weight duly stencilled thereon. A layer of waterproof paper/material shall be applied to the surface of the boxes.

The Vendor/ Bidder/ Supplier shall give Package/Consignment Data as per format given in **Annexure-F** one month before despatch.

5.5 QUALIFYING CRITERIA:

Each Bidder is required to fill the complete questionnaire (**Annexure-I**) and submit the same along with technical offer. Same shall be submitted to end customer M/s NTPC for approval of the Bidders. If NTPC requires further documents during vendor evaluations, same shall be made available by the bidders, failing which their offer shall not be considered. Price bid shall be opened only for those bidders, who are technical qualified by BHEL and are approved by NTPC based on questionnaire.

5.6 RECEIVING AND INSPECTION AT SITE:

Upon arrival to site, the Supplier shall visit site & formally identify his items and shall jointly verify with the BHEL site/ customer representative:

- Condition of the items
- Compliance with the packing list.

After this verification, items shall be stored in compliance with storage instructions.

The Supplier shall inform the purchaser for any problem observed during item inspection or storage, and in particular if any problem observed may affect the overall Project deadline. The storage instruction shall be supplied to BHEL during detailed design & at approval stage for acceptance.

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5.7 ERECTION & COMMISSIONING AT SITE:

Manufacturer shall depute his expert engineer to site for installation & commissioning work immediately after reaching the material at site. Vendor shall provide sufficient skilled and unskilled manpower to complete the job in time. Journey, Lodging & boarding at site, local transport etc. is to be borne by vendor.

All tools, tackles instruments required for erection /commissioning shall be arranged by Vendor.

All statutory permissions, gate pass, welder certificate etc. shall be arranged by the vendor. Necessary help shall be extended by BHEL for getting the approvals.

6.0 INFORMATION/DOCUMENTS (TO BE GIVEN BY the Vendor/ Bidder/ Supplier):

Documents/Drawings shall be submitted as per **Annexure-1A**.

7.0 ENCLOSURES WITH SPECIFICATION:

- | | |
|--------------------|---|
| (i) Annexure-A | - Project Information & Data |
| (ii) Annexure-1A | - Documents/Drawings Submission Schedule |
| (iii) Annexure-B | - Schedule of Guaranteed & Technical Particulars |
| (iv) Annexure-C | - Scope of Supply |
| (v) Annexure-D | - Unpriced Schedule |
| (vi) Annexure-E | - Schedule of Technical Deviation |
| (vii) Annexure-F | - Package/Consignment Data |
| (viii) Annexure-G | - Format for Quality Assurance Plan, Field Quality Plan & inspection call |
| (ix) Annexure-H | - Check List |
| (x) Annexure-I | - Supplier Questionnaire |
| (xi) Annexure-J | - Format for Field Quality Assurance Plan |
| (xii) Annexure - K | - Enclosed Drawing |

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 BHOPAL	TITLE:- DOCUMENTS/DRAWINGS SUBMISSION SCHEDULE	DOC. NO. HPE/TPV/PS/08 ANNEXURE-1A	REV 00
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Project:-TAPOVAN VISHNUGAD H.E.P. (4 X 130 MW), NTPC LTD

Enquiry No.-

Sl. No.	Documents	No. of Copies/ Sets	Submission Schedule/ Remarks
1.0	Before Award of Contract (i.e. At the time of submitting technical offer) for technical scrutiny	3 Sets/ Copies each	At the time of technical bid submission.
1.1	Check List as per Annexure-H for submission of document Duly filled by vendor.		
1.2	Technical Deviations if any from specification, together with the justification as per format (Annexure-E , Schedule of Technical Deviations).		
1.3	Confirmation of Scope of supply as per Annexure-C .		
1.4	Unpriced Schedule as per Annexure-D (without price indication and clearly indication as Quoted/Not quoted).		
1.5	Schedule of Guaranteed & Technical Particulars duly filled as per Annexure-B .		
1.6	Copy of Complete Type tests reports as per Clause no. 4.0 of Specification HPE/TPV/PS/08 .		
1.7	Confirmation for suitability of equipment (under scope of supply) for trouble free operation and satisfactory working under climatic conditions indicated in Annexure-A .		
1.8	Works test schedule (In-Process & list of Routine Tests, acceptance tests, type tests etc.)		
1.9	Duly filled Questionnaire as per Annexure-I from OEM.		
1.10	Acceptance of clause no. 4.0 , Tests & Inspection		
1.11	Detailed Catalogues clearly indicating all the parts along with procedures for installation.		
1.12	Comprehensive List of drawings/documents to be submitted after award.		
1.13	Confirmation for agreeing to all the clauses of technical specification HPE/TPV/PS/08 & annexures in totality except the technical deviations (if any) indicated in Technical deviation sheet (Annexure-E) clearly by the bidder.		

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 BHOPAL	TITLE:- DOCUMENTS/DRAWINGS SUBMISSION SCHEDULE	DOC. NO. HPE/TPV/PS/08 ANNEXURE-1A	REV 00
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2.0		After Award of Contract		
		<u>For Approval</u>		
	2.1	Final Guaranteed & Technical Particulars duly filled	12 Sets	Within two weeks from the date of award of contract
	2.1.1	as per Annexure-B .	of each	
	2.1.2	Package/Consignment Data as per Annexure-F.		
	2.1.3	Quality Assurance Plan duly filled as per Annexure-G		
	2.2	<u>For Reference</u> Type tests reports	12 Sets	Within two weeks from the date of award of contract
	2.3	Resubmission, if required	12 Sets	Within 10 days from date of comments excluding both ways postal time
	2.4	Approved documents as listed at 2.1	12 Sets	Within 10 Days from the date of approval
3.0		Final Tests Certificates/Reports and O & M Manuals in bound volume.	12 Sets	Before despatch of items
	3.1	Final Test Report & Certificates including routine tests reports		
	3.2	Guarantee Certificates		
	3.3	Instruction manual (Storage, Handling, Installation, Layout).		
4.0		Guarantee Certificates	15 Sets	Before despatch of items
5.0		CD-ROM of all 'As - built drawings/ design documents/Reports etc. (drawing/documents should be in editable format of AutoCAD/MS Word as applicable).	02 Sets	Before despatch of items

Notes:-

1. The vendor to strictly submit the documents as listed at sl. no.-1 (documents required for technical evaluation during tender stage). **Incomplete offer will not be considered for technical evaluation.**
2. The supplier may note that all re-submissions must incorporate all comments given in the prior submission by the Purchaser. Adequate justification for not incorporating the same must be submitted, failing which the submitted documents may be returned.
3. All the drawings shall be worked out on computer using latest version of AUTOCAD on maximum A1 size, to scale. All electrical drawings shall be made on A3 size. All documents shall be made in MS office. Offer/ all drawings and documentation shall be in English and units of measurement shall be MKS/SI.
4. The submission of various documents indicated against different clauses of this Annexure shall be strictly followed by the vendor as per the duration indicated to comply the completion of the supply & to avoid further commercial penalization.

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	TITLE:- PROJECT INFORMATION AND DATA	DOC. NO. HPE/TPV/PS/08 ANNEXURE-A	REV 00
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Project:-TAPOVAN VISHNUGAD H.E.P. (4 X 130 MW), NTPC LTD.

Enquiry No.-

1.	Name of Project	:	TAPOVAN VISHNUGADH HYDRO ELECTRIC PROJECT
2.	Customer	:	NTPC Ltd
3.	Location		
	i) Province	:	Distt.- Chamoli, Uttarakhand
	ii) Nearest Air port	:	Dehardun
	iii) Nearest rail head	:	Rishikesh
	iv) Access	:	Road, 280 km from Rishikesh on Joshimath-Malari road
4.	No. of units & Rating	:	4 x 130 MW,
5.	Site conditions		
	i) Ambient air temp. - Max.	:	(+) 27.0°C (However Equipment design temp 40.0°C)
	ii) Relative Humidity	:	Max - 95% , Min - 35%
	iii) Altitude	:	EL 1289.0 Meters above M.S.L. for service bay Power house
6.	Transport Limitation		
	i) Size (in mm) (l x b x h)	:	8500x3000x3000
	ii) Weight (Tonnes)	:	70 T
7	Seismic	:	Project is located at a margin of Zone-IV & Zone-V of the seismic zoning map of India. The equipment shall be designed to withstand seismic forces.

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 BHOPAL	TITLE:- SCHEDULE OF GUARANTEED & TECHNICAL PARTICULARS FOR FALSE FLOOR (To be filled by vendor/bidder/supplier)	DOC. NO. HPE/TPV/PS/08 ANNEXURE-B	REV 00
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Project:-TAPOVAN VISHNUGAD H.E.P. (4 X 130 MW), NTPC LTD.

Enquiry No.-

Sl. No.	PARTICULARS	UNIT	DATA
1.0	FALSE FLOOR PANEL:		
1.1	Make		
1.2	Type/brand name		
1.3	Thickness		
1.4	Dimensions		
1.5	Thickness of antistatic layer		
1.6	Concentrated Load		
1.7	Rolling Load		
1.8	Ultimate Load		
1.9	Impact Load		
1.10	Applicable Standard		
1.11	Total Weight		
2.0	UNDER STRUCTURE:		
2.1	Material		
2.2	Type		
2.3	Size		
2.4	Height Range (minimum & maximum)		
2.5	Max. Load Capacity without deflection		
3.0	STRINGERS		
3.1	Material		
3.2	Type		
3.3	Size		
3.4	Thickness		
4.0	HEAD ASSEMBLY		
4.1	Material		
4.2	Type		
4.3	Size		
4.4	Adjustment Range		
5.0	SUPPORTING STRUCTURE		
5.1	Material		
5.2	Channel Size		
5.3	Max. Load Capacity		
5.4	Galvanizing/ anti rust paints		

Handwritten signature

 BHOPAL	TITLE:-	DOC. NO.	REV 00
	SCOPE OF SUPPLY	HPE/TPV/PS/08 ANNEXURE-C	
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Projects: - TAPOVAN VISHNUGAD H.E.P. (4 X 130 MW), NTPC LTD. Enquiry No.-

Sl. No.	Description	Qty.
1.	Raised Access False Floor 600 x 600 mm wooden tiles as per Purchase Specification HPE/ TPV/ PS/ 08.	1 Set (425 sq. m (approx.))
2.	Installation Charges including Laying and Fixing of False Floor as per Purchase Specification HPE/ TPV/ PS/ 08.	01 Set

Sign with Stamp:

Date:

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 BHOPAL	TITLE:- UNPRICED SCHEDULE (To be filled by vendor/Bidder/supplier)	DOC. NO. HPE/TPV/PS/08 ANNEXURE-D	REV 00
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Projects: - TAPOVAN VISHNUGAD H.E.P. (4 X 130 MW), NTPC LTD. Enquiry No.-

Sl. No.	Description	Qty.	Unit Rate	Total Price Ex-Work
1.	Raised Access False Floor 600 x 600 mm wooden tiles as per Purchase Specification HPE/ TPV/ PS/ 08.	1 Set (425 sq. m (approx.))	Quoted/ Not Quoted	Quoted/ Not Quoted
2.	Installation Charges including Laying and Fixing of False Floor as per Purchase Specification HPE/ TPV/ PS/ 08.	01 Set	Quoted/ Not Quoted	Quoted/ Not Quoted

*-Strike out whichever is not applicable

Sign with stamp:

Date:

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	TITLE:- SCHEDULE OF TECHNICAL DEVIATIONS	DOC. NO. HPE/TPV/PS/08 ANNEXURE-E	REV 00
	HYDRO PROJECTS ENGINEERING DIVISION	PAGE 1 OF 1	

Project:-TAPOVAN VISHNUGAD H.E.P. (4 X 130 MW), NTPC LTD.

Enquiry No.-

Sl. No.	Clause No. & Description	Technical Deviation	Reasons/Justification

Sign with Stamp:

Date:

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ANNEXURE-G

Annex-83

FGC'S OCD	MANUFACTURER'S NAME AND ADDRESS	MANUFACTURING QUALITY PLAN				PROJECT : PACKAGE : CONTRACT NO.: MAIN-SUPPLIER:	
		ITEM: SUB-SYSTEM:	Q.P. NO.: REV. NO.: DATE: PAGE: ... OF ...	ACCEPTANCE NORMS	FORMAT OF RECORD		
COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	AGENCY	REMARKS
2.	3.	4.	5.	6.	7.	8.	9.
							10.
							11.

APPENDIX
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REV. CAT.
APPROVED BY
SEAL
ENGG. DIV./QA&I

DOC. NO.:
REVIEWED BY

FOR
NTPC
USE

LEGEND: * RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE
ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.
** M: MANUFACTURE/SUB-SUPPLIER C: MAIN SUPPLIER. N: NTPC
P: PERFORM W: WITNESS AND V: VERIFICATION, AS APPROPRIATE.
CIP: NTPC SHALL IDENTIFY IN COLUMN "N" AS "W"

MANUFACTURER'S SIGNATURE
MAIN-SUPPLIER
SIGNATURE
FORMAT NO.: QS-01-QAL-P-09/FI-R1

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ANNEXURE-G

APPENDIX -C
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REFERENCE / STANDARD / FIELD QUALITY PLAN (RQP / SQP/RFQP/SFQP)

TO BE FILLED IN BY SUPPLIER AT TIME OF SUBMISSION

PROJECT NAME		To be filled in by NTPC	
CONTRACT NO		REVIEW & ENDORSEMENT BY NTPC PROJECT	
CONTRACT NAME		SPECIFIC QP NUMBER ALLOTTED	
MAIN SUPPLIER		QP NO.:	
MANUFACTURER WORKS & ADDRESS		REV. NO.:	
ITEM /EQUIPMENT / SYSTEM/		DATE:	
SUB-SYSTEM DETAILS i.e. MODEL TYPE /		** The RQP/SQP/RFQP/SFQP once endorsed for a particular	
SIZE /RATING etc.		contract shall remain valid even though the original QP may	
APPROVED QP NO.: RQP/SQP/RFQP/SFQP		have expired or revised, unless / otherwise mutually agreed with	
0000-999-QV - - REV. NO.:		the supplier. ①	
DATED**:		(TICK APPLICABLE)	
Confirmation by Main Supplier (TICK WHICHEVER APPLICABLE)			
I. That the item/ component is identical to that considered for QP approval. OR			
II. That there are minor changes in the item/ component with respect to that considered for QP approval, however the same do not affect the contents of QP. OR			
III. That there are minor changes in the item/ component with respect to that considered for QP approval, however the same affect the QP slightly, as indicated below / in attached sheet.			
SIGN.: (Main Supplier)		SIGN.: (Manufacturer)	
DATE		DATE:	
NTPC		NTPC	

FORMAT NO.: QS-01-QA1-P-10/ F5-R2

1/1

ENGG. DIV./QA&I

APPENDIX -C
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ANNEXURE-G

APPENDIX - C

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FROM: SUPPLIER : (ON WHOM NTPC PLACED LOI / ORDER) M/s: _____ Address: _____ Contact Person: _____ Ph(O): _____ Fax: _____ Mobile: _____ e-mail: _____		INSPECTION CALL FOR NTPC INSPECTION (FOR SUBMISSION BY SUPPLIER/ SUB-SUPPLIER)		TO: REGIONAL INSPECTION OFFICE NTPC LTD. Contact Person: _____ Ph(O): _____ Fax: _____ Mobile: _____ e-mail: _____	
PROJECT NAME: _____ PACKAGE NAME: _____ NTPC CONTRACT NO/ PO NO: _____ PROPOSED DATE OF INSPECTION: _____ NO. OF DAYS REQUIRED: _____ WEEKLY OFF DAY (OF MANUFACTURER): _____		SUB-SUPPLIER (If Applicable) M/s: _____ Address: _____ Contact Person: _____ Ph(O): _____ Fax: _____ Mobile: _____ e-mail: _____ MANUFACTURER (Place of Inspection) M/s: _____ Address: _____ Contact Person: _____ Ph(O): _____ Fax: _____ Mobile: _____ e-mail: _____		REMARKS/ UNDERTAKING 1. Material internally inspected, in line with NTPC QP and found satisfactory. 2. All Reference Documents including latest revisions of NTPC approved QP / Drawing / BBU in original are available and shall be made available during inspection. 3. All stage inspection requirements if applicable have been cleared and relevant CHP's are available. 4. (Applicable for bought out items) Inspection by Main supplier is completed and material is cleared. OR Joint inspection along with Main supplier proposed. 5. Type test Approval from NTPC Engg.: Obtained / Pending / Not available. 6. Material shall not be Despatched without Despatch Clearance from NTPC	
Insp. Cat (*): Enter	0 - For Stage Inspection. 1 - For Final Physical Inspection.	2 - For Review of MTC's based on QP	3 - For Non-QP cases based on COC.	SIGNATURE & DATE: _____ NAME & DESIGNATION: _____ ORGANIZATION: _____	



FORMAT NO.: QS-01-QAI-P-13/F1-R2

1/1

ENGINEERING DIV. / QA & I

	TITLE:- CHECK LIST (To be submitted by supplier duly filled, stamped & signed along with offer)	HPE/TPV/PS/08 ANNEXURE-H	REV 00
	HYDRO PROJECTS ENGINEERING DIVISION	PAGE:- 01 OF 01	

Project:-TAPOVAN VISHNUGAD H.E.P. (4 X 130 MW), NTPC LTD.

Enquiry No.-

Sl. No.	Documents	Remarks*
	Submission of Documents along with offer	
1.1	Check List as per Annexure-H for submission of document Duly filled by vendor.	Submitted/Not Submitted
1.2	Technical Deviations if any from specification, together with the justification as per format (Annexure-E , Schedule of Technical Deviations).	Submitted/Not Submitted
1.3	Confirmation of Scope of supply as per Annexure-C .	Confirmed/Not Confirmed
1.4	Unpriced Schedule as per Annexure-D (without price indication and clearly indication as Quoted/Not quoted).	Submitted/Not Submitted
1.5	Dully filled Schedule of Guaranteed & Technical Particulars as per Annexure-B .	Submitted/Not Submitted
1.6	Copy of Complete Type tests reports in line with Clause no. 4.0 of Specification HPE/TPV/PS/04	Submitted/Not Submitted
1.7	Confirmation for suitability of equipment (under scope of supply) for trouble free operation and satisfactory working under climatic conditions indicated in Annexure-A.	Confirmed/Not Confirmed
1.8	Works test schedule (In-Process & list of Routine Tests, acceptance tests, type tests etc.)	Submitted/Not Submitted
1.9	Acceptance of clause no. 4.0 , Tests & Inspection	Accepted/Not Accepted
1.10	Detailed equipment Catalogues clearly indicating all the parts along with procedures for making termination.	Submitted/Not Submitted
1.11	Comprehensive List of drawings/documents to be submitted after award.	Submitted/Not Submitted
1.12	Duly filled questionnaire as per Annexure-I from the OEM	Submitted/Not Submitted
1.13	Confirmation for agreeing to all the clauses of technical specification HPE/TPV/PS/08 & annexure in totality except the technical deviations (if any) indicated in Technical deviation sheet (Annexure-E) clearly by the bidder.	Confirmed/Not Confirmed

Notes:-

- * - Strike out whichever is not applicable.
- The vendor to fill up the check list given above and submit it along with offer for initial review.
Failing to which their offer will not be considered for technical evaluation.

Signature with Stamp:

Date:

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ANNEXURE - I

	CORPORATE QUALITY ASSURANCE MAIN CONTRACTOR'S PROPOSAL CUM EVALUATION REPORT
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Ref No:				Date:			
i.	Main Contractor						
ii.	Project						
iii.	Package Name				Package No		
iv.	Proposed Item/Scope of Sub-contracting						
v.	Item covered under	Schedule-1			As per contract clause No-		
		Schedule-2					
vi.	If item is Schedule-1 and proposed sub-vendor is indigenous, Main Contractor to explain how the contractual provisions will be fulfilled						
vii.	Name and Address of the proposed Sub-vendor's works						
viii.	PO placement date/ Start of manufacturing (if self-manufactured) as per L2 network						
ix.	Item Description (Type/Size/Rating/Scope of Sub-Contracting)	Total quantity of proposed item envisaged in this package (Nos/ Running Meters/ Kgs/ Tons etc)	Quantity proposed to be procured from proposed sub-vendor (Nos/ Running Meters /Kgs /Tons etc)	Timeline for quantity requirements as per project schedule & whether the proposed Sub-vendor equipped with adequate capacity to supply proposed order quantity in time			
x.	Supply experience of the proposed sub-vendor (including supplies to Main Contractor, if any) for similar item/scope of sub-contracting, for last 3 years (Note:- Only relevant experience details w.r.t. proposed item/scope of subcontracting to be brought out here)						
	Project/Package	Customer Name	Supplied Item (Type/Rating/Model /Capacity/Size etc)	PO ref no/date	Supplied Quantity	Date of Supply	
We confirm that as per our assessment, the proposed sub-vendor has requisite capabilities & supply experience and is suitable for supplying the proposed item/scope of sub-contracting.							
Name:		Desig:		Sign:		Date:	

Company's Seal/Stamp:-





CORPORATE QUALITY ASSURANCE SUB-VENDOR QUESTIONNAIRE

i.	Item/Scope of Sub-contracting			
ii.	Address of the registered office	Details of Contact Person (Name, Designation, Mobile, Email)		
iii.	Name and Address of the proposed Sub-vendor's works where item is being manufactured	Details of Contact Person: (Name, Designation, Mobile, Email)		
iv.	Annual Production Capacity for proposed item/scope of sub-contracting			
v.	Annual production for last 3 years for proposed item/scope of sub-contracting			
vi.	Details of proposed works			
1.	Year of establishment of present works			
2.	Year of commencement of manufacturing at above works			
3.	Details of change in Works address in past (if any)			
4.	Total Area			
	Covered Area			
5.	Factory Registration Certificate	Details attached at Annexure – F2.1		
6.	Design/ Research & development set-up (No. of manpower, their qualification, machines & tools employed etc.)	Applicable / Not applicable if manufacturing is as per Main Contractor/purchaser design Details attached at Annexure – F2.2 (if applicable)		
7.	Overall organization Chart with Manpower Details (Design/Manufacturing/Quality etc)	Details attached at Annexure – F2.3		
8.	After sales service set up in India, in case of foreign sub-vendor (Location, Contact Person, Contact details etc.)	Applicable / Not applicable Details attached at Annexure – F2.4		
9.	Manufacturing process execution plan with flow chart indicating various stages of manufacturing from raw material to finished product including outsourced process, if any	Details attached at Annexure – F2.5		
10.	Sources of Raw Material/Major Bought Out Item	Details attached at Annexure – F2.6		
11.	Quality Control exercised during receipt of raw material/BOI, in-process, Final Testing, packing	Details attached at Annexure – F2.7		
12.	Manufacturing facilities	Details attached at Annexure – F2.8		

ANNEXURE - I



CORPORATE QUALITY ASSURANCE SUB-VENDOR QUESTIONNAIRE

	<i>(List of machines, special process facilities, material handling etc.)</i>					
13.	Testing facilities <i>(List of testing equipment)</i>		Details attached at Annexure – F2.9			
14.	If manufacturing process involves fabrication then-		Applicable / Not applicable			
	List of qualified Welders		Details attached at Annexure – F2.10			
	List of qualified NDT personnel with area of specialization		(if applicable)			
15.	List of out-sourced manufacturing processes with Sub-Vendors' names & addresses		Applicable / Not applicable			
			Details attached at Annexure. –F2.11 (if applicable)			
16.	Supply reference list including recent supplies		Details attached at Annexure – F2.12 (as per format given below)			
	Project/ package	Customer Name	Supplied Item (Type/Rating/Model /Capacity/Size etc)	PO ref no/date	Supplied Quantity	Date of Supply
17.	Product satisfactory performance feedback letter/certificates/End User Feedback			Attached at annexure - F2.13		
18.	Summary of Type Test Report (Type Test Details, Report No, Agency, Date of testing) for the proposed product (similar or higher rating) Note:- Reports need not to be submitted			Applicable / Not applicable Details attached at Annexure – F2.14 (if applicable)		
19.	Statutory / mandatory certification for the proposed product			Applicable / Not applicable Details attached at Annexure – F2.15 (if applicable)		
20.	Copy of ISO 9001 certificate (if available)			Attached at Annexure – F2.16		
21.	Product technical catalogues for proposed item (if available)			Details attached at Annexure – F2.17		
Name:		Desig:		Sign:	Date:	

Company's Seal/Stamp:-

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