

BHARAT HEAVY ELECTRICALS LIMITED ,
Heavy Electrical Equipment Plant
Ranipur, Haridwar – 249 403 (UK), India



BHEL ref . B/4011/2024/3799/V1 for the requirement of LP BYPASS SYSTEM WITH SPARES for Adani Raigarh, Mirzapur, Kawai Ph-II, Korba, Mirzapur and Mahan Ph-III project on GeM Portal

LIST OF ENCLOSURES

	<u>Document</u>	<u>Number of pages</u>
1.	PRE-QUALIFICATION REQUIREMENT	04
2.	SCOPE OF SUPPLY (ANNEXURE-I)	01
3.	BUYER SPECIFIC TERMS & CONDITIONS OF TENDER	19
4.	MADE IN INDIA DECLARATION FORMAT	01
5.	FCA FORMAT	07
6.	FORMAT OF BANK GUARANTEE FOR PERFORMANCE SECURITY	03
7.	INTEGRITY PACT	05
8.	CUSTOMER APPROVED QP FOR LPBP	11
9.	CUSTOMER APPROVED QP FOR LT MOTOR	09
10.	CUSTOMER APPROVED VENDOR LIST OF MECHANICAL ITEMS	22
11.	APPROVED VENDOR LIST OF ELECTRICAL ITEMS	08
12.	CUSTOMER APPROVED VENDOR LIST OF C&I ITEMS	02
	TOTAL PAGES	92

Sachin Gupta (Engineer/PPX-BOI)
Email: gupta.sachin@bhel.in
Ph. 01334-281690

Pankaj Kumar (Manager/ PPX-BOI)
Email: ssbgpankaj@bhel.in
Ph. 01334- 281690

PRE-QUALIFICATION REQUIREMENTS FOR "LP BYPASS SYSTEM"

Clause No.	Pre-Qualification Requirements (Bidder to meet either Clause 1 or Clause 2 of PQR, as applicable)	Bidder's Response
1.	<p>a. The bidder should be Original Equipment manufacturer (OEM) of LP Bypass System [consisting of electro-hydraulically actuated LP Bypass Valve along with Water Injection Valve and Hydraulic Power Supply Unit (HPSU)]. The bidder to confirm that they have previously designed, manufactured, tested, supplied, erected & commissioned LP Bypass System for 660MW or higher capacity steam turbine unit. Further, design temperature for LP Bypass Valve should be 593° C or above.</p> <p>b. The bidder to confirm that the equipment(s) as per Clause No. 1.a above are in successful operation in at least one (1) plant for a period not less than one (1) year before the date of issuance of enquiry.</p> <p>c. The bidder to also confirm that they have previously supplied & commissioned the required instrumentation i.e. Transmitters, Switches and gauges compatible with HPSU/EHA's of LPBP system for steam turbine applications.</p> <p>d. The bidder to also submit experience details as per Annexure-A (copy enclosed) of supplied LPBP system complying the requirements mentioned at clause no. 1a, 1b & 1c above. Further, the date of issue of experience certificate shall not be earlier than 15 years from the date of issuance of enquiry.</p>	<p>(a) Yes/No</p> <p>(b) Yes/No</p> <p>(c) Yes/No</p> <p>(d) Yes/No</p>
OR		
2.	<p>a. The bidder (A Joint Venture/ Subsidiary Company/Sister Company/Collaborator company) formed for manufacturing and supply of LPBP system in India can be considered, provided it has a valid collaboration or licensing agreement for design, engineering & manufacturing of LP Bypass system in India with a qualified equipment manufacturer (QEM) who meets the requirements stipulated at Clause-1 above. Further, the bidder to ensure that Collaboration/Licensing agreement shall remain valid for at least seven (7) years from the date of issuance of enquiry.</p> <p>b. The bidder to furnish the following documents/confirmation:-</p> <p>i. Annexure-A with Experience details of Qualified Equipment manufacturer (QEM) for LPBP system as per Clause No. 1.d above.</p> <p>ii. Filled-in Annexure-B along with Valid Collaboration/Licensing agreement as per Annexure-B.</p> <p>iii. Annexure-C (Declaration filled & signed by QEM)</p> <p>iv. Confirmation to submit DJU in which the executants of the DJU shall be jointly and severally liable for the successful performance of the equipment.</p> <p>v. Confirmation that LPBP system equipments viz. LPBP valve, EHA, HPSU, Casting and Forgings shall be procured from its QEM or QEM approved sub vendor only. QEM approved sub-vendor list may be furnished to BHEL for review.</p>	<p>(a) Yes/No</p> <p>Document enclosed</p> <p>i Yes/No</p> <p>ii Yes/No</p> <p>iii Yes/No</p> <p>iv Yes/No</p> <p>v Yes/No</p>

Signature of authorized signatory.....
(Name & Designation with seal)

Notes: -

- Against Bidder's replies, BHEL reserves the right to ask for more information/documents/clarifications. Bidder's offer shall not be considered if Bidder fails to furnish the document/information/clarifications as mentioned above or Bidder doesn't meet the above acceptance criteria.

Sr. Manager (STE-TG)

DGM (STE-TG)

AGM (STE-TG, TF & TS)

AGM & HOD (STE)

Manager (CIE)

SDGM (CIE)

AGM (CIE)

विशाल 27/03/25
विवेक 30/03/2025
Signature 30/03/2025

अरुण 29/03/25
अरुण 29/03/25
अरुण 29/03/25

ANNEXURE-A

Experience Details for LP Bypass System: -

S. No.	Details	BHEL Requirement	Bidder's Response
1.	Name of the station and its Location		
2.	Client name and its address, Fax no. & Tel. No.		
3.	Name, designation, e-mail ID & Mobile No. of the responsible person in client's organization		
4.	Purchase Order No. & Date		
5.	Capacity/Rating in MW of individual Steam Turbine Unit	≥ 660 MW	
6.	No. of Units		
7.	Date of Commissioning of LPBP system		
8.	Date of Commencement of Successful Operation		
9.	Years of successful operation as on date of issuance of enquiry	1 years (Min.)	
10.	Mandatory enclosures: - Certificate of satisfactory operation from their client/end user. Further, experience certificate shall contain at least the following information: i. Name of supplier ii. Name of power plant & Unit rating (in MW) in which LPBP system is installed iii. Design flow, pressure & temperature of LPBP valve iv. Operating flow, pressure & temperature of LPBP valve v. Performance status of LPBP system vi. Date of commissioning of LPBP system/Power plant start date/ plant synchronization date vii. Date of issuance of certificate		
11.	LPBP system designed by: (Please indicate separately for each point below) a. Design/ Sizing calculations of LPBP valve done by b. Design/ Sizing calculations of Desuperheater of LPBP valve done by c. Design/ Sizing calculations of Actuators of LPBP valve done by d. Design/ Sizing calculations of Water Injection valve done by e. Design/ Sizing calculations of Actuator of Water Injection valve done by f. Design/ Sizing calculations of HPSU done by		
12.	LPBP system manufactured by: (Please indicate separately for each point below) a. LPBP valve manufactured by b. Desuperheater of LPBP valve manufactured by c. Actuators of LPBP valve manufactured by d. Water Injection valve manufactured by e. Actuator of Water Injection valve manufactured by f. HPSU manufactured by		
13.	Control system designed by		
14.	Control system manufactured by		
15.	Design steam temp. for LPBP Valve	≥ 593° C	
16.	Design steam flow & pressure		
17.	Type of actuator of LPBP Valve	Electro-Hydraulic	
18.	Type of LPBP Valve (Single Stem/Double Stem)/ size		
19.	Body material of LPBP Valve		
20.	Make & model no. of Actuator of LPBP Valve		
21.	Make & model no. of Servo/Proportional Valve		
22.	Make of Hydraulic Power Supply Unit (HPSU)		
23.	Operating Hydraulic Pressure		
24.	Working Fluid (Mineral Oil/Fire Resistant Fluid)		
25.	Design Spray Water Flow (T/hr)		
26.	Spray Water Press/Temp. (ata/deg.)		
27.	Type of Actuator of water injection valve		

Information against Sl. No.1-17 are to be mandatorily provided by the bidders. Further, the bidder to submit all supporting documents like Sizing calculations, datasheet & drawings of supplied LPBP Valve (with Actuators), Water Injection Valve (with actuator) & HPSU and schematic drawings of actuators & HPSU along with their functional write-up for BHEL information.

Signature of authorized signatory.....
(Name & Designation with seal)

6/10/11
[Signature]

Annexure-B

Details of Collaboration agreement between bidder (Indian JV /Subsidiary/Sister/ collaborator Company) and Qualified equipment manufacturer for manufacturing & supply of LPBP System			
SL. NO.	Item Description	BHEL Requirement	Applicable data
1.	Name and address with telephone no. of the bidder (Indian JV/subsidiary company/Sister/collaborator Company) proposed for manufacturing & supply of LP Bypass system.		
2.	Name and address with telephone no. of the Authorised representative(s) of bidder (Indian JV/subsidiary company/ Sister/ collaborator Company)		
3.	Name and address with telephone no. of qualified equipment manufacturer Company who meets the requirement of clause 1 of Pre-qualification requirement (PQR).		
4.	Name and address with telephone no. of the Authorised representative(s) of qualified equipment manufacturer company) meeting clause no. 1 of PQR.		
5.	M/s. (Indian JV/subsidiary / Sister /collaborator Company has a valid collaboration or licensing agreement with M/s..... (/ qualified equipment manufacturer company) for design, Engineering, manufacturing & supply of LP Bypass system in India.	The Bidder to furnish valid collaboration/licensing agreement which should be in place within one month from the date of issuance of enquiry and shall be maintained for a lock-in period of seven (7) years from the date of issuance of enquiry.	
6.	The Bidder to furnish commitment for lock in period for technology collaboration or licensing agreement.	Confirmation to be provided by the Bidder	
7.	Date of Commencement/date of agreement of collaboration or licensing agreement.	within one month from the date of issuance of enquiry	
8.	Validity/End date of collaboration or licensing agreement.	Minimum Seven years from the date of issuance of enquiry	
9.	Established manufacturing & testing facility for LPBP system at Bidder's works duly verified by Qualified equipment manufacturer	Confirmation to be provided by the Bidder	

The Bidder to submit documentary evidence in support of above requirements.

Signature of authorized signatory.....
(Name & Designation with seal)

राजीव बिराल

Annexure-C

DECLARATION

[to be signed by the Qualified Equipment Manufacturer

QEM (M/s _____)]

**Reference: BHEL tender enquiry no. _____ for supply
of LP Bypass system against projects _____
by Bidder(M/s.....)**

1. We hereby confirm that: -
 - a) The Bidder have established manufacturing and testing facilities at its works as per QEM design, manufacturing and quality control system for LP Bypass system being offered in the BHEL tender enquiry.
 - b) we shall submit DJU in which each of the executants of the DJU shall be jointly and severally liable for the successful performance of the LP Bypass system equipment (preferably within one month of placement of order by BHEL).
2. In the event of ordering of LP Bypass system by BHEL to the bidder, the QEM hereby declare that: -
 - a) We shall ensure that collaboration agreement named _____ between QEM & bidder for LP Bypass system equipments being offered in the BHEL tender enquiry shall remain valid for at least seven (7) years from the date of issuance of enquiry.
 - b) We shall provide all design, design calculations, manufacturing drawings etc. of LP Bypass system and also provide technical and quality surveillance, assistance and supervision during manufacturing, testing, erection & commissioning of LP Bypass system being offered in the BHEL tender enquiry.
 - c) We shall provide approved sub vendor list for LPBP system equipments being offered in the BHEL tender enquiry viz. LPBP valve, EHA, HPSU, Casting and Forgings for procurement by bidder.
 - d) We shall take guarantee of the process and will be responsible for all warranty issues for complete LP Bypass system supplied by the bidder.
 - e) We shall author/vett LP Bypass system documents submitted by the bidder, after placement of order for review & approval by BHEL/end customer.
 - f) We shall provide the required technical & service support or alternative solutions for any issues reported during operation of LP Bypass system.


Enclosures (if any): -

Date:

Signature of authorized signatory

[Qualified Equipment Manufacturer (QEM)].....

(Name & Designation with seal)

01/01/21 

**Purchase Indent No. 20243799 dtd 05.02.2025**

1. Total scope of supply against 2x800 MW Raipur Ph-II, Mirzapur Ph-II, Kawai Ph-II, Kawai Ph-III & Mahan Ph-III project shall be as per the details given below:

SL. No.	Description	Qty per TG Unit	Total Qty for 10 units
I.	LP Bypass Valve with EHA & Desuperheater	02 Set	20 Set
II.	Hydraulic Power Supply Unit (HPSU)	01 Set	10 Set
III.	Water Injection Control Valve with Hydraulic Actuator	02 Nos.	20 Nos.
IV.	Flow Nozzle for WIV	02 Nos.	20 Nos.
V.	Dump Tube	02 No.	20 No.
VI.	Steam Blowing devices for LPBP valves (Refer Point No.4)	02 Set	10 Set
VII.	Hydraulic test devices for LPBP valve	02 Set	10 Set
VIII.	Assembly & disassembly device	01 Set	05 Set
IX.	Flushing Device for Control Fluid System	01 Set	05 Set
X.	Filling and gauging device for hydraulic accumulator	01 No.	05 No.
XI.	Motorized control fluid pump unit for filling of fluid in CF Tank for HPSU	01 No.	05 No.
XII.	Special tools & tackles as per clause-8.0 of ST47050 (Refer Point No.3)	01 set	05 set
XIII.	Mandatory spares as per BHEL Drg No. 3-12300-32100 (Refer Point No.-5)	03 Set	
XIV.	Mandatory spares as per BHEL Drg No. 3-12300-32200 (Refer Point No.-5)	01 Set	
XV.	Mandatory spares as per BHEL Drg No. 3-12300-32300 (Refer Point No.-5)	01 Set	
XVI.	Commissioning Spares as BHEL Drg No.3-12300-56005	01 Set	05 Set
XVII.	Servo Valve (as spare)	01 No. each type	
XVIII.	Solenoid Valve (as spare)	01 No. each type & module	
XIX.	Supervision during erection and commissioning at site for each TG set		

2. Following BHEL Drawings/specification may be referred:

- I. Drg. No.2-12300-32000 Rev.00 (Sh.01 & Sh.02) for 'LP Bypass System'.
- II. LPBP-TG ADDENDUM
- III. LPBP addendum for CIE system
- IV. ST47050 Rev.02.
- V. ST22007 Rev.06.
- VI. Drg. No. 3-12300-32001 Rev.00 for 'Input/Process data for LPBP valve and actuators.
- VII. Drg. No. 3-12300-32002 Rev.00 for 'Arrangement of LPBP valve along with associated equipment'.
- VIII. Drg. No. 2-12300-32003 Rev.00 for 'Water Injection control valve with Actuator'.
- IX. Drg. No. 1-12300-32004 Rev.00 (Sh.01, Sh.02 & Sh.03) for 'System Diagram Hydraulic Supply Unit'.
- X. Drg. No. 3-12300-56005 Rev.03 for 'Commissioning spare parts for LP Bypass System'.
- XI. Drg. No. 3-13360-89501 Rev.00 for 'Flow Nozzle for WIV'
- XII. Drg. No. 3-12300-32100, 3-12300-32200 & 3-12300-32300 for 'Mandatory spares-LP Bypass System'.
- XIII. Drg. No. 0-12321-30000 Rev.00 for 'Suspension of LP Bypass valve'.
- XIV. Drg. No. 1-12300-56008 Rev. 00 for 'Recommended Spares for LPBP System'.
- XV. Annexure-II (Check list to be submitted along with the offer).
- XVI. Annexure-III Rev.04 (Master list of documents).

3. In case special tools & tackles are not offered, these will have to be supplied free of cost, if required, at any stage of the project in future.
4. Additional 02 set/ unit of Packing/Gaskets applicable for Steam Blowing devices shall also be supplied by the vendor. The same shall be utilized against TG Unit-2.
5. Mandatory spares shall be packed in a separate Box & shall be painted with Green colour for easy identification at site.

BUYERS SPECIFIC ADDITIONAL TERMS & CONDITIONS
ITEM NAME: LP BYPASS SYSTEM AND ITS MANDATORY SPARES
PROJECTS: Adani Raigarh, Mirzapur, Kawai Ph-II, Korba & Mahan Ph-III

1. SCOPE OF ENQUIRY:

E-bids on GeM portal are invited from bidders for the supply of **LP BYPASS SYSTEM AND ITS MANDATORY SPARES and its Mandatory Spares for Adani Raigarh, Mirzapur, Kawai Ph-II, Korba & Mahan Ph-III** as per requirement mentioned below:

ITEM-NO	MATERIAL CODE & ITEM DESCRIPTION	QTY.	UNIT	PROJECT	Delivery as per COMML EMAIL (FOR SUPPLY COMPLETION)
1	W90312300590 DRG: 21230032000 REV:00 LPBP VALVE WITH EHA, DESUPERHEATER,HPSU,WATER INJECTION VALVE,FLOW NOZZLE AND DUMPTUBE SPEC: ST47050 REV: 02	1	SET	RAIGARH U-1	31-08-26
		1	SET	RAIGARH U-2	28-02-27
		1	SET	MIRZAPUR U-1	28-02-27
		1	SET	MIRZAPUR U-2	30-08-27
		1	SET	KAWAI PH-II, U-1	30-09-27
		1	SET	KAWAI PH-II, U-2	30-03-28
		1	SET	KORBA, U-1	30-11-27
		1	SET	KORBA, U-2	30-05-28
		1	SET	MAHAN PH-III, U-1	30-08-27
		1	SET	MAHAN PH-III, U-2	28-02-28
	Total qty	10	SET		
2	W99312301993 DRG: 31230032100 REV:00 MANDATORY SPARE FOR LP BYPASS SYSTEM SPEC: ST47050 REV: 02	1	SET	RAIGARH spares	30-04-27
		1	SET	MIRZAPUR spares	30-10-27
		1	SET	KAWAI PH-II spares	30-05-28
	Total qty	3	SET		
3	W99312302051 DRG: 31230032200 REV:00 MANDATORY SPARE FOR LP BYPASS SYSTEM SPEC: ST47050 REV: 00	1	SET	Korba Mand. Spares	30-10-28
	Total qty	1	SET		
4	W99312302060 DRG: 31230032300 REV:00 MANDATORY SPARE FOR LP BYPASS SYSTEM SPEC: ST47050 REV: 00	1	SET	Mahan Ph-III Mand. Spares	30-04-28
	Total qty	1	SET		

2. Project Detail:

1. Project Name	ITEMS TO BE DISPATCHED DIRECTLY TO 2X800 MW RAIGARH PROJECT
Consignee Address	Adani Power Limited, Village: Chhote Bhandar, PO: Bade Bhandar, Tehsil: Pussore Raigarh 496100, Chhattisgarh
2. Project Name	ITEMS TO BE DISPATCHED DIRECTLY TO 2X800 MW MIRZAPUR PROJECT
Consignee Address	Mirzapur Thermal Energy (UP) Private Limited Village: Dadri Khurd; PO: Darhi Ram Tehsil: Sadar, District: Mirzapur 231 304 Uttar Pradesh
3. Project Name	ITEMS TO BE DISPATCHED DIRECTLY TO 2X800 MW KAWAI PH-II PROJECT
Consignee Address	Adani Power limited, Kawai, 2 x 800 MW(Phase-II) Thermal Power project, Village - Kawai, Tehsil - Atru, Baran -District, Rajasthan Pin-325219
4. Project Name	ITEMS TO BE DISPATCHED DIRECTLY TO 2X800 MW 2X800 MW KORBA PH-III (ADANI) PROJECT
Consignee Address	KORBA POWER LIMITED 2x800 MW Phase-III, Ultra-Supercritical Thermal Power Project Village: Pathadi, District: Korba State: Chhattisgarh Pin Code – 495674
5. Project Name	ITEMS TO BE DISPATCHED DIRECTLY TO 2X800 MW MAHAN PH-III PROJECT
Consignee Address	Mahan Energen Limited. 2x800 MW (Phase-III) Thermal Power Project Village: Bandhaura, Karsulal Tehsil: Waidhan, District. Singrauli-486886 (Madhya Pradesh)

3. EARNEST MONEY DEPOSIT (EMD):

All interested vendors must submit their e-bid along with the proof of submission of following Earnest Money Deposit (EMD) details in GeM portal along with offer EMD is applicable to all the bidders irrespective of PMD bidders/GeM provisions.

Details	Amount In INR	Type
EMD	INR 40,00,000/- (Forty lakhs only)	Refundable

3.1: Modes of deposit: The EMD may be accepted only in the following forms:

- (i) Electronic Fund Transfer credited in BHEL account (before tender opening).
- (ii) Banker's cheque/ Pay order/ Demand draft, in favour of BHEL (along with offer).

(iii) Fixed Deposit Receipt (FDR).

(iv) Bank Guarantee from any of the Scheduled Banks.

(v) Insurance Surety Bonds.

(vi) The EMD shall remain valid for a period of 45 (forty-five) days beyond the final bid validity period as asked in NIT.

For E-Payment, the RTGS details are as mentioned below:

Bank Details	SWIFT Details of bank	Contact Details of Banker
STATE BANK OF INDIA RANIPUR BRANCH, OPP: BHEL MAIN GATE, SECTOR-5, RANIPUR, HARIDWAR, UTTRAKHAND, INDIA PIN CODE: 249403	SWIFT NO : SBININBB225 CC ACCOUNT NO : 10667995458 IFSC CODE : SBIN0000586	Contact No. +91 1334 224201 +91 1334 226125 Fax: +91 1334 226512

3.2: Exemption of EMD

As per GeM GTC following are the exempted category of EMD/Bid Security.

- a. Micro and Small Enterprises (MSEs) who are holding valid Udyam Registration and are manufacturer of the offered Productor Service (Primary Product / Service - in case of bunch bid with total value wise evaluation) and give specific confirmation to this effect at the time of bid submission and claim EMD exemption and whose credentials are validated online through Udyam Registration website of Ministry of MSME and also through supporting document uploaded during bidding process and validated by the Buyer. State Government Buyers may, however, choose to exempt only MSEs from the State of Bid Inviting Authority by specifying the same in ATC of the Bid. In case no such ATC is included, eligible MSEs of all states are exempted.
- b. Start-ups as recognized by Department for Promotion of Industry and Internal Trade (DPIIT), holding valid Start-up Recognition Certificate which is to be uploaded while bidding and claiming EMD exemption and to be validated by the Buyer. Bidder to ensure that turnover for any of the financial years has not exceeded beyond limits prescribed in the certificate / Start Up scheme of DPIIT.
- c. KVIC, ACASH, WDO, Coir Board, TRIFED and Kendriya Bhandar.
- d. Sellers who have got their credentials verified through the process of Vendor Assessment by Vendor Assessment Agencies for the Primary Product / Primary Service for which Bid / RA has been invited and holding valid Vendor Assessment or Vendor Assessment Exemption Report / confirmation (Seller to upload VA report / VAE confirmation to be validated by the Buyer).
- e. Sellers / Service Provider having annual turnover of INR 500 Crore or more, at least in one of the past three completed financial year(s)
- f. Sellers / Service Providers holding valid BIS License for the Primary Product Category whose credentials are validated through BIS database and through uploaded supporting documents to be validated by the buyer.
- g. Central / State PSUs.
- h. **In addition to above GeM conditions, offers directly from the manufacturer or their authorized agents are also exempted from submission of EMD.**

3.3: Forfeiture of EMD:

- a. A bidder's EMD will be forfeited if the bidder withdraws or amends its/his tender or impairs or derogates from the tender in any respect within the period of validity of the tender or if the successful bidder fails to furnish the required performance security within the specified period mentioned in the Tender.

- b. EMD by the tenderer to be withheld in case any action on the bidder is envisaged under the provisions of extant "Guidelines on Suspension of business dealings with suppliers/ contractors" and forfeited/ released based on the action as determined under these guidelines.
- c. Bid securities of the unsuccessful bidders shall be returned to them after expiry of the final bid validity period / latest by the 30th day after the award of the contract. Since it is a two-part bidding, bid securities of unsuccessful bidders during first stage i.e. technical evaluation shall be returned within 30 days of declaration of result of first stage i.e. technical evaluation.
- d. Bid security/EMD of the successful bidder shall be returned only on conclusion of the order and receipt of a Performance Security/Performance Bank Guarantee of 10% of contract value (excluding taxes) from contractor / Supplier.
- e. EMD/PBG/PS shall not carry any interest.

4. PERFORMANCE SECURITY/PERFORMANCE BANK GUARANTEE:

Successful bidder to submit Performance Security/Performance Bank Guarantee of 5% of the contract Value (Excluding Taxes). The Performance Security/PBG shall be submitted within 30 days of notification of the award of Contract and it should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations.

PS/PBG shall be returned to the contractor without interest, after the contractor duly performs and completes the contract in all respects but not later than 60 (sixty) days of completion of all such obligations including the warranty under the contract. The Performance Security/PBG shall not carry any interest.

4.1 Modes of deposit of PS/ PBG: Performance Security/Performance Bank Guarantee shall be furnished in the following forms:

- I. Local cheques of Scheduled Banks (subject to realization)/ Pay Order/Demand Draft/ Electronic Fund Transfer in favour of BHEL.
- II. Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.
- III. Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL).
- IV. Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL).
- V. Insurance Surety Bond.

(Note: BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith)

4.2: Forfeiture of Performance Security/Performance Bank Guarantee:

The Performance Security/ Performance Bank Guarantee will be forfeited and credited to BHEL's account in the event of a breach of contract by the supplier.

5. BUYERS SPECIFIC ADDITIONAL TERMS & CONDITIONS IN ADDITION TO GTC

Sl. No.	Terms	Description	Supplier confirmation
---------	-------	-------------	-----------------------

1.	Documents Checklist:	<p>Please submit signed and stamped copy of your offer on each page along with following documents;</p> <ul style="list-style-type: none"> • Buyer Specific T&C. • Technical PQR & its supportive document. • Technical drawing & purchase specification. • Quality plan. • Certificate/self-certification for minimum local content as per PPP-MII order. • Replica of price bid schedule without prices with part-I offer. <p>Please note that technical documents shall be shared against submission of FCA (FCA copy enclosed) .</p>	
2.	Compliance of GTC on GeM	General Terms and Conditions on GeM 4.0 GeM 4.0 (Version 1.23) Dtd 05.03.2025 or it's latest revision of GeM portal shall be applicable against this enquiry. Kindly confirm to compliance the same for this tender.	
3.	Customer approval requirement	<p>Kindly note that supplier approval from customer is mandatory for consideration of their offer. Proneness requirement has been mentioned in ANNEXURE-B. Kindly SUBMIT the filled-in ANNEXURE-C along with applicable filled-in forms & supporting documents for review & approval by customer.</p> <p>Bidders are requested to submit their credentials along with offer (Credentials should include BHEL P.O.s on vendor for the same rating or higher rating turbines, Experience of vendor with state utilities and major PSU like NTPC, End User Certificate wherever available), in order to take up with end customer for approval</p> <p>Supplier to submit following credentials for arranging Customer approval:-</p> <ul style="list-style-type: none"> • Company Profile • List of Order Executed/ on hand for Power Sector/Gov. organization of same /similar items • Copy of Major Supply Orders • Performance Certificates for Satisfactory working of System/ Equipment from end users Item. <p>The offer of only those bidders, who meet Pre-qualification requirement (PQR), Technical requirement and approved by the End Customer, will be considered for price-bid opening & RA for the requirement against this enquiry.</p>	
4.	Pre-Qualification Requirements	The Pre-Qualification Requirements have been compiled. All the bidders should ensure submission of complete details and documents as called for in these requirements. The Offers submitted by the bidders would be scrutinized with respect to Pre-Qualification Requirements first. Techno-Commercial offer of only those bidders shall be evaluated who meet the Pre-Qualification Requirements.	
5.	Make in India Clause	<p>"For this procurement, the local content to categorize a supplier as a Class-I Local Supplier / Class-II Local Supplier/ Non-Local Supplier and purchase preference to Class-I Local Supplier, is as defined in Public Procurement (Preference to Make in India), Order-2017 Ref. No. P-45021/2/2017-PP (BE-II) dtd. 04/06/2020 issued by DPIIT. In case of subsequent orders issued, by the nodal ministry, changing the definition of local content for the items of this NIT, but before opening of Part-II bids against this NIT</p> <p>As per Make in India Order, only Class-I and Class-II local supplies are eligible to bid in this tender enquiry.</p>	

		<p>For this eligibility criteria, bidders are required to submit certificate of Minimum local content as specified in the Annexure-B of the tender</p> <p>The Certificate shall be from the Cost Auditor / CA of the Company.</p>	
6.	Compliance of Rule 144 (xi) of GFR 2017	Compliance of Restrictions under Rule 144 (xi) of GFR 2017 shall be as per GeM.	
7.	Bid validity/ Validity of offer	<p>Please note that validity of the offer shall be 180 days from the date opening of Techno-Commercial bid (Part-I bid) on GeM portal.</p> <p>Offer of bidder's having validity less than 180 days shall liable to reject. Please confirm.</p>	
		The required validity is considering that offer is complete & clear w.r.t. PQR and all techno-commercial conditions. Vendors need to extend their offer validity for the time taken by them in responding BHEL's comments/clarification sought during techno-commercial scrutiny of the offer. In case regret by any bidder for such validity extension, their offer shall liable to be reject. Please confirm.	
8.	Prices/Basis of Quotation	Prices: The offered prices of the items shall remain firm and fixed till execution of the contract , kindly confirm.	
		Ensure to quote your price inclusive of packing, forwarding, Freight & GST for Total quantity on GeM portal.	
		Transit Insurance would be arranged by BHEL. Please quote your prices accordingly.	
		The prices are to be quoted on Ex-Works with freight Pre-paid up to project destination basis. The goods must be dispatched through any Bank approved transporters having their branch at Haridwar. The names and addresses of transporters approved by IBA as well as BHEL are posted at our website www.bhelhwr.co.in . Please note that, if you dispatch the material by any BHEL un-approved transporter then you will necessarily be required to furnish the MRC (Material Receipt Certificate) from respective Project Site for processing of your invoice. No demurrage charges would be borne by BHEL.	
9.	Loading and unloading	<p>Vendor's scope will not cover Loading & Unloading at Final destination of delivery. Unloading at final destination (i.e. BHEL site) is in BHEL 'scope.</p> <p>Loading and unloading at other intermediate places due to any permitted transshipment will be the responsibility of the vendor. Kindly note</p>	
10.	Evaluation criteria	Evaluation will be done on the basis of total landed cost to BHEL, taking all material codes and service together with total cost involved for delivery up to BHEL project sites (considering material cost, taxes & duties and Freight charges up to Project site).	
11.	SPLITTING THE ORDER	<p>BHEL shall be resorting to splitting the Purchase Order between the bidders for this tender/NIT. Splitting shall be done in the ratio of 60:40 i.e. L-1 bidder would be awarded order for 60% of enquiry quantity and L-2 bidder would be awarded for 40% of enquiry quantity, provided they accept the L-1 rates on counter-offering.</p> <p>In case the L-2 bidder does not accept the counter-offer then the L-1 prices would be counter-offered to the L-3 bidder and so on till (N-1) qualified responses. In case, no bidder accepts the counter-offer, then the whole quantity would be ordered on the L-1 bidder. Here, "N" denotes numbers of qualified responses.</p> <p>Note: - As per govt. guidelines, benefits shall be extended to eligible MSE/MII Class-I Sellers. In case quantity splitted due to MSE/MII guidelines, no further splitting shall be done.</p>	

12.	Evaluation Currency	The evaluation currency for this tender shall be INR.									
13.	Payment terms:	<p>For Material Portion;</p> <p>The payment shall be done after receipt of Material at BHEL respective project site, within no. of days as defined in the below table from the date of receipt of Material at site (i.e. MRC date).</p> <table><tr><th>Type of Bidder</th><th>Payment Terms (Number of Days)</th></tr><tr><td>Micro & Small Enterprises (MSEs)</td><td>45 days</td></tr><tr><td>Medium Enterprises</td><td>60 days</td></tr><tr><td>Non MSME</td><td>90 days</td></tr></table> <p>The Payment terms are subject to receipt of non-discrepant document from supplier.</p> <p><u>For Supervision during E&C of equipment at project site ;</u></p> <p>100% payment against submission of Successful Commissioning or installation Certificate/Time Sheet/MOM signed by Project authorities along with Invoice direct to BHEL.</p>	Type of Bidder	Payment Terms (Number of Days)	Micro & Small Enterprises (MSEs)	45 days	Medium Enterprises	60 days	Non MSME	90 days	
Type of Bidder	Payment Terms (Number of Days)										
Micro & Small Enterprises (MSEs)	45 days										
Medium Enterprises	60 days										
Non MSME	90 days										
14.	GeM charges	GeM charges if any shall be either side only i.e. buyer's GeM charges shall be in buyer's account and seller's GeM charges shall be on seller's account. Please confirm.									
15.	Contract execution	Bidder's are advised to read GeM related query & clarification carefully on GeM portal. Order shall be executed through GeM.									
16.	Delivery Period	<p>Please note that BHEL's Delivery requirements are mentioned in point no 1 of above.</p> <p>Early delivery w.r.t. above lot delivery will be accepted only after written confirmation from BHEL. BHEL reserve right to reject early delivery request of bidders / suppliers.</p> <p>Delivery period indicated in GeM bid is only indicative and final delivery of tender shall be taken as mentioned above.</p> <p>Accordingly bidders to confirm the above deliveries or quote their best possible delivery in no of months / weeks from the date of placement of Purchase order, including all activities like document approval, inspection by TPI time etc.</p>									
17.	Technical Requirements	<p>Scope of supply & other special instructions have been mentioned in Annexure-I kindly submit your offer accordingly.</p> <p>Kindly ensure completeness of their offer & furnish the check list as per Annexure-II duly filled along with the offer.</p> <p>In case of order , kindly confirm to furnish the documents as per the list of master documents (ANNEXURE-III) within four weeks of the date of placement of P.O.</p> <p>THE vendor to include commissioning spares in their offer as per BHEL DRG. NO.3-12300-56005.</p> <p>IN the event of ordering the vendor shall furnish all the documents as per ANNEXURE-III (MDL), complying time schedule mentioned therein. further, BHEL approval on documents shall be given within 30 days subject to finalization of documents by vendor to the satisfaction of BHEL/end customer post all clarifications/comments</p> <p>The document no. THE DOCUMENT "C&I ADDENDUM TO ST47050 REV.02 (MAHAN)" is also a part of purchase specification and shall be complied BY bidder, kindly confirm.</p> <p>Kindly furnish item wise price of each item referred IN BHEL DRAWING</p>									

		31230032100.	
		The vendor to provide 3D MODELS for the supplied equipment assemblies (having all the components included) complete with all connection points/interface for the purpose of 3D power plant layout to be done by BHEL as per customer specification requirements. The file format of 3d model shall be informed by BHEL and the same shall be subject to customer approval, kindly confirm.	
		In case of any conflict between stipulations in various portion of the specification, most stringent stipulation would be applicable for implementation by the vendor without any cost or delivery implication to BHEL. PL confirm.	
		Deviation, if any, whether major or minor, should be brought out very clearly on deviation sheet along with the offer. In the absence of any deviation, the offer shall be deemed to be in full conformity with the specification. Hidden deviation in the offer shall not be acceptable or binding on BHEL. PL note & confirm.	
		Drawings/Data sheets/documents & Quality plan as called for in the specifications/Drawings/Documents shall be submitted for approval to BHEL for BHEL/customer approval within 30 days of purchase order. Any delay in delivery on account of late submission of drawings shall be to vendors account. BHEL will arrange the approval of the drawings/data sheets/ documents within 30 days of their receipt provided those are complete in all respect. Any delay in documents submission/approval shall be on either side.	
		LPBP documents submitted by vendor for BHEL's approval shall also be subject to customer's approval. Therefore timely submission of the complete set of LPBP system documents must be ensured by the vendor.	
		Kindly confirm to supply the E-LEARNING package module as per the clause 8.03.05 of annexure-6 which in turn shall be submitted to customer for approval.	
18.	Technical Document/ Drawing approval conditions	<p>Drawings/Data sheets/documents/QAP etc. as called for in the specifications shall be submitted by Vendor for BHEL/ Customer approval within 30 days of purchase order. BHEL shall approve these drawings/data sheets/ documents / QAP etc. within 30 days of receipt.</p> <p>Any comments on the documents shall be given by BHEL within 7 days of submission and vendor shall submit revised document / reply to comments, within 7 days of BHEL comments. However, total time for Document submission and approval shall not exceed 30 days for respective party.</p> <p>Delivery is from the date of PO, accordingly, delay in submission / revision of the documents by the vendor will automatically account for to vendor. In case of delay on account of BHEL in comments / approval of the documents, the delivery shall be re-scheduled by the no of days taken by BHEL in excess to 30 days. For delay analysis cumulative no of days (including time taken in comments), shall be considered for delivery extension.</p>	
19.	Recommended Spares	Please submit item wise price list of each item referred in BHEL Drawing no 1-12300-56008 (Recommended Spare Parts) for our reference and future ordering (if required) and not to be considered for Evaluation for this tender.	
20.	Supervision during Erection & Commissioning and Training	<p>The supplier to carry out the supervision work during E&C of the equipment at project site, kindly Confirm that following charges have been quoted separately in your offer :</p> <ol style="list-style-type: none"> 1. Per ManDay Charges for Training, Supervision during Erection & Commissioning (lump sum & inclusive of everything i.e. lodging, fooding, boarding etc.) 2. Per Visit Charges (to & FRO to our site) for Training regarding design/construction features, operation & maintenance of the supplied equipments (Including C&I) to customer's/BHEL Engineers, Supervision during Erection & Commissioning. <p>A total period of 130 mandays (Inclusive of 02 days training) and 25 Visits i.e. 26</p>	

		<p>mandays & 05 visits for each project will be taken for evaluation purpose. However payment will be made on actual number of days and visits involved in supervision of erection/ commissioning and training endorsed by project site.</p> <p>Please ensure that “Per Man Day” & “Per Visit” charges for Supervision during Erection & Commissioning and Training including every expense are quoted.</p>	
		<p>Please note that the vendor should send a checklist to BHEL prior to deputation of competent representative for Commissioning. BHEL will confirm the checklist prior to issuing Commissioning Call to the vendor. After receipt of checklist from BHEL, the vendor would send the competent representative within 15 days of confirmation of site readiness. <u>In case, any additional work is required which is beyond the scope/warranty/guarantee of the vendor, the work would be commenced only after signed agreements with site representative & the vendor.</u></p>	
		<p>Kindly note that you have to make a visit of 02-03 days to project site at a suitable point of time during erection, to streamline all the erection & commissioning activities of your supplied equipment's and to ensure completeness of all equipment's/tools etc., which are required for commissioning of the equipment's.</p>	
		<p>Please confirm that the charges quoted for Supervision during Erection & Commissioning and Training shall be inclusive of applicable GST .</p>	
21.	Painting requirement	<p>Painting of the equipment shall be as per cl. No5.1 of BHEL frg no 21230032000. Additionally , touch up paint (5% of total finish coat quantity) is also to be supplied, kindly confirm..</p>	
22.	Project specific requirement	<p>Kindly confirm the following requirement for Adani projects covered in the tender;</p> <ul style="list-style-type: none"> • 8 DIGIT GST HSN CODE OF ITEM MAY PLEASE BE FREEZED WITH VENDOR AT THE TIME OF PLACEMENT OF PO. SAME IS REQUIRED TO MENTIONED IN PO FOR ADANI PROJECT. • INVOICE,GR/LR,MDCC, PKG LIST ALONG WITH E-WAY BILL IS REQUIRED FOR BILLING • DOCUMENTS (GR/LR, PACKING LIST, TEST CERTIFICATES) ARE REQUIRED IN ORIGINAL • MATERIAL FOR UNIT-1, UNIT-2, COMM. SPARES AND MAND. SPARES NEEDS TO BE PACKED IN SEPARATE BOXES AND SAME IS REQUIRED TO BE MARKED ON THE BOX & PACKING LIST • MSDS(MATERIAL SAFETY DATA SHEET) IS TO BE SENT ALONG WITH LR DOCS, IF APPLICABLE 	
23.	Operation & Maintenance Manual	<p>Kindly confirm that in the event of ordering O&M manuals will be provided in 22 nos. of Hard Copies & 4 no. CDS OF O&M manuals at BHEL HARDWAR as per MDL (ANNEXURE-III). 3 no. hard copies & 1 NO. CD OF O& M manual shall be supplied along with equipment at site.</p>	
24.	Performance Security/ Performance Bank Guarantee:	<p>Successful bidder to submit Performance Security/Performance Bank Guarantee of 5% of the contract Value (Excluding Taxes). The Performance Security/PBG shall be submitted within 30 days of notification of the award of Contract and it should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier, including Guarantee/warranty obligations. PS/PBG shall be returned to the contractor without interest, after the contractor duly performs and completes the contract in all respects but not later than 60 (sixty) days of completion of all such obligations including the Guarantee/ Warranty under the contract. The Performance Security/PBG shall not carry any</p>	

		interest. Please confirm.	
25.	Guarantee/Warranty clause	<p>Kindly confirm the following Guarantee/Warranty clause;</p> <ul style="list-style-type: none"> Guarantee/Warranty period shall be provided for a period of 36 months from the date of supply or 18 months from commissioning, whichever is earlier. In case of any failure or trouble reported from site, the supplier should depute their representative immediately to attend the problem and replace the defective component/part if required, without any additional cost to BHEL. The supplier to provide technical support/services or alternative solutions against any issues; reported in the equipment supplied by the vendor for up to at least 10 years from the supply date. <p>BHEL reserve the rights to reject the offers having lesser guarantee period as mentioned above.</p>	
26.	Reverse Auction	RA shall be done on GeM portal as per the guidelines & logics enabled on GeM portal.	
27.	Liquidated Damages (LD) for late delivery	<p>Liquidated Damages shall be lot wise as per clause no. 15 (iii) of General terms and conditions on GeM 4.0 (Version 1.23) Dtd 05.03.2025 as under: kindly confirm.</p> <p>“If the Seller/Service Provider fails to deliver any or all of the Goods/Services within the original/re-fixed delivery period(s) specified in the contract, the Buyer will be entitled to deduct/recover the Liquidated Damages for the delay, unless covered under Force Majeure conditions aforesaid, @ 0.5% of the contract value of delayed quantity per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value of delayed quantity without any controversy/dispute of any sort whatsoever”.</p> <p>The date of LR would be treated as the date of delivery for penalty purposes.</p>	
28.	MDCC clause	<p>Please note that, material shall be dispatched only after issue of Material dispatch clearance certificate (MDCC) from end customer. For issue of MDCC, vendors are required to submit all test certificates (TC) and inspection report of third party (IR) to BHEL. After review & acceptance of the quality document, BHEL will forward the same to end customer for issuance of MDCC.</p> <p>MDCC shall be issued within 7 days of receipt of complete quality documents / TCs,. In case of delay in issuance of MDCC, only delivery shall be extended by no of days taken by BHEL in excess to 7 days and all other terms and conditions of PO shall remains same & binding.</p> <p>In case any material is dispatched without MDCC and any loss is incurred by Supplier/Vendor for any reason whatsoever, BHEL shall not be responsible in any manner to compensate the supplier in this regard.</p> <p>Kindly confirm.</p>	
29.	Order Acceptance :	Ink signed order acceptance shall be furnished within 15 days of order placement. In case, order acceptance do not received within 15 days of order placement, PO deemed to be accepted by you.	
30.	Beneficiary of PO	Kindly confirm on whom the PO will be placed in the event of ordering.	
31.	Dispatch documents	<p>Following dispatch documents to be provided immediately after directly dispatch to BHEL Project site for billing purpose:</p> <ul style="list-style-type: none"> Guarantee/Warrantee Certificates E- Invoice and commercial inv GeM invoice Original consignee copies of GR/LR/RR (Material shall be dispatched on door delivery basis without consignee copy) Packing list 	

		<ul style="list-style-type: none">• HSN code to be mentioned in the invoice• Original GST compliance certificate• MRC/POD/Receipted LR/RR/GR copy (as per proof of delivery of material at BHEL Project site)													
32.	Integrity Pact	<p>(a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.</p> <table border="1"><thead><tr><th>SI</th><th>IEM</th><th>Email</th></tr></thead><tbody><tr><td>1.</td><td>Shri Otem Dai, IAS (Retd.)</td><td>iem1@bhel.in</td></tr><tr><td>2.</td><td>Shri Bishwamitra Pandey, IRAS (Retd.)</td><td>iem2@bhel.in</td></tr><tr><td>3.</td><td>Shri Mukesh Mittal, IRS (Retd.)</td><td>iem3@bhel.in</td></tr></tbody></table> <p>(b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three-part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.</p> <p>(c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.</p>	SI	IEM	Email	1.	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in	2.	Shri Bishwamitra Pandey, IRAS (Retd.)	iem2@bhel.in	3.	Shri Mukesh Mittal, IRS (Retd.)	iem3@bhel.in	
SI	IEM	Email													
1.	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in													
2.	Shri Bishwamitra Pandey, IRAS (Retd.)	iem2@bhel.in													
3.	Shri Mukesh Mittal, IRS (Retd.)	iem3@bhel.in													
33.	BREACH OF CONTRACT, REMEDIES AND TERMINATION:	<p>The following shall amount to breach of contract:</p> <p>I. Non-supply of material/ non-completion of work by the Supplier/Vendor within scheduled delivery/ completion period as per contract or as extended from time to time.</p> <p>II. The Supplier/Vendor fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery/ completion period to justify that supplies shall be inordinately delayed beyond contractual delivery/ completion period.</p> <p>III. The Supplier/Vendor delivers equipment/ material not of the contracted quality.</p> <p>IV. The Supplier/Vendor fails to replace the defective equipment/ material/ component as per guarantee clause.</p> <p>V. Withdrawal from or abandonment of the work by the Supplier/Vendor before completion as per contract.</p> <p>VI. Assignment, transfer, subletting of Contract by the Supplier/Vendor without BHEL’s written permission resulting in termination of Contract or part thereof by BHEL.</p> <p>VII. Non-compliance to any contractual condition or any other default attributable to Supplier/Vendor.</p> <p>VIII. Any other reason(s) attributable to Vendor towards failure of performance of contract. In case of breach of contract, BHEL shall have the right to terminate the Purchase Order/ Contract either in whole or in part thereof without any compensation to the Supplier/Vendor.</p> <p>IX. Any of the declarations furnished by the contractor at the time of bidding and/ or entering into the contract for supply are found untruthful and such declarations were of a nature that could have resulted in non-award of contract to the contractor or could expose BHEL and/ or Owner to adverse consequences, financial or otherwise.</p> <p>X. Supplier/Vendor is convicted of any offence involving corrupt business</p>													

practices, antinational activities or any such offence that compromises the business ethics of BHEL, in violation of the Integrity Pact entered into with BHEL has the potential to harm the overall business of BHEL/ Owner.

Note-Once BHEL considers that a breach of contract has occurred on the part of Supplier/Vendor, BHEL shall notify the Supplier/Vendor by way of notice in this regard. Contractor shall be given an opportunity to rectify the reasons causing the breach of contract within a period of 14 days.

In case the contractor fails to remedy the breach, as mentioned in the notice, to the satisfaction of BHEL, BHEL shall have the right to take recourse to any of the remedial actions available to it under the relevant provisions of contract.

Remedies in case of Breach of Contract.

i) Wherein the period as stipulated in the notice issued under above clause has expired and Supplier/Vendor has failed to remedy the breach, BHEL will have the right to terminate the contract on the ground of "Breach of Contract" without any further notice to contractor.

ii) Upon termination of contract, BHEL shall be entitled to recover an amount equivalent to 10% of the Contract Value for the damages on account of breach of contract committed by the Supplier/Vendor. This amount shall be recovered by way of encashing the security instruments like performance bank guarantee etc available with BHEL against the said contract. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the Supplier/Vendor, retention amount, from the money due to the Supplier/Vendor etc. with BHEL) or the other legal remedies shall be pursued.

iii) wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is 10% of the contract value or more, such security instruments to the extent of 10% contract value will be encashed. In case no security instruments are available or the value of the security instruments available is less than 10% of the contract value, the 10% of the contract value or the balance amount, as the case may be, will be recovered in all or any of the following manners:

iv) In case the amount recovered under sub clause (a) above is not sufficient to fulfil the amount recoverable then; a demand notice to deposit the balance amount within 30 days shall be issued to Supplier/Vendor.

v) If Supplier/Vendor fails to deposit the balance amount within the period as prescribed in demand notice, following action shall be taken for recovery of the balance amount:

a) from dues available in the form of Bills payable to defaulted Supplier/Vendor against the same contract.

b) If it is not possible to recover the dues available from the same contract or dues are insufficient to meet the recoverable amount, balance amount shall be recovered from any money(s) payable to Supplier/Vendor under any contract with other Units of BHEL including recovery from security deposits or any other deposit available in the form of security instruments of any kind against Security deposit or EMD.

vi) In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted

		<p>supplier/Vendor.</p> <p>vii) It is an agreed term of contract that this amount shall be a genuine pre-estimate of damages that BHEL would incur in completion of balance contractual obligation of the contract through any other agency and BHEL will not be required to furnish any other evidence to the Supplier/Vendor for the purpose of estimation of damages.</p> <p>viii) In addition to the above, imposition of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.</p> <p>Note:</p> <p>1) The defaulting Supplier/Vendor shall not be eligible for participation in any of the future enquiries floated by BHEL to complete the balance work. The defaulting contractor shall mean and include:</p> <p>(a) In case defaulted Supplier/Vendor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor.</p> <p>(b) In case defaulted Supplier/Vendor is The Partnership Firm, any firm comprising of same partners/ some of the same partners ; or sole proprietorship firm owned by any partner(s) as a sole proprietor.</p>	
34.	Suspension of Business Dealings with Suppliers / Contractors:	<p>The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms / principal / agents, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.</p> <p>If any bidder / supplier / contractor during pre-tendering / tendering / post tendering / award / execution / post-execution stage indulges in any act, including but not limited to, mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or tampers the tendering process or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860(Bhartiya Nyaya Samhita 2023) or any other law in force in India, or does anything which is actionable under the Guidelines for Suspension of Business dealings, action may be taken against such bidder / supplier / contractor as per extant guidelines of the company available on www.bhel.com and / or under applicable legal provisions. Guidelines for suspension of business dealings is available in the webpage: http://www.bhel.com/vender_registration/vender.php.</p>	
35.	Settlement of Dispute, CONCILIATION & ARBITRATION	<p>Settlement of Dispute</p> <p>If any dispute or difference of any kind whatsoever shall arise between BHEL and the Supplier/Vendor, arising out of the contract for the performance of the work whether during the progress of contract termination, abandonment or breach of the contract, it shall in the first place referred to Designated Officer / IEM for amicable resolution by the parties. Designated Officer / IEM who within 60 days after being requested shall give written notice of his decision to the contractor. Save as hereinafter provided, such decision in respect of every matter so referred shall forthwith be given effect to by the Supplier/Vendor who shall proceed with the work with all due diligence, whether he or BHEL desires to resolve the dispute as hereinafter provided or not. If after the Designated Engineer has given written notice of this decision to the party and no intention to pursue the dispute has been communicated to him by the affected party within 30 days from the receipt of such notice, the said decision shall become final and binding on the parties. In the event the Supplier/Vendor being dissatisfied with any such decision or if amicable settlement cannot be reached then all such disputed issues shall be resolved through conciliation in terms of the BHEL Conciliation Scheme 2018 as</p>	

per 'CONCILIATION' Clause.

CONCILIATION:

Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure as per BHEL Conciliation Scheme 2018. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in - "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com).

Note: Ministry of Finance has issued OM reference No. 1/2/24 dated 03.06.2024 regarding "Guidelines for Arbitration and Mediation in Contracts of Domestic Public Procurement. In the said OM it has been recommended that Government departments/ Entities/agencies are to encourage mediation under the Mediation Act. 2023. The said Act has not yet been notified by the Government. Therefore, the clause "Settlement of Disputes" shall be modified accordingly as and when the Mediation Act 2023 gets notified.

ARBITRATION:

Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided herein above or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'), then, either Party may, refer the disputes to Arbitral Institution and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the Rules of said Arbitral Institution.

A party willing to commence arbitration proceeding shall invoke Arbitration Clause by giving notice to the other party in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice') before referring the matter to arbitral institution. The Notice shall be addressed to the Head of the Region, Power Sector/ Unit, BHEL, executing the Contract and shall contain the particulars of all claims to be referred to arbitration with sufficient detail and shall also indicate the monetary amount of such claim including interest, if any.

After expiry of 30 days from the date of receipt of aforesaid notice, the party invoking the Arbitration shall submit that dispute to the Arbitral Institutions (shall be identified by the contract issuing agency) and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd Judge having considerable experience in commercial matters to be appointed/nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to a specific Arbitral institution for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged.

The fee and expenses shall be borne by the parties as per the Arbitral Institutional

		<p>rules.</p> <p>The Arbitration proceedings shall be in English language and the seat and venue of Arbitration shall be at the court(s) of Haridwar.</p> <p>Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at Haridwar , shall have exclusive jurisdiction.</p> <p>Notwithstanding any reference to the Designated Engineer or Conciliation or Arbitration herein, a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. Settlement of Dispute clause cannot be invoked by the Contractor, if the Contract has been mutually closed or 'No Demand Certificate' has been furnished by the Contractor or any Settlement Agreement has been signed between the Employer and the Contractor.</p> <p>It is agreed that Mechanism of resolution of disputes through arbitration shall be available only in the cases where the value of the dispute is less than Rs. 10 Crores.</p> <p>In case the disputed amount Claim, Counter claim including interest is Rs. 10 crores and above, the parties shall be within their rights to take recourse to remedies other than Arbitration, as may be available to them under the applicable laws after prior intimation to the other party. Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof as amended from time to time, shall apply to the arbitration proceedings under this clause.</p> <p>In case, multiple arbitrations are invoked (whether sub-judice or arbitral award passed) by any party to under this contract, then the cumulative value of claims (including interest claimed or awarded) in all such arbitrations shall be taken in account while arriving at the total claim in dispute for the subject contract for the purpose of clause mentioned above. Disputes having cumulative value of less than 10 crores shall be resolved through arbitration and any additional dispute shall be adjudicated by the court of competent jurisdiction.</p>	
36.	CONFLICT OF INTEREST AMONG BIDDERS/ AGENTS	<p>A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:</p> <p>a) they have controlling partner (s) in common; or</p> <p>b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or</p> <p>c) they have the same legal representative/agent for purposes of this bid; or</p> <p>d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or</p> <p>e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from. one bidding manufacturer in more than one bid; or</p> <p>f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only</p>	

		<p>one agent/dealer. There can be only one bid from the following:</p> <ol style="list-style-type: none"> 1. The principal manufacturer directly or through one Indian agent on his behalf; and 2. Indian/foreign agent on behalf of only one principal, - <p>or</p> <p>g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid, or</p> <p>h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. "</p>													
37.	MICRO AND SMALL ENTERPRISES (MSE):	<p>Any Bidder falling under MSE category shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.</p> <table border="1"> <thead> <tr> <th>Type under MSE</th><th>SC/ST owned</th><th>Women owned</th><th>Others (excluding SC/ ST & Women Owned)</th></tr> </thead> <tbody> <tr> <td>Micro</td><td></td><td></td><td></td></tr> <tr> <td>Small</td><td></td><td></td><td></td></tr> </tbody> </table> <p>Note: If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSE category.</p> <p>a) MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F. No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) only if they submit along with the offer, attested copies of either Udyam Registration. Date to be reckoned for determining the deemed validity will be the last date of Technical Bid submission. Non-submission of supporting document in GeM portal will lead to consideration of their bids at par with other bidders. No benefits shall be applicable for this enquiry if the above required documents are not uploaded at the time of bid submission. Documents submitted by the bidder shall be verified by BHEL for rendering the applicable benefits.</p>	Type under MSE	SC/ST owned	Women owned	Others (excluding SC/ ST & Women Owned)	Micro				Small				
Type under MSE	SC/ST owned	Women owned	Others (excluding SC/ ST & Women Owned)												
Micro															
Small															
38.	JURISDICTION:	<p>This contract shall be governed by the Law for the time being in force in the Republic of India. Subject to clause(s) mentioned above of this contract, the Civil Court having original Civil Jurisdiction at Haridwar shall alone have exclusive jurisdiction in regard to all matters in respect of the Contract.</p>													
39.	Force Majeure	<p>"Force Majeure" shall mean circumstance which is: a) beyond control of either of the parties to contract, b) either of the parties could not reasonably have provided against the event before entering into the contract, c) having arisen, either of the parties could not reasonably have avoided or overcome, and d) is not substantially attributable to either of the parties And Prevents the performance of the contract, Such circumstances include but shall not be limited to: i) War, hostilities , invasion, act of foreign enemies. ii) Rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war. iii) Riot, commotion or disorder by persons other than the contractor's personnel and other employees of the contractor and sub-contractors. iv) Strike or lockout not solely involving the contractor's personnel and other employees of the contractor and sub-contractors. v) Encountering munitions of war, explosive materials, ionizing radiation or contamination by</p>													

		<p>radio-activity, except as may be attributable to the contractor's use of such munitions, explosives, radiation or radio- activity. vi) Natural catastrophes such as earthquake, tsunami, volcanic activity, hurricane or typhoon, flood, fire, cyclones etc. vii) Epidemic, pandemic etc.</p> <p>The following events are explicitly excluded from Force Majeure and are solely the responsibilities of the non-performing party: a) any strike, work-to-rule action, goslow or similar labour difficulty (b) late delivery of equipment or material (unless caused by Force Majeure event) and (c) economic hardship.</p> <p>If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within 15 (fifteen) days after the occurrence of such event.</p> <p>The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended by a period of time equal to period of delay caused due to such Force Majeure event.</p> <p>Delay or non-performance by either party hereto caused by the occurrence of any event of Force Majeure shall not</p> <p>i) Constitute a default or breach of the Contract. ii) Give rise to any claim for damages or additional cost expense occasioned thereby, if and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure.</p> <p>BHEL at its discretion may consider short closure of contract after 1 year of imposition of Force Majeure in line with extant guidelines. In any case, Supplier/Vendor cannot consider deemed short-closure after 1 year of imposition of Force Majeure</p>	
40.	Cartel Formation	<p>The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines.</p>	
41.	Order of Precedence:	<p>In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:</p> <ol style="list-style-type: none"> Amendments/Clarifications/Corrigenda/Errata etc. issued in respect of the tender documents by BHEL. Buyer Added Bid Specific ATC GeM Bid Technical Conditions of Contract (TCC) GeM GTC 	
42.	Quality Requirements	<p>Kindly confirm the following quality requirement of the tender;</p> <ol style="list-style-type: none"> VENDORS TO SUBMIT ENDORSED COPY OF CUSTOMER APPROVED QUALITY PLAN NO. QA/BI/QP/114 REV 02 (ATTACHED). VENDORS TO SPECIFICALLY CONFIRM TO FOLLOW CUSTOMER APPROVED QP. 6. VENDOR TO FOLLOW ATTACHED CUSTOMER APPROVED C&I 	

		<p>LISTS FOR APPLICABLE C&I ITEMS. (PLEASE REFER CUSTOMER APPROVED VENDOR LIST FOR C&I ITEMS, ADDITIONAL CUSTOMER APPROVED VENDOR LIST FOR C&I & ANNEXURE D REV 01 FOR APPLICABLE C&I ITEMS)</p> <p>d. VENDOR TO FOLLOW ATTACHED CUSTOMER APPROVED MECHANICAL LISTS FOR APPLICABLE SUB COMPONENTS/ASSEMBLIES. (PLEASE REFER CUSTOMER APPROVED VENDOR LIST FOR APPLICABLE MECHANICAL ITEMS)</p> <p>e. CUSTOMER APPROVED VENDOR LIST FOR LT MOTORS ARE:</p> <p>A) CGL AHMEDNAGAR</p> <p>B) MARATHON ELECTRIC KOLKATA</p> <p>C) MARATHON REGAL BELOIT WUXI CO. LTD. CHINA</p> <p>D) SIEMENS CHINA</p> <p>E) ABB FARIDABAD, CHINA</p> <p>F) BHARAT BIJALI MUMBAI</p> <p>G) KEC BANGALORE/HUBLI</p> <p>H) BHEL BHOPAL</p> <p>I) SHANGHAI ELECTRIC COMPANY CHINA</p> <p>J) XIANGTAN ELECTRIC MANUFACTURING CO LTD CHINA</p> <p>K) SIEMENS LTD MUMBAI, CHINA</p> <p>L) JYOTI LTD. BARODA</p> <p>M) NGEF HUBLI</p> <p>N) SHANGHAI SHANGDIAN ELECTRIC MACHINERY CHINA</p> <p>O)JIANGSU DAZHONG ELECTRIC MOTORS CO. LTD CHINA</p> <p>(PLEASE REFER CUSTOMER APPROVED VENDOR LIST FOR APPLICABLE ELECTRICAL ITEMS)</p> <p>f. PLEASE REFER ATTACHED CUSTOMER APPROVED SQP FOR LT MOTOR.THIS SQP IS APPLICABLE FOR 45 KW & ABOVE RATING MOTORS. BELOW 45 KW MOTORS, MANUFACTURER TO CARRYING OUT INTERNAL ROUTINE TEST AND TEST REPORT OF SAME TO BE SUBMITTED TO CUSTOMER FOR REVIEW.</p> <p>g. VENDORS TO CONFIRM THAT ITEM WILL BE OFFERED FOR WITNESSING IN UNPAINTED CONDITION.</p> <p>h. INSPECTION BY BHEL NOMINATED INSPECTION AGENCY QUEST AND CUSTOMER AS PER CUSTOMER APPROVED QUALITY PLAN.</p> <p>i. FOR SPARE ITEMS, VENDOR TO SUBMIT TEST CERTIFICATES ENDORSED BY THIRD PARTY INSPECTION AGENCY AS PER CUSTOMER APPROVED QP.</p>	
		<p>Inspection charges will be borne by BHEL. All coordination with third party inspection agency shall be done by the supplier only.</p> <p>Inspection call to third party inspection agency may be raised directly by the supplier; however 15 days are to be provided for deputation of representative of third party inspection agency for inspection.</p>	

SPECIAL NOTE FOR BIDDERS:

- a. In the event of our customer order covering this tender being cancelled /placed on hold /otherwise modified, BHEL would be constrained to accordingly cancel / hold / modify the tender at any stage of execution.

- b. BHEL may negotiate the L1 rate, if not meeting our budget / estimated cost. BHEL may re-float the tender opened, if L1 price is not acceptable to BHEL even after negotiation.
- c. Any change in applicable rates of Tax or any other statutory levies (Direct / Indirect) or any new introduction of any levy by means of statute and its corresponding liability for the deliveries beyond the agreed delivery date for reasons not attributable to BHEL will be to vendors account. BHEL will not reimburse the same and any subsequent claim in this respect will be summarily rejected.
- d. BHEL reserves its right to reject an offer due to unsatisfactory past performance by the respective Vendor in the execution of any contract to any BHEL project / Unit.
- e. The offers of the bidders who are under suspension and also the offers of the bidders, who engage the services of the banned firms /principal/agents, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.
- f. Recovery / deduction as applicable as per Direct and Indirect taxes as notified by Govt. Of India from time to time will be made and information/certificate for such deduction/recoveries shall be provided by BHEL to the vendor.
- g. If the delivery of supply as detailed above gets delayed beyond the delivery period, the Supplier/Vendor shall request for a delivery extension and BHEL at its discretion may extend the Contract. However, if any 'Delivery extension' is granted to the Supplier/Vendor for completion of supply, due to backlog attributable to the Supplier/Vendor, then it shall be without prejudice to the rights of BHEL to impose LD for the delays attributable to the Supplier/Vendor.
- h. In case BHEL increase the quantity during currency of the contract in line with quantity variation clause of GeM bid, delivery extension on pro-rata basis shall be given for supply of these additional quantity.

Following documents are an integral part of this Tender Enquiry and endorsed copies of these documents (duly signed and stamped on each page, as a token of acceptance) are to be submitted/uploaded along with offer on GeM portal against this bid.

- 1. Please submit replica of Price schedule (without prices) showing "quoted" in place of price along with techno-commercial bid (Part-I).
- 2. Please submit signed & Stamped copy (each page) of duly filled of confirmation column of "Buyers Specific Additional Terms & Conditions (ATC)" and its clause wise supporting documents where required.
- 3. Please submit signed & stamped copy (each page) for qualifying PQR with proper filled information and related supporting documents as mentioned in PQR.
- 4. Please submit signed & stamped copy (each page) of QAP .
- 5. Please submit certificate of Minimum local content as specified in the Make In India Certificate of the tender.

Format for preference to Make in India order

Certificate

In line with Government Public Procurement Order No. P-45021/2/2017-PP (BE-II) dated 04.06.2020, we hereby certify that we M/s _____
(supplier name) are local supplier. The percentage of local content in the items _____ offered by us against Enquiry No. _____ is _____% (percentage).

Details of location at which local value addition will be made is as follows:

We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

The Certificate shall be from the Cost Auditor / CA of the Company.

Framework Confidentiality Agreement cum Undertaking

This Agreement made on this the _____ day of (month) _____ 20____
("Effective Date") by and between

M/s BHARAT HEAVY ELECTRICALS LIMITED, having registered office at "BHEL House", Siri Fort, New Delhi – 110049 (India), acting through its _____ Unit (hereinafter may be referred to as "BHEL" or "the Company").

And

M/s _____ (address) _____
represented by authorized representative Sri _____ (herein after referred to as the "Supplier").

The Supplier and the Company may, unless the context otherwise requires, hereinafter be collectively referred to as "Parties" or singly as the "Party".

RECITALS

Whereas, BHEL is engaged in the design, engineering, manufacturing, construction, testing, commissioning and servicing of a wide range of products, systems and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation, Renewable energy, Oil & Gas and Defence and providing associated services to varied customers in relation to which BHEL/its affiliates own valuable information of a secret and confidential nature.

Whereas the Company may, in connection with Contract(s) (as defined hereunder) placed or to be placed upon the Supplier, or otherwise, from time to time, make available, Technical Information as is defined hereunder.

And Whereas BHEL is willing to provide such Technical Information to the Supplier from time to time and the Supplier understands and acknowledges that such Technical Information is valuable for the Company and as such is willing to protect confidentiality of such information, subject to the terms and conditions set out hereunder.

Now therefore, in view of the foregoing premises and in consideration of the mutual covenants and agreements hereinafter set forth, the Parties agree as under:

1. Definitions:

Unless the context so requires, in this Agreement, the following terms will bear the meaning ascribed to the said term in this clause.

- A. **"Contract"** means the Contract entered into with a Supplier and includes a Purchase Order, or a Work Order for procurement of any goods or for provision of any services.
- B. **"Effective Date"** means the date of this Agreement as mentioned in the preamble of this Agreement.

- C. **“Supplier”** includes a Contractor or a Vendor of the Company whether for supplying of goods or for providing any services under a Contract or both.
 - D. **“Technical Information”** includes Drawings, and/or Product Standards and/or Specifications and/or Corporate / Plant Specifications and/or Technological Process Sheets and/or Technical Data Sheets and/or Jigs & Fixtures and/or Pattern & Dies and/or Special Gauges and/or Tools etc. belonging to or wherein the Company has acquired from a third party a right of user and includes any improvement thereto from time to time whether carried out by the Company or by the Supplier.
 - E. **“Intended Purpose”** means the purpose for which the Technical Information is provided to the Supplier under or in connection with a Contract.
 - F. **“Improvement”** includes any modification made to, or adaptation of, the Technical Information which enhances or is calculated to enhance the performance (whether in terms of effectiveness or in terms of efficiency or both) of the product and/or the service to be provided by the Supplier under a Contract.
2. This Agreement shall come into force/deemed to have come into force, as the case may be, on the Effective Date; or, on the first date when the Technical Information or any part thereof is provided by BHEL to the Supplier; whichever is earlier.
3. **Agreement deemed to be incorporated in each Contract:** Unless and to the extent otherwise stipulated in the Contract, the conditions of this Agreement are deemed to be incorporated in all Contracts which may be entered into between the Company and the Supplier. Further, unless otherwise stipulated, the obligations under this Agreement are and will be independent of the obligations under the Contracts and such obligations of the Supplier hereunder will remain of full effect and validity notwithstanding that the period of validity of the Contracts has expired by efflux of time stipulated therein; or, the contract has been discharged by performance or breach; or, the termination of the Contracts for any reason whatsoever.
4. **Ownership:**
- 4.1 The Company may, from time to time, make available to the Supplier, Technical Information on a non-exclusive basis by way of loan.
- 4.2 The Supplier acknowledges and agrees that all Technical Information and copies thereof that are or may be provided by the Company to the Supplier, are and shall remain the property of BHEL or that of the concerned entity from whom BHEL has obtained the Technical Information and such Technical Information are and shall constitute trade secrets of the BHEL. Nothing in this Agreement or in any disclosures made hereunder by or on behalf of the Company shall be construed as granting upon the Supplier any patent, copyright or design or any other intellectual property rights of whatsoever description that subsists or may hereinafter exist in the Technical Information. Furthermore, nothing in this Agreement or in any disclosures made hereunder by or on behalf of the Company shall be construed as granting upon the Supplier any license or rights of use of such patent, copyright or design or any other

Annexure-2

intellectual property rights of whatsoever description which may now or hereafter exist in the Technical Information except for use of the Technical Information strictly in accordance with this Agreement and the Contract and/or as directed in writing by the Company, solely for the Intended Purpose under the Contract.

4.3 Neither Party is obligated by or under this Agreement to purchase from or provide to the other Party any service or product and that any such purchase/sale of any product and/or service by one Party to the other Party will be governed by the Contract if any, that may be entered into by and between the Company and the Supplier.

4.4 The Supplier is/has been made well aware and acknowledges that the Technical Information being/which may be shared with it by the Company has been either generated by the Company by incurring huge investment and cost or obtained from foreign collaborators under Technical Collaboration Agreement (TCA) with stringent confidentiality conditions.

4.5 The Supplier agrees and undertakes to adhere to confidentiality requirements as applicable to BHEL under a TCA and also ensure that the confidentiality requirements are adhered to by all its concerned employees or sub-contractors/suppliers (where permitted to be engaged by BHEL). Any damages, losses, expenses of any description whatsoever, arising out of or in connection with a breach of the confidentiality requirements under a TCA owing to any act or omission on the part of the Supplier or its employees or sub-contractors/suppliers that is claimed by a foreign collaborator from the Company shall be wholly borne by the Supplier and it shall keep BHEL fully indemnified in this behalf. The demand by the Company shall be conclusive upon the Supplier who shall thereupon forthwith pay to the Company without demur, dispute or delay the amount as demanded without demanding any further proof thereof.

4.6 The Supplier agrees and undertakes that unless so decided and advised by the Company in writing all rights/title to any Improvement to the Technical Information shall vest in the Company. The Supplier undertakes and agrees to inform forthwith to the Company of any such Improvement made to the Technical Information and transfer all drawings/documents or other materials connected with such Improvement to the Company and also agrees to fully cooperate with the Company for protecting the Company's interests in such Improvement in the Technical Information including but not limited to obtaining necessary protection for the intellectual property rights in such improvement, if so desired by the Company. If a question arises whether a modification amounts to Improvement to the Technical Information, the same shall be decided by the Company and such decision shall be final and binding upon the Supplier.

5. Use and Non-Disclosure:

5.1 Unless otherwise stipulated by the Company, all Technical Information made available to the Supplier, by the Company shall be treated as Confidential irrespective of whether the same is marked or otherwise denoted to be Confidential or not.

- 5.2 The Supplier undertakes and agrees that the Technical Information in its possession shall be held in strict confidence and will be used strictly in accordance with this Agreement and solely for the Intended Purpose under the Contract. Use of the Technical Information for any other purpose other than Intended Purpose is prohibited.
- 5.3 In particular, the Supplier shall not use Technical Information or any Improvement in its possession for the manufacture or procurement of the Product(s) or components or parts thereof or use the Technical Information or any portion thereof or any modification or adaptation thereof in any form to provide any product and/or service to any third party, without the prior written consent of the Company.
- 5.4 The Supplier shall not disclose any of such Technical Information to any third party without the prior written consent of the Company. The Supplier agrees that without prior written consent of the Company, the Supplier shall not disclose to a third party about the existence of this Agreement, or of the fact that it is/was in possession of or has experience in the use of any Technical Information nor shall the Supplier share in any manner whatsoever, with a third party, the name or details of any Contract(s) awarded by the Company to it or performed by the Supplier or the scope of work thereof or share any document or correspondence by and between the Company and the Supplier in or in connection with this Agreement or such Contract(s). Notwithstanding what is stated elsewhere, the overall responsibility of any breach of the confidentiality provisions under this Agreement shall rest with the Supplier.
- 5.5 The Supplier undertakes and agrees not to make copies or extracts of and not to disclose to others any or all of the Technical Information in its possession, except as follows:
- (a) The Supplier may disclose the Technical Information to such of its officers and employees strictly to the extent as is necessary for such officer or employee for the Intended Purpose, provided that the Confidential Information (or copies thereof) disclosed shall be marked clearly as the confidential and proprietary information of Company and that such officers and employees shall similarly be bound by undertakings of confidence, restricted use and non-disclosure in respect of the Technical Information. The Supplier shall be responsible for any breach of such confidentiality provisions by such officers and employees.
 - (b) With the prior written consent of Company, the Supplier may disclose for the Intended Purpose such Technical Information as is provided for in such consent to such of its professional advisers: consultants, insurers and subcontractors who shall be similarly bound by undertakings of confidence, restricted use and non-disclosure in respect of such Technical Information.
 - (c) The Supplier shall not be prevented to make any disclosure required by (i) order of a court of competent jurisdiction or (ii) any competent regulatory authority or agency where such disclosure is required by law, provided that where the Supplier

intends to make such disclosure, it shall first consult Company and take all reasonable steps requested by it to minimize the extent of the Technical Information disclosed and to make such disclosure in confidence and also shall cooperate with the Company in seeking any protective order or any other remedy from proper authority in this matter.

6. Exceptions:

The obligations of the Supplier pursuant to the provisions of this agreement shall not apply to any Confidential Information that:

- a) was/is known to, or in the possession of the Supplier prior to disclosure thereof by the Company;
- b) is or becomes publicly known, otherwise than as a result of a breach of this agreement by the Supplier.
- c) is developed independently of the Disclosing Party by the Supplier in circumstances that do not amount to a breach of the provisions of this Agreement or the Contract;
- d) is received from a third party in circumstances that do not result in a breach of the provisions of this Agreement.

7. The obligation of maintaining confidentiality of the Technical Information on each occasion, shall subsist for the entire duration during which the Technical Information / equipment is in possession of the Supplier and shall thereafter subsist for a further period of --- years from the date when the complete Technical Information has been returned to the Company and if Technical Information has been returned in portions on different dates then, the period of ---- years will be reckoned from the date when the last portion of the Technical Information has been returned. Notwithstanding the expiry of the confidentiality obligation, the obligation of the Supplier under clause 5.4 shall continue to subsist for a further period of ----- years.

8. Warranties & Undertakings:

a) The Supplier undertakes to ensure the due observance of the undertakings of confidence, restricted use and non-disclosure by its persons to whom it discloses or releases copies or extracts of the Technical Information.

b) The Supplier shall keep the Technical Information or improvement made therein properly segregated and not mix up the same with any other material/documents belonging to him/it or to any other third party.

c) The Supplier further undertakes that he/it shall not hypothecate or give on lease or otherwise alienate or do away with any of the Technical Information and/or equipment of the Company, made available to him/it, and undertakes that he/it shall hold the same as a trustee, in capacity of custodian thereof and use/utilise the same solely for the purpose of executing the Contract awarded by the Company.

d) The Supplier further undertakes that he/it shall return all the equipment and/or Technical Information as far as practicable in the same condition in which the same was made available to him/it by the Company together with any Improvement thereon and the documents connected with such Improvement, to the Company forthwith upon completion of the scope

of work or Contract for which such Technical Information was provided by the Company to it or as directed by the Company together with a confirmation by way of an affidavit or in such manner as directed by the Company that it has not retained any equipment and/or Technical Information/Improvement thereof. In case any such equipment and/or Technical Information or Improvement thereof shall remain in his possession or is not capable of being returned, the retention and use of such Technical Information or Improvement thereto shall continue to be governed by this Agreement.

e) The Supplier undertakes to indemnify the Company for all the direct, indirect and/or consequential losses, damages, expenses whatsoever including any consequential loss of business, profits suffered by the Company owing to breach by the Supplier of its obligations under this Agreement and/or the confidentiality requirements, if any, contained in the Contract and that the Supplier hereby agrees that the decision of the Company in all such or any such matter/s shall be final and binding on the Supplier. On mere written demand of the Company, the Supplier shall forthwith and without demur or delay pay to the Company any such sum as determined by the Company as the amount of loss or damage or expense which has been suffered by the Company. The Supplier agrees that the Company shall be entitled to withhold and appropriate any amount payable to the Supplier under any Contract then existing between the Company and the Supplier, in case the Supplier fails to make payment, in terms of the written demand, within 7 days thereof. Without prejudice to the foregoing actions, in respect to any breach of this Agreement, the Company shall be entitled to take any other action against the Supplier as per applicable laws, the Contract, Company's applicable policies, guidelines rules, procedures, etc.

9. Without prejudice to any other mode of recovery as may be available to the Company for recovery of the amount determined as due as per Clause 8(e) hereinabove, the Company shall have a right to withhold, recover and appropriate the amount due towards such losses, damages, expenses, from any amount due to the Supplier in respect of any other Contract (s) placed on him/it by any department/office/Unit/Division of the said Company.

10. Arbitration & Conciliation:

a) In case amicable settlement is not reached between the Parties, in respect of any dispute
or

difference or claim or controversy arising out of the formation, breach, termination, validity or execution of the Contract(or Agreement) or the respective rights and liabilities of the parties or in relation to interpretation of any provision of the Contract or in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other Party refer such dispute or difference or controversy or claim, (except as to any matters, the decision of which is specifically provided for therein) to the sole arbitration by the arbitrator appointed by Head/In-Charge of the Unit/Division/Region.

b) The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the parties to the dispute.

c) Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India), or other statutory modifications or re enactments thereof and the rules made thereunder and for

the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be at ----- **(Insert the name of the city/town of the concerned BHEL Unit/Division).**

d) In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred to by either party to the arbitration of one of the arbitrators in the department of public enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the parties hereto finally and conclusively.

e) Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the Supplier shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner.

11. Governing Law & Jurisdiction:

This Agreement shall be governed by and be construed as per applicable Indian Laws in force at the relevant time.

Subject to clauses 10(a) and 10(d) hereinabove, all matters in connection with the subject agreement shall be subject to exclusive jurisdiction of Courts situated at -----**(insert the name of the place where the BHEL Unit/Division is located)**

SIGNATURE

WITNESSES

1.

Name

Address:

2.

Name:

Address:

BANK GUARANTEE FOR PERFORMANCE SECURITY

Bank Guarantee No:

Date:

To

NAME

& ADDRESSES OF THE BENEFICIARY

Dear Sirs,

In consideration of Bharat Heavy Electricals Limited (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at _____ through its Unit at.....(name of the Unit) having awarded to (Name of the Vendor / Contractor / Supplier) with its registered office at _____ hereinafter referred to as the 'Vendor / Contractor / Supplier', which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No.....dated valued at Rs..... (Rupees -----)/FC.....(in words.....) for (hereinafter called the 'Contract') and the Vendor / Contractor / Supplier having agreed to provide a Contract Performance Bank Guarantee, equivalent to% (.... Percent) of the said value of the Contract to the Employer for the faithful performance of the Contract,

we, (hereinafter referred to as the Bank), having registered/Head office at and inter alia a branch at being the Guarantor under this Guarantee, hereby, irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer any sum or sums upto a maximum amount of Rs ----- (Rupees -----) without any demur, immediately on first demand from the Employer and without any reservation, protest, and recourse and without the Employer needing to prove or demonstrate reasons for its such demand.

Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Vendor / Contractor / Supplier in any suit or proceeding pending before any Court or Tribunal, Arbitrator or any other authority, our liability under this present being absolute and unequivocal.

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder and the Vendor / Contractor / Supplier shall have no claim against us for making such payment.

We thebank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract/satisfactory completion of the performance guarantee period as per the terms of the Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

WeBANK further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Vendor / Contractor / Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Vendor / Contractor / Supplier and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Vendor / Contractor / Supplier or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Vendor / Contractor / Supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Vendor / Contractor / Supplier and notwithstanding any security or other guarantee that the Employer may have in relation to the Vendor / Contractor / Supplier 's liabilities.

This Guarantee shall remain in force upto and including..... and shall be extended from time to time for such period as may be desired by Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Vendor / Contractor / Supplier but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof.

Unless a demand or claim under this guarantee is made on us in writing on or before thewe shall be discharged from all liabilities under this guarantee thereafter.

This Bank Guarantee shall be governed, construed and interpreted in accordance with the laws of India.

Courts at shall alone have exclusive jurisdiction over any matter arising out of or in connection with this Bank Guarantee

We, BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed.....
- b) This Guarantee shall be valid up to
- c) Unless the Bank is served a written claim or demand on or before _____ all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

We, _____ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

For and on behalf of
(Name of the Bank)

Dated.....

Place of Issue.....

¹ NAME AND ADDRESS OF EMPLOYER I.e Bharat Heavy Electricals Limited

² NAME AND ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.

³ DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE

⁴ CONTRACT VALUE

⁵ PROJECT/SUPPLY DETAILS

⁶ BG AMOUNT IN FIGURES AND WORDS

⁷ VALIDITY DATE

⁸ DATE OF EXPIRY OF CLAIM PERIOD

Note:

1. Units are advised that expiry of claim period may be kept 3-6 months after validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.
2. The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Contractor/Supplier /Bank issuing the guarantee.

424

INTEGRITY PACT**Between**

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for _____

_____ (hereinafter referred to as "Contract"). The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint panel of Independent External Monitor(s) (IEMs), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

- 1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
 - 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. The Bidder(s)/ Contractor(s) commits himself to observe the following principles during participation in the tender process and during the contract execution.

- 923
- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and shall await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process, terminate the contract, if already awarded, exclude from future business dealings and/ or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 4 - Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder (s) from the tender process before award / order acceptance according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal is entitled to terminate the Contract according to Section 3, or terminates the Contract in application of Section 3 above, the Bidder(s)/ Contractor (s) transgression through a violation of Section 2 above shall be construed breach of contract and the Principal shall be entitled to demand and recover from the Contractor an amount equal to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher, as damages, in addition to and without prejudice to its right to demand and recover compensation for any other loss or damages specified elsewhere in the contract.

C/22

Section 5 - Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 (three) years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason or action can be taken as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 6 - Equal treatment of all Bidder (s)/ Contractor (s) / Sub-contractor (s)

- 6.1 The Principal will enter into Integrity Pacts with identical conditions as this Integrity Pact with all Bidders and Contractors.
- 6.2 In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor(s) and ensure that all Sub-contractors also sign the Integrity Pact.
- 6.3 The Principal will disqualify from the tender process all Bidders who do not sign this Integrity Pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 -Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible panel of Independent External Monitor (s) (IEMs) for this Integrity Pact. The task of the IEMs is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Integrity Pact.
- 8.2 The IEMs are not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The IEMs shall be provided access to all documents/ records pertaining to the Contract, for which a complaint or issue is raised before them as and when warranted. However, the documents/records/information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.
- 8.4 The Principal will provide to the IEMs sufficient information about all meetings among the parties related to the Contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the IEMs the option to participate in such meetings.

421

- 8.5 The advisory role of IEMs is envisaged as that of a friend, philosopher and guide. The advice of IEMs would not be legally binding and it is restricted to resolving issues raised by a Bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some Bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process or during execution of Contract, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- 8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to the CMD, BHEL at the earliest. They may also send their report directly to the CVO, in case of suspicion of serious irregularities requiring legal/ administrative action. Only in case of very serious issue having a specific, verifiable Vigilance angle, the matter should be reported directly to the Commission. IEMs will tender their advice on the complaints within 30 days.
- 8.8 The CMD, BHEL shall decide the compensation to be paid to the IEMs and its terms and conditions.
- 8.9 IEMs should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the Principal should be looked into by the CVO of the Principal.
- 8.10 If the IEMs have reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code / Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the IEMs may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.11 After award of work, the IEMs shall look into any issue relating to execution of Contract, if specifically raised before them. As an illustrative example, if a Contractor who has been awarded the Contract, during the execution of Contract, raises issue of delayed payment etc. before the IEMs, the same shall be examined by the panel of IEMs. Issues like warranty/ guarantee etc. shall be outside the purview of IEMs.
- 8.12 However, the IEMs may suggest systemic improvements to the management of the Principal, if considered necessary, to bring about transparency, equity and fairness in the system of procurement.
- 8.13 The word 'Monitor' would include both singular and plural.


Section 9 - Pact Duration

- 9.1 This Integrity Pact shall be operative from the date this Integrity Pact is signed by both the parties till the final completion of contract for successful Bidder, and for all other Bidders 6 months after the Contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.
- 9.2 If any claim is made/ lodged during currency of this Integrity Pact, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

C/20

Section 10 - Other Provisions

- 10.1 This Integrity Pact is subject to Indian Laws and exclusive jurisdiction shall be of the competent Courts as indicated in the Tender or Contract, as the case may be.
- 10.2 Changes and supplements as well as termination notices need to be made in writing.
- 10.3 If the Bidder(s)/ Contractor(s) is a partnership or a consortium or a joint venture, this Integrity Pact shall be signed by all partners of the partnership or joint venture or all consortium members.
- 10.4 Should one or several provisions of this Integrity Pact turn out to be invalid, the remainder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 Only those bidders / contractors who have entered into this Integrity Pact with the Principal would be competent to participate in the bidding. In other words, entering into this Integrity Pact would be a preliminary qualification.
- 10.6 In the event of any dispute between the Principal and Bidder(s)/ Contractor(s) relating to the Contract, in case, both the parties are agreeable, they may try to settle dispute through Mediation before the panel of IEMs in a time bound manner. In case, the dispute remains unresolved even after mediation by the panel of IEMs, either party may take further action as the terms & conditions of the Contract. The fees/expenses on dispute resolution through mediation shall be shared by both the parties. Further, the mediation proceedings shall be confidential in nature and the parties shall keep confidential all matters relating to the mediation proceedings including any settlement agreement arrived at between the parties as outcome of mediation. Any views expressed, suggestions, admissions or proposals etc. made by either party in the course of mediation shall not be relied upon or introduced as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the dispute that is the subject of mediation proceedings. Neither of the parties shall present IEMs as witness in any Alternative Dispute Resolution or judicial proceedings in respect of the dispute that was subject of mediation.


For & On behalf of the Principal
(Office Seal)

(PANKAJ KUMAR)
MGR - PDX/BOT
BHEL/HOR

For & On behalf of the Bidder/ Contractor
(Office Seal)

Place HARIDWAR
Date _____

Witness: _____
(Name & Address) _____

Witness: _____
(Name & Address) _____

[illegible][illegible]

Keywords: *Self-esteem, self-esteem management, self-esteem training, self-esteem intervention, self-esteem program, self-esteem workshop, self-esteem seminar, self-esteem course, self-esteem module, self-esteem program, self-esteem workshop, self-esteem seminar, self-esteem course, self-esteem module*

KETERANGAN		KETERANGAN		KETERANGAN		KETERANGAN	
No	Uraian	Uraian	Uraian	Uraian	Uraian	Uraian	Uraian
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



1. Nama Perusahaan 2. Alamat Perusahaan 3. Kota 4. Kode Pos 5. Nomor Telepon 6. E-mail 7. Website		8. Nama Pemilik 9. Alamat Pemilik 10. Kota 11. Kode Pos 12. Nomor Telepon 13. E-mail 14. Website		15. Nama Direktur 16. Alamat Direktur 17. Kota 18. Kode Pos 19. Nomor Telepon 20. E-mail 21. Website		22. Nama Manajer 23. Alamat Manajer 24. Kota 25. Kode Pos 26. Nomor Telepon 27. E-mail 28. Website	
29. Nama Produk 30. Deskripsi Produk 31. Harga Produk 32. Jumlah Produk 33. Tanggal Produk 34. Lokasi Produk 35. Status Produk		36. Nama Pelanggan 37. Alamat Pelanggan 38. Kota 39. Kode Pos 40. Nomor Telepon 41. E-mail 42. Website		43. Nama Supplier 44. Alamat Supplier 45. Kota 46. Kode Pos 47. Nomor Telepon 48. E-mail 49. Website		50. Nama Distributor 51. Alamat Distributor 52. Kota 53. Kode Pos 54. Nomor Telepon 55. E-mail 56. Website	

1. Nama Perusahaan 2. Alamat Perusahaan 3. Kota 4. Kode Pos 5. Nomor Telepon 6. E-mail 7. Website		8. Nama Pemilik 9. Alamat Pemilik 10. Kota 11. Kode Pos 12. Nomor Telepon 13. E-mail 14. Website		15. Nama Direktur 16. Alamat Direktur 17. Kota 18. Kode Pos 19. Nomor Telepon 20. E-mail 21. Website		22. Nama Manajer 23. Alamat Manajer 24. Kota 25. Kode Pos 26. Nomor Telepon 27. E-mail 28. Website	
29. Nama Produk 30. Deskripsi Produk 31. Harga Produk 32. Jumlah Produk 33. Tanggal Produk 34. Lokasi Produk 35. Status Produk		36. Nama Pelanggan 37. Alamat Pelanggan 38. Kota 39. Kode Pos 40. Nomor Telepon 41. E-mail 42. Website		43. Nama Supplier 44. Alamat Supplier 45. Kota 46. Kode Pos 47. Nomor Telepon 48. E-mail 49. Website		50. Nama Distributor 51. Alamat Distributor 52. Kota 53. Kode Pos 54. Nomor Telepon 55. E-mail 56. Website	

Nama Direktur
 Manajer LK 5



<div>adaniTM</div>		STANDARD QUALITY PLAN									Approved by QA			
		ITEM : LT MOTOR					SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 1 of 9							
SL No.	COMPONENT/ OPERATION	CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		INSPECTION AGENCY			REMARKS
					M	C/A					M	C	A	
1	2	3	4	5	6		7	8	9	*D	**10			11
1. Boughtout Items / Raw Material														
1.1	A) C.I. Frame & End Bracket/Shield/Base Frame (If Applicable)	Visual Check for defects	Major	Visual	100%	100%	Mfg. Works Drg.	No casting defects	MTC		P	V	V	Weld Repair On Cast Frame Is Not Acceptable.
		Tensile Strength & Brinell Hardness		Mech	1 Sample/ Heat	1 Sample/ Heat	IS 210	IS 210		√	P	V	V	
		Dimension		Meas	1 Sample/ Lot	1 Sample/ Lot				√	P	V	V	
		Chemical Properties		Chemical	1 Sample/ Lot	1 Sample/ Lot				√	P	V	V	
		Pressure Testing (Applicable for flame proof motors only)		Mech	1 Sample/ Lot	1 Sample/ Lot	IEC 60079-I	IEC 60079-I		√	P	V	V	
	B) Fab.Frame & End Bracket/ Base Frame (If Applicable)	Visual Check for defects	Major	Visual	100%	100%	Mfg. Works Drg.	Smooth Finish	MTC/ITR		P	V	V	
		Dimension		Measure	1 Sample/ Lot	1 Sample/ Lot		Mfg. Works Drg.		√	P	V	V	
		Tensile Strength & % Elongation		Mech	1 Sample/ Lot	1 Sample/ Lot	IS 2062	IS 2062		√	P	V	V	
		Heat Treatment (Applicable for thickness above 18 mm)		Thermal	100%	100%	ASME SEC 8 DIV. 1 & 2	ASME SEC 8 DIV 1 & 2		√	P	V	V	
		Chemical Composition		Chemical	1 Sample /Lot	1 Sample /Lot	IS 2062	IS 2062		√	P	V	V	
1.2	Electrical Steel Stamping For Stator & Rotor	Dimensions	Major	Measure	1 Sample /Batch	1 Sample /Batch	IS 648 / IS 649	IS 648 / IS 649	MTC	√	P	V	V	
		Burr Height		Measure						√	P	V	V	
		Material		Mech						√	P	V	V	
		Core Loss		Elect						√	P	V	V	
		Stacking Factor								√	P	V	V	
		Insulation Resistance		Elect						√	P	V	V	

<div>adani™</div>		STANDARD QUALITY PLAN									Approved by QA			
		ITEM : LT MOTOR					SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 2 of 9							
SL No.	COMPONENT/ OPERATION	CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		INSPECTION AGENCY			REMARKS
					M	C/A					M	C	A	
1	2	3	4	5	6		7	8	9	*D	**10			11
1.2	Electrical Steel Stamping For Stator & Rotor	Bend Test	Major	Measure	1 Sample/ Batch	1 Sample/ Batch	IS 648/IS 649	IS 648/IS 649	MTC	√	P	V	V	
		Coating Thickness		√						P	V	V		
		AC Magnetization		√						P	V	V		
1.3	Forged Shaft - Normalised (If Applicable)	Dimension & Visual	Major	Measure	100%	100%	Mfg. Works Drg.	Mfg. Works Drg.	ITR	√	P	V	V	Ultra sonic test is applicable for shaft dia 50mm & above. Refer Note- 2 At Page 11
		Chem. Composition	Major	Chemical	1 Sample / Heat	1 Sample / Heat	BS 970 IS 1570- 4SCB (N)	BS 970 IS 1570- 4SCB (N)	MTC	√	P	V	V	
		Mech Properties	Critical	Mech						√	P	V	V	
		I) % Elongation								√	P	V	V	
		II) Ultimate Tensile Strength								√	P	V	V	
		III) Hardness (If Applicable)								√	P	V	V	
		IV) Impact Test (If Applicable)								√	P	V	V	
		V) Yield Strength								√	P	V	V	
		Ultrasonic Test	Critical	NDT	100%	100%	ASTM A 388 & NOTE 2	ASTM A 388 & NOTE 2	NDT Report	√	P	V	V	
	Steel Shaft Rolled Bar (If Applicable)	Dimension	Major	Measure	100%	100%	Mfg. Works Drg.	Mfg. Works Drg.	MTC / ITR	√	P	V	V	Ultra sonic test is applicable for shaft dia 50mm & above. Refer Note- 2
		Mechanical Properties	Critical	Mech	1 Sample / Heat	1 Sample / Heat	IS 1570-II / AISI 431	IS 1570-II / AISI 431		√	P	V	V	
		Chemical Properties	Major	Chemical						√	P	V	V	
		Ultra Sonic Test	Critical	NDT					ASTM A-388 & NOTE 2	ASTM A-388 & NOTE 2	NDT Report	√	P	
1.3.1	Shaft Rib (If Applicable)	Chemical Comp.	Major	Visual	100%	100%	BS 970	BS 970	MTC	√	P	V	V	
		Mechanical Prop. (Tensile Strength & % Elongation)	Major	Measure	100%	100%				√	P	V	V	
		UT On Plates > 40Mm Thick	Major	NDT	100%	100%	ASTM A 435	ASTM A 435, (LAMINATION IN PLATE IS NOT ACCEPTABLE)	NDT Report	√	P	V	V	

<div>adaniTM</div>		STANDARD QUALITY PLAN												
		ITEM : LT MOTOR					SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 3 of 9							
SL No.	COMPONENT/ OPERATION	CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		INSPECTION AGENCY			REMARKS
					M	C/A					M	C	A	
1	2	3	4	5	6		7	8	9	*D	**10			11
1.4	Aluminum Die Cast Rotor (If Applicable)	Dimension (Core Length & Inner Diameter)	Major	Mech	100%	100%	Mfg. Works Drg.	Mfg. Works Drg.	MTC	√	P	V	V	
		Casting Defects	Major	Visual	100%	100%	No blow holes & crack	No blow holes & crack		√	P	V	V	
		Mechanical Properties of (Aluminum Ignot)	Major	Mech	1 Sample/ Lot	1 Sample/ Lot	IS 4026	IS 4026		√	P	V	V	
		Conductivity (of Aluminum Ignot)	Major	Elect						√	P	V	V	
		Chemical Composition	Major	Chemical						√	P	V	V	
		Aluminum Grade	Critical	Chemical						√	P	V	V	
1.5	Slip Ring (Applicable for slip ring motor only)	Dimension	Major	Measure	100%	100%	Mfg. Works Drg.	Mfg. Works Drg.	MTC	√	P	V	V	
		HV Test		Elect	100%	100%	Mfg. Works Std.	Mfg. Works Std.		√	P	V	V	
		Heat Sock Test		Elect	1 Sample / Lot	1 Sample / Lot				√	P	V	V	
1.6	Enamelled Copper Wire (If Applicable)	Dimension (Overall Diameter, Bare Diameter, Coating Thiickness, etc.)	Major	Measure	IS 13730	IS 13730	IS 13730	IS 13730	MTC	√	P	V	V	
		Elongation		Mech						√	P	V	V	
		Heat Shock		Mech						√	P	V	V	
		Resistance to Abrasion		Elect						√	P	V	V	
		Peel Test		Visual						√	P	V	V	
		Cut Through Test		Elect						√	P	V	V	
		Break Down Voltage @ Room Temperature		Elect						√	P	V	V	
		Mandrel Winding Test		Mech						√	P	V	V	
		Continuity Test (Pin Hole Test)		Elect						√	P	V	V	


<div>adani™</div>		STANDARD QUALITY PLAN												
		ITEM : LT MOTOR					SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 4 of 9							
SL No.	COMPONENT/ OPERATION	CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		INSPECTION AGENCY			REMARKS
					M	C/A					M	C	A	
1	2	3	4	5	6		7	8	9	*D	**10			11
1.7	Double Glass Lapped Enamelled Copper Conductor (If Applicable)	Tensile Strength, % Elongation, Cu Purity, Oxygen Content & Flexibility, Hardness	Major	Verify	1 Sample/ Lot	1 Sample/ Lot	IS 10114	IS 10114	MTC	√	P	V	V	
		Breadk Down Voltage Test		1 Sample /Lot	1 Sample /Lot	√				P	V	V		
		Dimension				√				P	V	V		
		Resistivity				√				P	V	V		
1.8	High Conductivity Annealed Copper Strip Covered By Film Backed Mica, Paper Tape (If Applicable)	Dimension	Major	Measure	1 Sample / Lot	1 Sample / Lot	Mfr Std / Spec	Mfr Std / Spec	MTC	√	P	V	V	
		Chemical Composition		Chemical						√	P	V	V	
		Breadk Down Voltage Test		Elect						√	P	V	V	
		Tensile Strength		Mech						√	P	V	V	
		Resistivity		Elect						√	P	V	V	
		Springness		Measure						√	P	V	V	
1.9 Rotor Conductor For Sq. Cage Rotor														
1.9.1	Hard / Half Hard Drawn Copper Bar (If Applicable)	Dimension	Major	Measure	Sample	Sample	BS 1432/ BS 1433/ IS 1897	BS 1432/ BS 1433/ IS 1897	MTC	√	P	V	V	
		Conductivity		Elec						√	P	V	V	
		Mech Properties		Measure						√	P	V	V	
		Chemical Composition								√	P	V	V	
		Oxygen Content								√	P	V	V	
1.9.2	Forged Copper End Ring (If Applicable)	Dimension	Major	Measure	Sample	Sample	BS 6017	BS 6017	ITR	√	P	V	V	
		Conductivity		Elec	Sample/ Heat	Sample/ Heat			√	P	V	V		
		Chem. Composition		Chem					√	P	V	V		
			Ultrasonic Test	Major	NDT	100%	100%	ASME SEC 5	ASME SEC 5, NO DEFECT IS ALLOWED	MTC	√	P	V	

<div>adani™</div>		STANDARD QUALITY PLAN									Approved by QA			
		ITEM : LT MOTOR				SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 5 of 9								
SL No.	COMPONENT/ OPERATION					CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK					
					M	C/A					M	C	A	
1	2	3	4	5	6		7	8	9	*D	**10			11
1.10	Insulating Paper	Type of Paper	Major	Visual	IEC 60626	IEC 60626	IEC 60626	IEC 60626	MTC	√	P	V	V	
		Thickness		Mech						√	P	V	V	
		Tensile Strength		Mech						√	P	V	V	
		Thermal Properties		Thermal						√	P	V	V	
		Dielectric Strength (BDV)		Elect						√	P	V	V	
1.11	Mica Paper (If Applicable)	Thickness	Major	Measure	1 Sample/ BaTCh	1 Sample/ BaTCh	IS 10192	IS 10192	MTC		P	V	V	
		BDV Test		Elec							P	V	V	
		Shelf Life		Visual	100%	100%					P	V	V	
1.12	Rotor Turning	Dimesion	Major	Visual	100%	100%	App. Drg	APP. DRG	ITR		P	V	V	
1.13	Varnish	Shelf Life	Major	Visual	1 Sample/ Batch	1 Sample/ Batch	IS 10026	IS 10026	MTC	√	P	V	V	
		Colour & Appearance		Visual						√	P	V	V	
		Curing in Thin Layer		Visual						√	P	V	V	
		Solid Content		Measure						√	P	V	V	
		Compatibility with Thinner		Visual						√	P	V	V	
		Viscosity		Mech						√	P	V	V	
											P	V	V	
1.14	Single Pack Solvent Less Epoxy Resin	Applied Viscosity	Major	Measure	1 Sample / Lot	1 Sample / Lot	Manufactuer's Standard / Spec	Manufactuer's Standard / Spec	ITR		P	V	V	
		Gel Time									P	V	V	
1.15	Tape For Over Hang	Thickness & Width	Major	Measure	1 Sample/ BaTCh	1 Sample/ BaTCh	Manufactuer's Standard / Spec	Manufactuer's Standard / Spec	MTC		P	V	V	
		Glass Fiber Content		Test							P	V	V	
		High Voltage Test		Elect							P	V	V	
1.16	Glass Fibre Sleeving (If Applicable)	Bore Dia	Major	Measure	1 Sample/ BaTCh	1 Sample/ BaTCh	IS 11654 PT 2	IS 10192	MTC		P	V	V	
		Wall Thickness								P	V	V		
		High Voltage Test		Elec							P	V	V	
1.17	Epoxy Glass Laminated Sheet (Wedges) (If Applicable)	Thickness	Major	Measure	1 Sample/ BaTCh	1 Sample/ BaTCh	IS 10192	IS 10192	MTC		P	V	V	
		High Voltage Test									P	V	V	

<div>adaniTM</div>		STANDARD QUALITY PLAN									Approved by QA			
		ITEM : LT MOTOR					SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 6 of 9							
SL No.	COMPONENT/ OPERATION	CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		INSPECTION AGENCY			REMARKS
					M	C/A					M	C	A	
1	2	3	4	5	6		7	8	9	*D	**10			11
1.18	Bearing and Grease	Type & Make	Major	Visual	100%	100%	Mfg. Catalouge	As per plant standard/ drawing	ITR		P	V	V	
1.19	Space Heater (If Applicable)	High Voltage (2kV for 01 minute)	Major	Elec	100%	100%	Approved Datasheet	Withstood	ITR		P	V	V	
		Resistance								P	V	V		
		Insulation Resistance								P	V	V		
		Dimension								P	V	V		
1.20	R.T.D./B.T.D (If Applicable)	Insulation Resistance	Major	Elec	100%	100%	IS 2848	IS 2848	MTC		P	V	V	
		High Voltage (2kV for 01 minute)		Elec			Approved Datasheet	Withstood			P	V	V	
		Resistance		Elec			IS 2848	IS 2848			P	V	V	
		Pull Out Test		Mech			Mfg. Catalouge	Mfg. Catalouge			P	V	V	
1.21	B.T.D (Dial Type) (If applicable)	Check For Visual Damage	Major	Visual	100%	100%	Works Drawing	Works Drawing	MTC / ITR	√	P	V	V	
		Calibration		Verify						√	P	V	V	
1.22	Fan (M.S. / Plastic - If Applicable)	Dimension	Major	Measure	Sample	Sample	Works Drawing/ IS 2062	Works Drawing/ IS 2062	MTC		P	V	V	
		Chemical & Mechanical (For M.S.)		Test							P	V	V	
2 .In-Process Inspection														
2.1	Stator Frame	Dimension	Major	Measure	100%	100%	Mfg. Works Drg.	Mfg. Works Drg.	ITR		P	V	V	
		Appearance		Visual			Free from defects	Free from defects			P	V	V	
2.2	Stator & Rotor Core Building	Core Length & Inner diameter	Major	Measure	100%	100%	Mfg. Works Drg.	Mfg. Works Drg.	ITR		P	V	V	
		Slot Alignment		Visual							P	V	V	
		Core Rigidity									P	V	V	
		Cleanliness	Major	Visual							P	V	V	
		Stator & Rotor Dimension		Measure							P	V	V	
2.3	Wound Stator	Surge Test	Major	Elec	100%	100%	Works Std	Works Std	ITR		P	V	V	
		Insulation Resistance (Before & After HV)					IS 325	IS-325			P	V	V	
		High Voltage Test					Works Drg.	Withstood			P	V	V	
		Winding Resistance						Works Drg.			P	V	V	
2.4	Rotor Cage Assembly	Visual Test	Major	Visual	100%	100%	Works Std	Works Std	ITR		P	V	V	
		UT Of Brazed Cage Rotor		NDT							P	V	V	
		Dynamic Balancing (Residual Unbalance)		Visual			ISO 1940	ISO 1940			P	V	V	

<div>adani™</div>		STANDARD QUALITY PLAN													
		ITEM : LT MOTOR					SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 7 of 9								
		Approved by QA													
SL No.	COMPONENT/ OPERATION	CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		INSPECTION AGENCY			REMARKS	
					M	C/A					M	C	A		
1	2	3	4	5	6		7	8	9	*D	**10			11	
2.5	Varnish Impregnation	Preheating	Major	Measure	100%	100%	Mfr Std / Spec	Mfr Std / Spec	ITR		P	V	V		
		Curing Cycle									P	V	V		
		Baking Temperature									P	V	V		
		Pressure									P	V	V		
		Gel Time									P	V	V		
		Viscosity			02 Sample/ Shift	02 Sample/ Shift					P	V	V		
		Vacuum Pressure Impregnation (If Applicable)			Daily	Daily					P	V	V		
3. Final Motor															
3.1	Complete Motor	Location Of Terminal Box etc	Major	Visual	100%	100%	App GAD	App GAD	IR	√	P	V	V		
		Marking On Rating Plates & Earthing Arrangement					√			P	V	V			
		Shaft Run Out		Measure			IS 2223			√	P	V	V		
3.2	Final Assembly & General Check	Fitting Of Sub Assembly & Components	Major	Visual / Measure	100%	100%	Works Drg & Datasheet	Works Drg & Datasheet	IR	√	P	H	H		
		Fitting Of Accessories e.g. RTD, BTd, Heaters, etc.					BOM	Works Drg & Datasheet		√	P	H	H		
		Dimensional Check		Measure			GA DRG.			√	P	H	H		
3.3	Terminal Marking	General Check	Major	Visual	100%	100%	Works Drg.	Works Drg & Datasheet		√	P	H	H		
3.4	Acceptance Test	DC Resistance Measurement Of Stator Winding, Rotor Winding (for slip ring motor only), RTD, BTd & Space Heater at ambient Temp.	Critical	Elec	100%	100%	IS 325, IS 4029 IEC 60034	IS 325, IS 4029 IEC 60034		IR	√	P	H		H
		O.C. Voltage ratio of stator & rotor windings (for slip ring motor only)					IS 325, IS 4029 IEC 60034	IS 325, IS 4029 IEC 60034			√	P	H		H

<div>adaniTM</div>		STANDARD QUALITY PLAN									Approved by QA			
		ITEM : LT MOTOR					SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 8 of 9							
SL No.	COMPONENT/ OPERATION	CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		INSPECTION AGENCY			REMARKS
					M	C/A					M	C	A	
1	2	3	4	5	6		7	8	9	*D	**10			11
3.4	Acceptance Test	IR Measurement Of Widg. Space Heater & RTD, BTD Before & After HV Test	Critical	Elec	100%	100%	IS-4722-1992	IS-4722-1992	IR	√	P	H	H	NOTE 1: Type Test Certificate. not Older Than Five Years from the date of award duly reviewed & accepted by Owner'S Engg For Similar Type, Size & Rating Of Motor shall be submitted along with Inspection Call.
		No-Load Test at 90% 100% & 110% of rated voltage and measure no load power, current & no load speed.					IS 325, IS 4029 IEC 60034	√		P	H	H		
		Reduced voltage running up test (for squirrel cage motors)						√		P	H	H		
		Locked Rotor Test at rated Current & measure Voltage , Power						√		P	H	H		
		Polarization Index						√		P	H	H		
		High Voltage Test For Winding, RTD, BTD & Space Heater						Withstood		√	P	H	H	
		Over Speed Test At 120% Of Rated speed for 02 min						IS 325 & IEC 60034		√	P	H	H	
		Phase Sequence, Direction Of Rotation & Motor RPM						App Drg		√	P	H	H	
		Vibration Measurement at Rated Speed & Voltage		Mech			IS 12075, IS 325 & IEC 60034	IS 12075, IS 325 & IEC 60034		√	P	H	H	In Case The Type Test Is Specially Required As Per The Technical Spec., Same Shall Be Witnessed.
		Noise Measurement at Rated Speed & Voltage					IS 12065, IS 325 & IEC 60034	IS 12065, IS 325 & IEC 60034		√	P	H	H	
		Visual Check, Dimension, & Cable Entry, Location Of Main Terminal Box		Visual			App Drg	App Drg		√	P	H	H	
		Marking On Rating Plate, Earthing Arrangement								√	P	H	H	
		Degree Of Protection		Verify			IS-12063	IS-12063		T.C	√	P	V	V

		STANDARD QUALITY PLAN								<div>Approved by QA</div>				
		ITEM : LT MOTOR					SQP NO: ADANI/QA/SQP/E/002 REV. NO.:02 DATE: 12.03.2016 PAGE: 9 of 9							
SL No.	COMPONENT/ OPERATION	CHARACTERISTICS	CATEGORY OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		INSPECTION AGENCY			REMARKS
					M	C/A				*D	M	C	A	
1	2	3	4	5	6		7	8	9		**10			11
3.5	Painting & Finishing	Finish, Shade, DFT & Adhesion	Major	Visual	100%	100%	App Drg & Datasheet	App Drg & Datasheet	IR	√	P	H	H	
<p>NOTE 2: ACCEPTANCE NORM FOR UT OF SHAFT:-</p> <p>1) CRACKS, FLAKES, SEAMS & LAPS ARE NOT ACCEPTABLE IN THE SHAFT FORGING.</p> <p>2) FOLLOWING DEFECTS IN THE OUTER REGION OF SHAFT BETWEEN 75% TO 100% OF SHAFT RADIUS ARE NOT ACCEPTABLE:-</p> <p>I) ANY DEFECT GIVING INDICATION LARGER THAN THAT FROM 2MM DIAMETER EQUIVALENT FLOW.</p> <p>II) GROUP OF DEFECT WITH MAX. INDICATION LESS THAN THAT FROM A 2 MM DIAMETER EQUIVALENT FLOW WHICH CANNOT BE SEPARATED AT TESTING SENSITIVITY, IF THE BACK ECHO IS REDUCED TO LESS THEN 70% OF FSH.</p> <p>III)THE DEFECTS GIVING INDICATIONS OF 1 TO 2 MM DIAMETER EQUIVALENT FLOW SEPARATED BY A DISTANCE LESS THEN FOUR TIMES THE SIZE OF THE LARGER OF THE ADJACENT FLOWS.</p> <p>3) FOLLOWING DEFECTS IN THE SHAFT BETWEEN CENTRE OF THE SHAFT TO 75% OF SHAFT RADIUS ARE NOT ACCEPTABLE:-</p> <p>I) ANY DEFECT GIVING INDICATION LARGER THAN THAT FROM 4 MM DIAMETER EQUIVALENT FLOW.</p> <p>II) GROUP OF DEFECT WITH MAX. INDICATION LESS THAN THAT FROM A 4 MM DIAMETER EQUIVALENT FLOW WHICH CANNOT BE SEPARATED AT TESTING SENSITIVITY, IF THE BACK ECHO IS REDUCED TO LESS THEN 50% OF FSH.</p> <p>III)THE DEFECTS GIVING INDICATIONS OF 2 TO 4 MM DIAMETER EQUIVALENT FLOW SEPARATED BY A DISTANCE LESS THEN FOUR TIMES THE SIZE OF THE LARGER OF THE ADJACENT FLOW..</p> <p>NOTE 3: THIS SQP IS APPLICABLE FOR 45 kW & ABOVE RATING MOTORS. BELOW 45 kW MOTORS, MANUFACTURER TO CARRYING OUT INTERNAL ROUTINE TEST AND TEST REPORT OF SAME TO BE SUBMITTED FOR REVIEW.</p> <p>LEGEND:- D* Records identified with tick (√) shall be essentially included by supplier & manufacturer in Quality Documentation package.</p> <p>** M: Manufacturer / Sub-Supplier, C: Main Supplier , A: Adani or their authorized representative.</p> <p>Use the following term as appropriate in columns 10. P: Perform, V: verification and H: Customer Hold Point to be witnessed and work shall not proceeded till it is witnessed and cleared in writing.</p> <p>Format of Record: MTC: Manufacturer/Sub-supplier Test Certificate, ITR: Inprocess Test Report/Record, IR: Inspection Report</p> <p>GENERAL NOTE:-</p> <p>- Manufacturer should have all the in house testing (Acceptance & Routine Test) facilities for LT Motor.</p> <p>- Testing Instruments used during Inspection must be calibrated from NABL accredited lab only. Instruments used during testing should be within valid calibration date.</p>														

		PRODUCTOS TUBULARES	SPAIN	
		EEW	Korea	
		EBK	Germany	
		HHI RB	Korea	
9.	Vacuum Pump	Gardner Denver Nash Machinery Ltd.	China	BOI
		Tsurumi Vacuum Engineering (Shanghai) Co., Ltd.	China	
		Edwards Technologies Trading (Shanghai) Co., Ltd.	China	
		Guangdong Kenflo Pump Co., Ltd.	China	
10.	CCCW water heat exchanger	Alfa Laval	China	BOI
		SONDEX	China	
		FLOWSERVE (SIHI) VACUUM PUMP	CHINA	
		STERLING	USA	
		GUANGDONG FOSHAN PUMP	CHINA	
		UNIQUE SYSTEM INCORPORATE	USA	
		TSURAMI MANUFACTURING CO LIMITED	JAPAN	
		JIEDINASHI MACHINERY CO., LTD.	WORLDWIDE	
		Tranter	China	
		SPX	China	
		GEA ECOFLEX China Co Ltd.-PHE	China	
11.	OCCW pump and CCCW pump	Guangzhou Xinheng Pump Manufacturing Co., Ltd.	China	
		Jiangsu Double-Wheel Pump Machinery Co., Ltd.	China	
		Andriz	China	
		Shanghai KSB Pump Co. Ltd.	China	
		Sulzer Pumps (Suzhou) Ltd.	China	
		Flowserve Flow Motion and Control (Suzhou) Co Ltd	China	
12	Rubber-ball cleaning system and motor drive	Dalian Songlone Pump Manufacturing Co., Ltd	China	
		Wuxi Hongxiang Power Auxiliary Equipment Co., Ltd.	China	
		JiangSu Power Equipment Co., Ltd	China	
		Shanghai Taprogge Water Tech Engineering Co Ltd	China	
		Jiangsu Zhongneng Power Equipment Co Ltd	China	
13	Oil purification device with oil tank and oil pump	Shanghai Taprogge Water Tech Engineering C	China	
		Jiangsu AET Technology & Engineering Co. Ltd.	China	
		Jiangsu Zhongneng Power Equipment Co., Ltd	China	
		Chengdu institute of pumps	China	
		Alfalaval	WORLDWIDE	
		Westfalia Saporator	WORLDWIDE	
14	Gate valve, NRV for Extraction (only for critical system)	SAMSHIN	Korea	BHEL
		VELAN	Canada	
		Weir	India/China	
		L&T Valves	India	
		BEHL	India	
		Emerson	ITALY	
		Sampell	Germany	
		KSB	CHINA	
		Pacific	USA	
		ADWARD	Singapore	
		HP/KVT	Korea/Neth erlands	
15	Drain valve(only for critical system)	LVF	ITALY	BHEL / BOI
		DOUGLAS	ITALY	
		GRV	Germany	
		HP/KVT	Korea/Neth erlands	
		VELAN	Canada	
16	Condensate Polishing Unit	Harbin boiler Co Ltd	China	BOI
		ION EXCHANGE INDIA LIMITED	INDIA	
		BGR ENERGY SYSTEM LIMITED	INDIA	
		VA TECH WABAG	INDIA	
		SPIC YUANDA ENVIRONMENTAL PROTECTION ENGINEERING CO. LTD.	China	
		JIANGSU DONGFANG WATER TREATMENT C O., LTD.	China	
		THERMAX	INDIA	
		Suzhou Dongfeng water Treatment co	China	
		Wuxi Power Aux co,China	China	
		Huadian Engg co	China	
		Nanjing CEC environment co	China	
17	Chemical dosing and Sampling System	Jiangsu Power Equipment Co., Ltd	China	BOI
		SUZHOUSAIHUA INSTRUMENT CONTROL CO.,LTD	China	
		Nanjing Guonengenviro-Protection Engineering Co., Ltd.	China	
		Jilin Grand Power Equipment Joint-stock Company	China	
		Suzhou Guoneng Electric Power Equipment Co.,Ltd	China	
18	CW PUMP	Shanghai KSB Pump Co., Ltd.	China	Not In Scope
		EBARA Machinery Zibo Co. Ltd.	China	
		Hitachi Pump Manufacturing (Wuxi) Co Ltd	China	
		ANDRITZ (China) Ltd.	China	
		Xylam	China	
		Sulzer Pumps	China	
		Flowserve	China/India	

19	Water Treatment Plant-De Mineralization Plant	Harbin boiler Co Ltd	China	Not In Scope
		Changzhou Jiangnan Environmental Engineering Co., Ltd.	China	
		Nanjing CEC Environment protection co ltd	China	
		China Huadian Engg. Co Ltd	China	
20	Waste water treatment plant	Jiangsu Tianma Environmental Protection Science and Technology Group Co., Ltd.	China	Not In Scope
		Nanjing Ease Environment Science and Technology co., LTD	China	
		Nanjing Guoneng Enviro-protection engineering Co., Ltd.	China	
21	Electro chlorination system	Sunrui Marine Environment Engineering Co., ltd.	China	Not In Scope
		Wuhan Xingda Technology Engineering Co., td.	China	
		Shanghai Sciye Water Sci.& Tech. Co., Ltd.	China	
		Jiangyin Hongrui Electrify Flange Co.,Ltd.	China	
22	HYDROGEN GENERATION Plant	China Shipbuilding Industry Corporation, No. 718 Institute	China	Not In Scope
		Suzhou Jingli Hydrogen Making Equipment Co., Ltd	China	
		Tianjin Mainland Hydrogen Making Equipme t Co., Ltd.	China	
23	Induced Draft Cooling Tower	Jians Seagull Cooling Tower Co., Ltd	China	Not In Scope
		Enexio	China	
		Hamon Thermal (Tianjin) Co., Ltd.	China	
24	Steam turbine house EOT crane	Hangzhou Huaxin Mechanical & Electrical Engineering Co., Ltd.	China	Not In Scope
		Weihua Group Co., Ltd.	China	
		Shandong Fenghui Equipment technology Co Ltd	China	
		HENAN SHENGQI MACHINERY GROUP CO., LTD.	China	
25	Air Compressor	Shanghai Compo Air Compressor Co. Ltd.	China	Not In Scope
		Shanghai Ingersoll-Rand Compressor Co., Ltd.	China	
		Boge Compressor	China	
		Atlas Copco (Shanghai) Trading Co., Ltd.	China	
26	Roof Fans & Axial flow fan	Shandong Zhongda Air-Condition Group Co., Ltd.	China	Not In Scope
		Baogang Central-Air (China) Co., Ltd.	China	
		Nantong Jinghai HVAC Equipment Factory	China	
		Zhejiang Yilida Ventilator Co., Ltd	China	
		Shangyu Special Fans Co., Ltd	China	
		Shandong Geruide Group	China	
27	Air Conditioning	Guangdong Shenling Environmental System Co., Ltd	China	Not In Scope
		Jiangsu jiasidun machiney equipment co.,ltd	China	
		Dezhou Guoyang Environmental Protection Equipment Co., Ltd.	China	
		Jiangsu Jiangping Air-Condition & Purification Equipment Co., Ltd.	China	
28	Elevator	OTIS	India/China	BOI
		KONE INDIA	India	
		GUANGZHOU HITACHI ELEVATOR CO., LTD	China	
		CHANGZHOU ELEVATOR FACTORY CO.,	China	
		HITACHI	China	
		TRIO ELEVATOR	INDIA	
		Schindler	India/China	
		Mitsubishi	India/China	
		Thyssenkrupp	India/China	
29	Cooling Tower Fan Hub & Blade Assembly	Howden	China	Not IN scope
		Confimco	China	
30	Intake screening equipment for CW pump house & Raw water pump house	Jiangsu Dayang Environmental Protection Engineering Co., Ltd.	China	
		Henan Source Environment Protection Engg Equipment Co Ltd	China	
		Jiangsu Tianma Environmental Protection Science and Technology Group Co., Ltd.	China	
31	LP(AS/SS) Pipes	China Bao feng steel pipe	China	# Refer Note
		Jiangsu Wujing SS steel pipe co Ltd	China	
		Zhejiang Dada SS steel pipe	China	
		Jiangsu chengde	China	
		Hengyang Valin steel tube co	China	
		Anhui Tianda oil pipe Bao steel	China	
		Tianjin Pipe co	China	
		YANTAI LUBO	China	
		Baogang group	China	
		Zhejiang Ningsheng steel pipe	China	

		BO AI PIPE GROUP	China	
		HENGSHUI JINGHUA STEEL PIPE	China	
32	Control Valve	Fisher	USA/Japan	BHEL / BOI
		Flowserve	USA	
		CCI	INDIA/KOREA	
		BHEL	INDIA	
		HORA	WORLDWIDE	
		DAUME	GERMANY	
		KOSO	INDIA	
		SAMPELL (PENTAIR)	GERMANY	
		MIL CONTROLS LIMITED	INDIA	
		DRESSER	USA	
		EMERSON	WORLDWIDE	
		Leslie	USA	
		Weir	UK/China	
		Masoneilan	Japan/France/ USA	
33	COMPENSATOR FOR CROSS OVER PIPE	Witzemann	India	BOI.
		Witzemann	Germany	
		HKS	Germany	
		M B Metallic Bellows	India	
		Aerosun Tola	China	
		Flexican	India	
		Flextherm	India	
		Nanjing Chenguang Tora	China	
		Kompasia	Switzerland	
		Kompaflex	Germany/ Switzerland	
		Lonestar	India	
34	LP CROSSOVER PIPE	Wizemann	India	BHEL Manufacturing shop
		Unitech	India	
		ISGEC	India	
		Lonestar	India	
		Gujarat Infra Pipes Pvt Ltd	India	
		Dee Development	India	
		Bend Joints	India	
		Aerosun Tola	China	
		Nanjing Chenguang Tora	China	
35	NRV'S for extraction	Adams	Germany	BHEL
		Bonetti	Italy	
		Babcock	Spain	
		Weir	USA	OIL MODULE-BOI.
36	MAIN OIL PUMPS	Allweiler (Colfax Group)	Germany	
		ABB	Switzerland	
		BAFFALO PUMP	USA	
		DONGFANG TURBINE CO.LTD.	CHINA	
		EBARA CORPORATION	JAPAN	
		TOSHIBA CORPORATION	JAPAN/INDIA	
		Bosch Rexroth	Germany/ Switzerland/China	
		Alstom Beizhong Power (Beijing) Co.Ltd	China	
		Speri	China	
37	JACKING OIL PUMP & System	Speri	Germany/ Switzerland /China	OIL MODULE-BOI
		TUSACO PUMPS	INDIA	
		HYDAC (INDIA) PVT LIMITED	INDIA	
		DONGFANG TURBINE CO.,LTD.	CHINA	
		DELTA PD PUMPS	INDIA	
		CENLUB	INDIA	
		LEISTRITZ	GERMANY	
		MATZ PUMPS PVT. LIMITED	INDIA	
		Bosch Rexroth	Germany/Switzerland/China	
		Allweiler (Colfax Group)	Germany	OIL PURIFICATION UNIT- BOI
38	OIL PURIFICATION UNIT	Leistritz	Spain	
		Facet	India	
		Alfa Laval	USA	
		Pall Corporation	Germany/ India	
		GEA Westfalia	Germany	
		Roetring	USA	

		Kaydon Filtration	USA	
39	TUBE PLATE COOLER	Hillard	India	# Refer Note
		Tranter	India	
		GEA Ecoflex	India	
		Kelvion	India	
		Alfa Laval	India	
		IDMC	JAPAN	
		HISAKA	South Korea	
40	MAIN OIL TANK	MYTEC	Poland	OIL MODULE-BOI.
		Rockfin Group	Germany	
		Hydac	China	
		Jord	India	
		Enpro Industries Pvt.Ltd.	India	
		Hydac	India	
		Cenlub	India	
		Fil Sep Equipment	India	
		Southern Lubrication	China	
		Shanghai Maosheng	India	
41	HYDRAULIC OIL PUMP	Bosch Rexroth	Germany	HPSU-BOI. (sl.no.41,42,43)
		Leistritz	China	
		Rexroth	Germany	
42	FRF REGENERATION	Rockfin Group	Poland	
		Jord	china	
		Hydac	India/Germany	
		Facet	Germany	
		CJC	Germany /Denmark	
		Pall Corporation	India	
		Hilliard	USA	
43	CONTROL FLUID COOLER	Rockfin Group	Poland	
		Hydac	Germany	
		Funke	Germany	
		Tranter	India	
		Kelvion	Germany	
		Alfa Laval	India	
		Alfa Laval	Sweden	
		IDMC	India	
		HISAKA	JAPAN	
		MYTEC	South Korea	
44	CHANGEOVER DOUBLE FILTER,DUPLEX OIL FILTER WITH OIL CHANGEOVER VALVE	Rockfin Group	Poland	OIL MODULE- BOI.
		Hydac	India/Germany	
		Southern Lubrication	India	
		Boll & Kirch	Germany	
45	HANGERS & SUPPORTS	Lisega	India/Germany	1.HANGERS & SUPPORTS for PIT- BOI. 2.BHEL MANUFACTURED for (GENERATOR AUXILIARIES SCOPE)
		JIANGSU FUTAI	CHINA	
		SARATHI	HYDERABAD	
		Jiangsu Power Equipment Co., Ltd	CHINA	
		DALIAN SPRING	CHINA	
		ITT GRINELL	GERMANY	
		Spring Support	UK	
		SICHUAN HUITONG	CHINA	
		YAMASHITA SEISAKUSHO	JAPAN	
		Pipe supports	UK/India	
		Witzenmann	Germany	
		Dee Development	India	
		Seonghwa	Korea	
46	3-WAY TEMP CONTROL VALVE	Rockfin Group	Poland	OIL MODULE- BOI.
		Hydac	Germany	
		MVA	Germany	
		Amot	UK	
		Xinhua Well Hydraulic System	China	
		Metal One Deutschland Gmbh	Germany	
	LUBE OIL SYSTEM	Hydac	India/Germany	BOI
		Rockfin	Poland	
		Jord	China	
		Enpro Industries Pvt.Ltd	India	
		Cenlub	India	

		Southern Lubrication	India	
		Bosch Rexroth	India	
48	HYDRAULIC OIL SYSTEM	Hydac	India/Germany	
		KAWASAKI PRECISION MACHINERY	Japan	
		PARKER HANNIFIN	JAPAN/ GERMANY	
		Jord	China	
		Rockfin	Poland	
		Bosch Rexroth	India/Switzerland	
49	HP/IP Inner & Outer Casing Casting	ALSTOM Power Sp. z o.o,	Poland	BHEL Manufacturing shop / # Refer Note
		Starwire	India	
		China National Erzhong Group Co,	China	
		JSW	Japan	
		Voest Alpine	Austria	
		Acciaieria Fonderia Cividale SpA	Italy	
		Japan Casting and Forging Company	Japan	
		Goodwin	UK	
		Sande Stahlguss GmbH	Germany	
		ISGEC (UP Steel)	Muzaffarnagar	
		Kobe Steel	Japan	
		Doosan	Korea/Romania	
		Kocel	China	
		L&T Heavy Castings	Hazira	
		Pilsen Steel	Japan	
		DHHI	China	

50	HP/IP/LP Turbine Shaft Forging	Saarschmiede	Germany	BHEL Manufacturing shop / # Refer Note
		Schmiedewerke Gröditz	Germany	
		Buderus Edelstahl	Germany/Austria	
		Cruesot Forge	France	
		Kobe Steel	Japan	
		JSW	Japan	
		Bharat Forge	Pune	
		Doosan Heavy Industries & Cons	Korea	
		SDF Terni	Italy	
		JCFC	Japan	
		L&T Special Steel and Heavy Forgings	Hazira	
		Fomas S.P.A	Italy	
51	HP/IP Stationary & Moving Blades Bar Stock	Acciaierie Valbruna S.p.a.	Italy	BHEL Manufacturing shop / # Refer Note
		Aubert & Duval	France	
		BGH Edelstahl GmbH	Germany	
		Böhler Edelstahl GmbH	Austria	
		Carpenter Technology Co.	USA	
		Daido	Japan	
		Corus Engineering Steels	United Kingdom	
		Gustav Grimm Edelstahlwerke GmbH	Germany	
		Sz-metal Ravne D.o.o.	Slovenia	
		Universal Stainless & Alloy Products, Inc.	USA	
		Boehler Schmiedetechnik	Germany	
		Starwire	Ballabgarh	
		Walzwerke Einsal	Switzerland	
52	HP/ IP valve Castings	Alstom Power Sp. z o.o	Poland	BHEL Manufacturing shop / # Refer Note
		China National Erzhong Group Co	China	
		CSMF	China	
		Star wire	Ballabgarh	
		Voest Alpine	Austria	
		ISGEC (UP Steels)	Muzaffarnagar	
		Gruppo Cividale	Italy	
		Sande Stahl Guss	Germany	
		L&T Heavy Castings	Hazira	
		Goodwin	UK	
		Kocel	China	
		DHHI	China	
53	LP Inner Casing Casting	Alstom Power Sp. z o.o.	Poland	BHEL Manufacturing shop / # Refer Note
		L&T Coimbatore	India	
		L&T Kanshbhal	India	
		CSMF	China	
		FWH Freidrich Wilhems-Hutte GmbH	Germany	
		Heidenheimer Giessen GmbH & Co	Germany	
		DHHI	China	
		L&T Heavy Castings	Hazira	
		ISGEC (UP Steel)	India	
		Starwire	India	
		Pilsen Steel	Czech	
		Beijing Bazhong	China	
		Buderus Spezialguss GmbH	Germany	
54	LP Outer casing complete	Alstom. Projects India Ltd	Shahabad	BHEL Manufacturing shop / # Refer Note
		Alstom Croatia Ltd	Croatia	
		Dalian Heavy Industrial	China	
		Alstom Bharat Forge Power Ltd	Sanand	
		Alstom Beizhong Power (Beijing) Co.Ltd	China	
		Starwire	Ballabgarh	
		D & N	Germany	
		Shape Engineers	Hardwar	
		KCP	Chennai	
		Tisco Growth Shop	Jamshedpur	
		ISGEC	Yamunanagar	
		ESSAR Heavy Engg. Services	Surat	
		Vitkovice	Czech	
		Sharp Engineers	Pune	
		Fushun	China	BHEL Manufacturing shop / # Refer Note
		Acciaierie Valbruna S.p.a.	Italy	
		Aubert & Duval	France	
		BGH Edelstahl GmbH	Germany	
		Böhler Edelstahl GmbH	Austria	
		Carpenter Technology Co.	USA	

55	LP Stationary Moving Blades from Bar	Daido	Japan	
		Corus Engineering Steels	United Kingdom	
		Gustav Grimm Edelstahlwerke GmbH	Germany	
		Sz-metal Ravne D.o.o.	Slovenia	
		Kalyani Carpenter Special Steels	Pune	
		Universal Stainless & Alloy Products, Inc.	USA	
		Boehler Schmiedetechnik	Germany	
		Starwire	Ballabgarh	
		Walzwerke Einsal	Switzerland	
56	LP Cast Blades (Casted)	Formetal (cismocisco)	Italy	BHEL Manufacturing shop / # Refer Note
		PTC	Mehsana	
		Magnacast	Coimbatore	
		Juergens	Germany	
		BSL Casting	Ballabgarh	
		Doloco	China	
		Zollernwerke	Germany	
		Wuxi	China	
57	LP Blade (Last stage)	Alstom (Switzerland) Ltd	Switzerland	BHEL Manufacturing shop / # Refer Note
		Böhler Schmiedetechnik GmbH	Austria	
		C. Blade S.p.a.	Italy	
		Pietro Rosa S.r.l.	Italy	
		Alstom Power Spzoo	Poland	
		Bharat Forge	Pune	
		Azad Engineering	Hyderabad	
		M Tech	Hardwar	
		Wuxi Turbine Blade Works	China	
		Leistritz Turbinenkomponenten GmbH	Germany	
58	LP Moving Blades From Bars - Before last stage	Alstom (Switzerland) Ltd	Switzerland	BHEL Manufacturing shop / # Refer Note
		Böhler Schmiedetechnik GmbH	Austria	
		C. Blade S.p.a.	Italy	
		Leistritz ATC	USA	
		Alstom Power Spzoo	Poland	
		Azad Engineering	Hyderabad	
		M Tech	Hardwar	
		Leistritz Turbinenkomponenten GmbH	Germany	
		Pietro Rosa S.r.l.	Italy	
		Setforge La Clayette	France	
		SMB SA	Switzerland	
		Bharat Forge	Pune	
		Wuxi Turbine Blade Works	China	
59	Bearing Pedastal - Casting	Alstom Sp Z.o.o	Poland	BHEL Manufacturing shop / # Refer Note
		Silbitz Guss	Germany	
		L&T,Coimbatore	Coimbatore	
		L&T,Kansbahal	Kansbahal	
		Acciaieria Fonderia Cividale spA	Italy	
		Kolhapur Steel	Kolhapur	
		L&T Heavy Castings	Hazira	
		ISGEC (UP Steel)	Muzaffarnagar	
		Patel Alloys	Ahmedabad	
		FWH Freidrich Wilhems-Hutte GmBH	Germany	
		Heidenheimer Giessen GmBH &Co	Germany	
		Buderus Spezialguss GmbH	Germany	
		Siemplekamp	Germany	
		Ergotech	Germany	
		DHHI	China	
60	Bearing - Thrust & Journal	Alstom Beizhong Power (Beijing) Co.Ltd	China	BHEL Manufacturing shop / # Refer Note
		Kingburry	USA	
		Omega Bhopal	Bhopal	
		Eurobearing	Italy	
		Wuakesha Bearing	UK	
61	HP/IP Joint Bolts	Alstom Beizhong Power (Beijing) Co.Ltd	China	BOI-Customer control not required. # Refer Note
		Hebei Guoyuan	China	
		Ultra	Pune	
		Atlas Fasteners	Hyderabad	
		Daido	Japan	
		Azad Engineering	Hyderabad	
		Bhart Forge	Pune	

		Kalyani Carpenter Special Steels	Pune	
		Mahindra Ugine	Raigad	
		Omega,Haridwar	Hardwar	
		Starwire	Ballabhgarh	
62	TURBINE INTEGRAL PIPING	Dee Development	India	BOI.
		BEND JOINTS	India	
		UNITECH	India	
		L&T Piping	India	
		ISGEC	India	
		Gujarat Infra Pipes	India	
		South china pipe	China	
63	TI PIPING VALVES	KSB	India/ Germany	BHEL
		Koso	India	
		Weir	India	
		Velan	Canada	
		Valve Technologies	India	
		L & T	India	
64	HP & LP VALVES FOR BTG(GATE, GLOBE, CHECK & BALL VALVE)	SPX	UK	
		Forbes Marshall Limited	India	
		KSB	India	
		China Shuangheng	China	BHEL
		Freet	China	
		Jiangsu YDF	China	
		Shandong Su High Valve Co.Ltd	China	
		WEIR - BDK	India	
		MIL Controls Limited	India	
		BOOP & REUTHER	GERMANY	
		BHEL	TRICHY	
		Dresser Valves	India	
		HE Harbin Power Plant Valve Co.,Ltd	China	
		Kolflow	China	
		HENAN KAIFA VALVE CO.,LTD	China	
		Fisher Sanmar Limited	India	
		Emerson Process Management	India	
		IL Limited	India	
		TYCO	India	
		HP VALVES	NETHERLANDS	
		Sempell	Germany	
		Persta	Germany	
		L&T	India	
		Dresser	USA	
		Koso	India	
65	GLAND STEAM CONDENSER	Hering	Germany	BHEL
		Mazda	India	
		GE Godavari	India	
		GEI Industries	India	
		TNS SP ZOO	Poland	
		Hubei Dangfend Heat Exchanger	China	
		DONGFANG TURBINE CO.LTD.	CHINA	
		HARBIN TURBINE AUXILIARY EQUIPMENT ENGINEERING CO., LTD	CHINA	
		TSUBAKI NAKASHIMA CO LIMITED	Japan	
		SHANGHAI ELECTRIC CORPORATION	CHINA	
		VDL Delmas	Germany	
		OELTECHNIK FRANCE	France	
		Standard Xchange	USA	
		Przedsiębiorstwo Usługowo Produkcyjno Handlowe NIWA J.J.Niwa Sp.Jawna	Poland	
		Hangzhou Guoneng Steam Turbine Engineering Co., Ltd.	China	
66	GLAND STEAM EXHAUSTER WITH MOTOR	Hering	Germany	BOI
		C-Doctor	India	
		TSUBAKI NAKASHIMA CO., LTD	JAPAN	
		GE GODAVARI	MEDAK AP INDIA	
		DONGFANG TURBINE CO.LTD.	CHINA	
		HARBIN TURBINE AUXILIARY EQUIPMENT ENGINEERING CO., LTD	CHINA	
		Mazda	India	
		SHANGHAI ELECTRIC CORPORATION	CHINA	

		Nadi Air Technics	India	
67	THERMAL INSULATION	Lloyd Insulation (India) Ltd.	India	BOI THERMAL INSULATION OF TURBINE, THERMAL INSULATION OF TURBINE INTEGRAL PIPING- BOI
		Minwool Rock fibers Limited	India	
		UNIFAX INDIA LIMITED	India	
		MURUGAPPA MURUGAN	India	
		Roxul Rockwool Technical Insulation	India	
		Goenka Rockwool India Limited	India	
		Poly Bond Insulation	India	
		Lapinus Rockwool Pvt Ltd	India	
68	Seal Oil Pump	Allweiler	Germany	BOI - Customer control not required
		TUSHACO	India	
		UT PUMP	India	
69	Air Cooler for Brush Gear (If applicable)	GEA	Germany/China/Poland	# Refer Note
		UT PUMP	China	
		GEA	Switzerland	
70	Stator water cooling unit	DFEM	Poland	BHEL
		Cold & Hot	China	
		Rockfin	China	
		Shanghai Xinhua	India	
		Beijing Zhongnegf	China	
		SOUTHERN LUBRICATION	Italy	
		Energas	India	
		Flenco	India	
		Lincoln	India	
		Enpro	India	
		CENLUB	India	

71	Seal Oil Cooler	Kelvion	India	BOI / # Refer Note
		GEA Ecoflex(Kelvion)	India/ Germany	
		ALPHA LAVAL	Poland/Europe	
		Hering	Germany	
		ALPHA LAVAL	Sweden/Germany	
		THERMOWAVE	Germany	
		TRANTER	India	
72	Seal Oil Unit	Beijing Zhongnegf	China	BHEL
		Rockfin	Poland	
		Shanghai Xinhua	China	
		Rotan	Germany	
		Energas	China	
		Flenco	Italy	
		SOUTHERN LUBRICATION	India	
		CENLUB	India	
		ENPRO INDUSTRIES	India	
		Hydac India	India	
73	Hydrogen Cooler	GEA	Germany	BHEL
		Dengfeng Unifin	China	
		TEMA	India	
		Laxmi	India	
		Fitwell	India	
		GEI INDUSTRIES	India	
		Funke	Germany	
		Thermax Group	India	
74	Hydrogen dryer	Jinda l electrical	India	BOI / BHEL– Customer control not required
		Melcon engg	India	
		Rockfin	Poland	
		Rotan	Germany	
		SPERI	China	
		Span Manufacturing	India	
		Xinhua Well Hydraulic System	China	
75	Control valve for feedwater flow Control	CCI	USA/Austria /Korea	BOI
		Dressor Masoneilan	France	
		HORA	Germany	
		EMERSON (Fisher)	USA/France /Japan	
		CCI	Sricity	
		Sempell	Germany	
		KOSO	Japan	
		Yamatake	JAPAN	
		Nakikta	Japan	
		MOTOYAMA	Japan	
		BOPP & ROUTHER	Germany	
		MIL	Alwaye	
76	Control valve(Other than BFP RC, FW flow Control.)	MIL	Alwaye	BOI
		EMERSON	Chennai	
		Dressor	Coimbatore	
		Spx Copes Vulcan	UK	
		Leslie	USA	
		Flow Serve	Bangalore	
		KOSO	Palakkad	
		CCI	Sricity	
		BOMAF A	Germany	
		MOTOYAMA	Japan	
77	Lube oil control valve - Self Regulating	NUOVO PIGNONE	ITALY	BOI
		EMERSON	CHENNAI	
		SAMSON	GERMANY / PUNE	
		Forbes Arca	Pune	
78	ALLOY STEEL/CARBON STEEL FORGING FOR FITTINGS/FLANGES	INDIAN FORGING & STAMPING	INDIA	# Refer Note
		HINDUSTAN FORGE	INDIA	
		BAY FORGE	INDIA	
		VIKRANT FORGE	INDIA	
		BHARAT FORGE	INDIA	
		PUNJAB HAMMER	INDIA	
		KISSAN FORGING LTD.	INDIA	
		CHW FORGE	INDIA	
		BHARAT FORGE	INDIA	
		CHW(CHAUDHRAY HAMMER WORKS)	INDIA	
		ECHJAY INDUSTRIES	INDIA	
		LAL METAL	INDIA	
		PRAKASH YANTRA UDYOG PVT LTD.	China	
		BAOSHAN IRON STEEL CO PRECISION STEEL TUBE FACTORY	China	
		CHANGZHOU CHANGBAO PRECISION STEEL TUBE CO., LTD.	China	

		SHANGHAI CHANGQIANG POWER STATION FITTINGS CO., LTD.	China	
		GUIZHOU HANGTIAN XINLI	China	
		WUHAN HEAVY EQUIPMENT CO.,LTD	China	
79	BASALT LINED PIPE/FITTING & BENDS	DEMECH	BARAMATI, PUNE	# Refer Note
		BMW STEEL	INDIA	
		ENVIRO-ABRASION RESISTANT ENGINEERS PVT LTD	PUNE	
		TURBO ENGINEERS (CBE)	COIMBATORE	
		HULUDAO CITY HUANENG INDUSTRIAL CERAMICS CO.,LTD	China	
		NANTONG GAOXIN ANTIWEAR TECHNOLOGY CO., LTD	China	
		SUZHOU SHANGCHUNYI	China	
80	Bearing	TIMKEN	FRANCE/USA/CANADA/MEXICO/ GERMANY	BHEL
		NTN	NETERLANDS/FRANCE/GERMANY/ITALY/ROMANIA	
		KOYO	JAPAN	
		NKC	SWEADEN/INDIA/FRANCE/IRELAND/ITALY	
		SKF	GERMANY/JAPAN/SPAIN/FRANCE/BRAZIL	
		FAG	UK	
81	BOILER CIRCULATING/FEED WATER PUMP (BFP)	HAYWARD TYLER ENGINEERED PRODUCTS LIMITED	CHINA	BHEL
		POWER CHINA SPEM CO. LTD.	GERMANY/ CHINA	
		KSB	JAPAN	
		TOROSIMA PUMP MFG CO LIMITED	WORLDWIDE	
		GE	HYDERABAD- INDIA	
		BHEL	UK, CHINA, MUMBAI INDIA	
		SULZER	CHINA, SPAIN, COIMBATORE INDIA,	
		FLOWSERVE	UK	
		CLADE UNION	JAPAN/CHINA	
		EBARA	JAPAN/CHINA	
		TORISIMA	JAPAN	
		HITACHI	JAPAN	
		MHI	KOREA	
		HYUNDAI HEAVY INDUSTRY LIMITED	CHINA	
		POWER CHINA SHANGHAI POWER EQUIPMENT MANUFAC	INDIA	
82	CASTABLE REFRACTORY	TATA REFRACTORIES LTD.	INDIA	NA in STG
		CALDERYS INDIA REFRACTORIES LTD	INDIA	
		SHARADA CERAMICS PVT.LTD	INDIA	
		CARBORANDUM UNIVERSAL	INDIA	
		CASTWEL	CHINA	
		WUXI YIGANG REFRACTORIES CO.,LTD	CHINA	
		SUZHOU LANJING	CHINA	
		SHANDONG LUYANG	CHINA	
		HEBEI HUANENG	CHINA	
83	COMPRESSORS-HYDROGEN	BEIJING JINGCHENG COMPRESSOR CO.	CHINA	NA
		BEIJING TITANGAO DIAPHRAGM COMPRESSOR CO. LTD	CHINA	
		BEIJING HUIZHI ELECTROMECHANICAL EQUIPMENT CO. LTD	GERMANY	
		NEYMAN & ESSAR ENGG PVT LTD	JAPAN	
84	Combined main stop and control valve/combined reheat valve	TOSHIBA CORPORATION	INDIA	BHEL
		BHEL	CHINA	
		SHANGHAI TURBINE	CHINA	
		DONGFANG TURBINE CO.LTD. - ALONG WITH TURBINE	INDIA	
		L & T VALVES	INDIA/KOREA/SWEDEN	
		CCI	GERMANY	
85	COMPENSATOR - NON METALLIC EXPANSION JOINTS	WILZMANN	GERMANY	NA in STG
		FLEXICON	INDIA	
		KOMPAFLEX	INDIA	
		BERGMAN		
		NANTONG SHUGUANG BELLOWS MANUFACTURING CO., LTD	CHINA	
		LONESTAR	INDIA	
		FLEXATHRAM	INDIA	
		JIANGSU TONGYI ELECTRIC POWER EQUIPMENT CO.,LTD	CHINA	
		ALSTOM / GE POWER SYSTEM	FRANCE	BHEL
		BHI	KOREA	
		L&T	HAZIRA	
		SIEMENS	GERMANY	
		SPX	USA	
		SPX	CHENNAI INDIA	
		HOLTEC	USA	

86	CONDENSER	STF	ITALY	
		FOSTER WHEELER	SPAIN	
		BHEL	HARDWAR- INDIA	
		GODRAJ	MUMBAI- INDIA	
		ISGEC	YAMUNANAAGAR-INDIA	
		SHANGHAI ELECTRIC GENERATION CO	CHINA	
		SHANGHAI ELECTRIC GROUP CO., LTD.	CHINA	
		DONGFANG TURBINE CO., LTD	CHINA	
		HARBIN TURBINE CO LTD	CHINA	
		HANGZHOU STEAM TURBINE CO., LTD.	CHINA	
		DONGFANG TURBINE CO.LTD.	CHINA	
87	CONDENSER ONLINETUBE CLEANINGSYSTEM (RUBBERBALL CLEANING SYSTEM AND MOTOR DRIVE WATER PURIFIER)	GEA-BGR	INDIA	BOI
		MULTITEX FILTER ENGINEERING CO	INDIA	
		TECHNO	FRANCE	
		TOPRAGGE	GERMANY, CHINA, KOREA	
		WUXI HONGXIANG POWER AUXILIARYEQUIPMENT CO., LTD.	CHINA	
		QINGDAO HUATAI ELECTRIC EQUIPMENT CO., LTD.	CHINA	
		SHANGHAI TAPROGGE WATER TECH ENGINEERING CO LTD	CHINA	
		QINGDAO HUATAI ELECTRIC EQUIPMENTCO., LTD.	CHINA	
		CHINA HUADIAN ENGINEERING CO LTD	CHINA	
		NANJING CEC ENVIRO- PRO ENGINEERING CO LTD	CHINA	
		XI'AN THERMAL POWER RESEARCHINSTITITE CO LTD	CHINA	
		JIANGSHU ZHONGNENG POWER EQUIPMENT CO. LTD	CHINA	
88	DAMPERS(GUILLOTINE DAMPERAT ESP)	BACHMANN	INDIA	BHEL
		WUXI HUADONG ELECTRIC POWEREQUIPMENT CO LTD	CHINA	
		LANZHOU CHANGZIN POWER EQUIPMENT CO LTD	CHINA	
		JIANGSU HAIHONG MACHINERY MANUFACTURING CO. LTD	CHINA	
		WUXI HUATONG ENVIRONMENTAL PROTECTION EQUIPMENT CO. LTD	CHINA	
		INDIRA DAMPERS	INDIA	
		FOURESS ENGINEERS	INDIA	
		DECCAN MECHANICAL & CHEMICAL INDUSTRIES PVT LTD (DEMECH)	INDIA	
89	DEAERATOR	TOSHIBA CORPORATION	INDIA/CHINA	BHEL
		SHANGHAI ELECTRIC POWER EQUIPMENT CO. LTD. (SHANGHAI EQUIPMENT MANUFACTURING CO. LTD.)	CHINA	
		TJPS	CHINA/ INDIA	
		LARSEN & TOUBRO LTD	INDIA	
		SHANGHAI ELECTRIC POWERGENERATION EQUIPMENT CO. LTD.	CHINA	
		SHANGHAI ELECTRIC GENERATIONEQUIPMENT CO. LTD.	CHINA	
		DONGFENG ELECTRIC HENAN POWERSTATION AUXILARY EQUIPMENT MFG. CO.	CHINA	
		ALSTOM POWER SYSTEM	FRANCE	
		HOLTEC	USA	
		STORK	NETHERLAND	
		GODREJ MNFR CO.	INDIA	
		ISGEC	INDIA	
		TEMA	INDIA	
		KASAS CITY DEAERATOR	USA	
		UNIVERSAL HEAT EXCHANGER	COIMBATORE	
		BGR ENERGY SYSTEM LIMITED	INDIA	
		ALSTOM BHARAT FORGE	SANAND - INDIA	
		SHANGHAI ELECTRIC CO (SEC)	CHINA	
		DONGFANG ELECTRIC CO (DEC)	CHINA	
		DONGFANG BOILER GROUP CO., LTD.	CHINA	
		HARBIN BOILER CO., LTD.	CHINA	
		HANGZHOU BOILER GROUP CO., LTD.	CHINA	
		VELAN	INDIA	BHEL
		L&T VALVES	INDIA	
		KSB	INDIA	
		MIL	INDIA	
		LVF	ITALY	
		DOUGLAS	ITALY	
		HP/KVT	KOREA/NETHERLANDS	

90	DRAIN VALVES - BTG(HIGH PRESSURE-IBR)	VELAN	INDIA/CANADA	
		WEIR - BDK	INDIA	
		FOURESS	INDIA	
		CONVAL	USA	
		SEMPELL	GERMANY	
		GRV	GERMANY	
		BOMABA	GERMANY	
		KSB	GERMANY	
91	DOSING PUMP	MILTON ROY	INDIA/CHINA	NA in STG
		VK PUMPS INDUSTRIES PVT. LTD.	INDIA	
		POSITIVE METERING PUMP	INDIA	
		RUD INDIA LIMITED	INDIA	
		ROSEMOUNT	USA	
92	EXPANSION JOINTS (RUBBER)	CORI ENGINEERS	CHENNAI INDIA	BHEL
		SRM ECO FLEX	KOLKATA	
		JIANGSU RISHENG	CHINA	
		AEROSUN CORPORATION	CHINA	
		JIANGSU BAIXIN	CHINA	
93	EMERGENCY OILPUMP FOR TG	EBARA YOSHIKURA HYDROTEC LIMITED	JAPAN	OIL MODULE-BOI.
		MATHER & PLATT	INDIA	
		KSB PUMPS	INDIA	
		CHENGDU INSTITUTE OF PUMPS APPLICATION TECHNOLOGY.	CHINA	
		SULZER PUMPS INDIA LIMITED	INDIA/CHINA	
		DONGFANG TURBINE CO.,LTD.	CHINA	
94	FABRICATION & SUPPLY OF STEEL STRUCTURE	DIAMOND ENGG	INDIA	BHEL
		KPE	KOREA	
		SHANDONG YIJEHONGFENG ENERGY EQUIPMENT CO.	CHINA	
		SUNG CHANG INDUSTRY CO., LTD	KOREA	
		SAM JIN STEEL STRUCTURE CO., LTD	KOREA	
		BOSUNG POWERTEC. CO. LTD	KOREA	
		DONG AH CONSTRUCTION	KOREA	
		DAE JOO HEAVY INDUSTRIES	KOREA	
		SEUNG BOO INDUSTRY	KOREA	
		SHANDONG YIJEHONGFENG ENERGY EQUIPMENT CO., LTD	CHINA	
		SIMPLEX ENGG	INDIA	
		SHANGHAI BAOYE GROUP CORPORATION	CHINA	
		ZHEJIANG FEIDA ENVIRONMENT SCIENCE & TECHNOLOGY	CHINA	
		ZHEJIANG HANGXIAO STEEL STRUCTURE CO., LTD	CHINA	
		XINLAI CO. LTD. - QINGDAO	CHINA	
		QINGDAO EAST STEEL TOWER STOCK CO. LTD.	CHINA	
		JSW SEVERFIELD	INDIA	
		TECHNO FAB	INDIA	
		FUJIAN LONG KING	CHINA	
		ZHEJIANG FEIDA ENVIRONMENT SCIENCE & TECHNOLOGY	CHINA	
		ESSAR	INDIA	
		CAPACITE STRUCTURE (PRATIBHA	INDIA	
		MCC5 Group Corporation Limited(Shanghai)	CHINA	
95	FGD	CPI YUANDA ENIRONMENTAL PROTECTION ENGINEERING CO., LTD	CHINA	Not in Scope
		BHEL	INDIA	
		ZHEJIANG FEIDA	CHINA	
		THERMAX	INDIA	
		CHINA DATANG TECHNOLOGIES	CHINA	
		GE	INDIA	
		SPIC YUANDA ENVIRONMENTAL PROTECTION ENGINEERING CO., LTD	CHINA	
		FJLK	CHINA	
		ISGEC	INDIA	
		BEIJING GUODIAN LONGYUAN ENVIRONMENTAL ENGINEERING CO., LTD	CHINA	
		WUHAN KAIDI ELECTRIC POWER ENVIRONMENT TECHNOLOGY CO., LTD	CHINA	
		LONGJING ENVIRONMENT TECHNOLOGY CO., LTD	CHINA	
		DONGFANG BOILER GROUP CO.,	CHINA	
		BEIJING SPC ENVIRONMENT PROTECTION TECH CO., LTD	CHINA	# Refer Note
		DAEWOO BOLT CO.,LTD	KOREA	
		CESHIN METAL INDUSTRY CO.,LTD	KOREA	
		KPF	KOREA	
		NEXO FASTENERS	LUDHIANA	

100	FOUNDATIONS BOLTS FOR BTG	ELECON	ANAND	
		STEEL PROJECTS INDIA PVT. LTD	INDIA	
		R.C. DAS ENGINEERING PVT. LTD	INDIA	
		GTV ENGG. LTD.	INDIA	BHEL
		DIAMOND ENGINEERING (CHENNAI) PVT	INDIA	
		NingBo Zhongjing electrical technolo Co.,LTD	CHINA	
		ZIGONG DONGFANG RENENG	CHINA	
101	FRP Ladder	ARVIND COMPOSITE	AHMEDABAD	BHEL
		EPP COMPOSITE	RAJKOT	
		SUMIP COMPOSITES PVT LTD	AHMEDABAD	
		ZIGONG DONGFANG EQUIPMENT	CHINA	
		ZIGONG DONGFANG STEEL STRUCTURE	CHINA	
102	GEAR BOX WITH LUBRICATION SYSTEM & INPUT COUPLING-	FOSHAN NANHAI DAHE	CHINA	BHEL
		ELECON	VV NAGAR	
		PREMIER TRANSMISSION LTD.	PUNE, 24 PARGANA (WB)	
		DAVID BROWN BHARAT FORGE GEAR SYSTEM INDIA LTD.	UK	
		HYOSUNG	SOUTH KOREA	
		SEISA GEAR LTD	JAPAN	
		FLENDER	CHINA	
		SEW	CHINA	
		SHANTI	COIMBATORE	
		RADICON	USA, UK, THAILAND, AUSTRALIA	
		NEW ALLENBURY WORKS(NAW)	KOLKATA	
		BEIJING POWER EQUIPMENT GROUP (CHINA	
		SHANGHAI ELECTRIC SHMP PULVERIZING & SPECIAL EQUIPMENT CO.,LTD	CHINA	
103	GLAND STEAM EXHAUSTER	DONGFANG TURBINE CO.,LTD.	CHINA	BOI
		TSUBAKI NAKASHIMA CO LIMITED	JAPAN	
		SWEDEN OKAMOTO	JAPAN	
		SUIDEN OKAMOTO	JAPAN	
		TSUBAKI NAKASHIMA CO., LTD	JAPAN	
		GE GODAVARI	MEDAK AP INDIA	
		MAZDA LIMITED	INDIA	
		HERING AG	GERMANY	
		DONGFANG TURBINE CO.LTD.	CHINA	
		HARBIN TURBINE AUXILIARY EQUIPMENT ENGINEERING CO., LTD	CHINA	
		SHANGHAI ELECTRIC CORPORATION	CHINA	
104	GRATING	SUHHEUNG ENGINEERING CO., LTD	KOREA	NA in STG
		SANGJIN DEVELOPMENT CO., LTD	KOREA	
		KOOKJAE METAL CO., LTD	KOREA	
		KANADE ANAND UDYOG	INDIA	
		GREATWELD STEEL GRATING	INDIA	
		JAMNA METAL CO	INDIA	
		PATNY SYSTEMS P. LTD.	INDIA	
		SUTTATI	INDIA	
		GALFAN ENGINEERING	INDIA	
		XINXING STEEL GRATINGS	CHINA	
		CHENGDU STEEL PIPE	CHINA	
		WUXI ZHENGDE	CHINA	
		SINOSTEEL	CHINA	
		INDIANA GRATINGS	PUNE	
		ELECTROFORGE	INDIA	
		ZIGONG DONGFANG EQUIPMENT	CHINA	
		ZIGONG DONGFANG STEEL STRUCTURE	CHINA	
		FOSHAN NANHAI DAHE	CHINA	
105	LUBE OIL PURIFIER	GEA WESTFALIA SEPARATION	INDIA/GERMANY	BOI
		PENWALT CORPORATION	UK	
		HYDAC TECHNOLOGY	GERMANY/POLAND/INDIA	
		FACET	SPAIN	
		PALL CORPORATION	USA	
		CHENGDU INSTITUTE OF PUMPS	CHINA	
		ROETRING	GERMANY	
		KAYDON FILTRATION	USA	
		ROCKFIN	POLAND	
		HILLARD	USA	
		JORD	CHINA	

107	MAIN OIL COOLER (PLATE TYPE)	DONGFANG TURBINE CO.LTD.	CHINA	BOI
		BOLL & KRICH FILTER	WORLDWIDE	
		ALFA LAVAL	SWEDEN/ JAPAN	
		APV	USA	
		GEA ECOFLEX	GERMANY	
		IDMC	INDIA	
		HISAKA WORKS	JAPAN	
		TRANTER	India	
		DONGFANG TURBINE CO.LTD.	CHINA	
		SPX (SHANGHAI) FLOW TECHNOLOGY CO. LTD.	CHINA	
		LHE	KOREA	
		MYTEC	SOUTH KOREA	
		STANDARD EXCHANGE	USA	
108	MAIN OIL TANK VAPOUR EXECUTOR	CONTAC	ITALY	OIL MODULE-BOI.
		OHIRD SANGYO CO LIMITED	JAPAN	
		SWEDEN OKAMOTO BLOWER CO LIMITED	JAPAN	
		TECHNO WASHING CO LIMITED	JAPAN	
		DONGFANG TURBINE CO.LTD.	CHINA	
109	METALLIC EXPANSION	HKR ,INCHON	KOREA	BOI
		YONGKWANG FLEXIBLE INDUSTRIAL CO.,	KOREA	
		CORI ENGINEERING	INDIA	
		EAGLE BERGMANN	INDIA	
		LONESTAR	CHENNAI	
		SUR INDUSTRIES	KOLKATA	
		FLEXICON BELLOWS& HOSES PVT LTD	VADODARA	
		FLAXICON	CHENNAI INDIA	
		MB METALLIC BELLOWS	CHENNAI INDIA	
		WITZEMANN	GERMANY	
		HKS	GERMANY-	
		KOMPAFLEX	GERMANY-	
		MOURO & MILLER	UK	
		BIRD PRECISION	UK	
		TURBO FLEX	GERMANY	
		FLAXITHERM	VADODARA	
		SANGHAI HEAVY MACHINERY PLANT CO.	CHINA	
		ATULYA BELLOWS	INDIA	
		B D EXPANSION	INDIA	
		DONGFANG TURBINE CO.LTD.	CHINA	
		HKR	KOREA	
		NEURON	JAPAN	
		NIPPON	JAPAN	
		THERMOFLEX	JAPAN	
		SJM	KOREA	
		FLEXPART	BELGAUM (KARNATAKA)	
		JIANGSU TONGYI ELECTRIC POWER EQUIPMENT CO.,LTD	CHINA	
110	PIPE : CARBON/LOW ALLOY SEAMLESS PIPE(P11, P12,P22,ASTM A106 GR B) FOR BTG	HENGYANG	CHINA	# Refer Note
		BENTELER STEEL TUBE GMBH	GERMANY	
		HMT (HEAVY METAL TUBE)	INDIA	
		IBF SPA	ITALY	
		IL JIN STEEL	KOREA	
		ISMT (INDIAN SEAMLESS METAL TUBE)	INDIA	
		JFE STEEL	JAPAN	
		KASCO	KOREA	
		PRODUCTOS TUBULARES	SPAIN	
		SUMITOMO METAL / NSSMC	JAPAN	
		TENARIS	ITALY, ARGENTINA	
		TENARIS NKK	JAPAN	
		BAO STEEL	CHINA	
		CHANGZHOU CHANGBO PRECISION	CHINA	
		TIANJIN PIPE CORPORATION	CHINA	
		TPS	GERMANY	
		US STEEL	USA	
		V & M	FRANCE, GERMANY,	
		WYMAN GORDON	USA	
		YANGZHOU CHENGDE STEEL PIPE	CHINA	
		VALLOUREC & MANNESMANN TUBEES	FRANCE/ GERMANY	
		ARCELOR MITTAL TUBULAR PRODUCTS	ROMANIA / S.A.	
		TUBOS REUNIDOS INDUSTRIAL S.L.U.	SPAIN	
		VALCOVNY TRUB CHOMUTOV	CZECH REPUBLIC	
		TIANJIN PIPE CORPORATION	CHINA	
		INNER MONGOLIA NORTHERN HEAVY INDUSTRIES GROUP	CHINA	
		CHANGZHOU CHANGBAO	CHINA	
		YANGZHOU LONTRIN	CHINA	
		BAOSHAN IRON AND STEEL	CHINA	
		SAIL	INDIA	

111	PLATES - STRUCTURAL STEEL	TATA STEEL	INDIA	# Refer Note
		JINDAL STEEL	INDIA	
		POSCO	KOREA	
		DILLINGER HUTTE	GERMANY	
		INDUSTEEL LOIRE	FRANCE	
		INDUSTEEL BELGIUM	BELGIUM	
		JFE STEEL	JAPAN	
		KOBE STEEL	JAPAN	
		NSC / NSSMC	JAPAN	
		ARCELOR MITTAL	USA, NETHERLANDS	
		DONGKUK	KOREA	
		HYUNDAI HYSCRO	KOREA	
		DKC	KOREA	
		ILSENBURGER	GERMANY	
		SALZGITTER	GERMANY	
		SPECIAL METAL	USA	
		ALLEGHENY LUDLUM	USA	
		NSSC	JAPAN	
		NIPPON YAKIN	JAPAN	
		AK STEEL	USA	
		HANWHA	KOREA	
		ASAHI KASEI	JAPAN	
		DMC NOBEL CLAD	USA	
		JSW	JAPAN	
		VOEST ALPINE	AUSTRIA	
		OUTOKUMPU STAINLESS AB, SPECIAL	GERMANY	
		OUTOKUMPU STAINLESS AB, AVESTA	SWEDEN	
		BAO STEEL	CHINA	
		NOVELIS KOREA	KOREA	
		ESSAR STEEL	INDIA	
		JOIL ALUMINUM	KOREA	
		THYSSEN KRUPP VDM	GERMANY	
		WUYANG IRON AND STEEL	CHINA	
		CHONGQING IRON AND STEEL	CHINA	
		ANSHAN STEEL	CHINA	
		BAOSHAN IRON AND STEEL	CHINA	
		ANYANG IRON AND STEEL	CHINA	
		RIZHAO STEEL	CHINA	
		WUHAN STEEL	CHINA	
112	PLATES (PRESSURE VESSEL)	SAIL	INDIA	# Refer Note
		TATA STEEL	INDIA	
		JSPL	INDIA	
		UTTAM VALUE STEEL (LLOYDS STEEL)	INDIA	
		RINL	INDIA	
		ESSAR STEEL	INDIA	
		BHUSHAN STEELS	INDIA	
		ISPAT INDUSTRIES LTD	INDIA	
		WELSPUN CORP.	INDIA	
		JSW / ISPAT	INDIA	
		POSCO	KOREA	
		DILLINGER	GERMANY	
		REINER BRANCH GMBH & CO. KG	GERMANY	
		ILSENBURGER GROBBLECH (SALGZITTER MANNESMAN)	GERMANY	
		VOESTALPINE GROBBLECH GMBH	AUSTRIA	
		SUMITOMO METAL / NSSMC	JAPAN	
		NIPPON STEEL CORPORATION	JAPAN	
		THYSSEN KRUPP STAHLUNION GMB	GERMANY	
		ARCELLER MITTAL	UK/ROMANIA/JAPAN	
		DONGKUK STEEL	KOREA	
		CORUS	UK	
		WUYANG IRON AND STEEL	CHINA	
		CHONGQING IRON AND STEEL	CHINA	
		ANSHAN STEEL	CHINA	
		BAOSHAN IRON AND STEEL	CHINA	
		ANYANG IRON AND STEEL	CHINA	
113	PLATE (LAS) FOR PRESSURE VESSEL	UTTAM VALUE STEEL (LLOYDS STEEL)	INDIA	# Refer Note
		JSPL	INDIA	
		ESSAR STEEL	INDIA	
		SAIL	INDIA	
		DILLINGER	GERMANY	
		NIPPON STEEL CORPORATION	JAPAN	
		JFE STEEL	JAPAN	
		KOBE STEEL	JAPAN	
		VOESTALPINE GROBBLECH GMBH	AUSTRIA	
		POSCO	KOREA	
		SALTZGUITTER	GERMANY	
		ARCELLOR MITTAL	ROMANIA	
		DUFERRCO DEUTSCHLAND GMBH	GERMANY	


		THYSSEN KRUPP	GERMANY	
		CHONGQING IRON AND STEEL	CHINA	
		ANSHAN STEEL	CHINA	
		BAOSHAN IRON AND STEEL	CHINA	
		ANYANG IRON AND STEEL	CHINA	
		WUHAN STEEL	CHINA	
114	PLATES (SS) FOR PRESSURE VESSEL	JSL STAINLESS LTD	INDIA	
		SAIL	INDIA	
		INDUSTEEL	BELGIUM	
		NIPPON STEEL CORPORATION	JAPAN	
		KOBE STEEL	JAPAN	
		SMST	JAPAN	
		DILLINGER	GERMANY	
		SALTZGUITTER	GERMANY	
		POSCO	KOREA	
		SUMITOMO METAL / NSSMC	JAPAN	
		OUTOKUMPO	FINLAND	
		VOESTALPINE	AUSTRIA	
		DILLING-GTS VENTES	FRANCE	
		THYSSENKRUPP	GERMANY	
		DAEKUNG	KOREA	
		SANDVIK GMBH	GERMANY	
		SHANXI TAIGANG STAINLESS	CHINA	
		BAOSHAN IRON AND STEEL	CHINA	
		ANSHAN STEEL	CHINA	
115	PRESSURE REDUCING AND DESUPERHEATING SYSTEM	SPIRAX MARSHALL	PUNE	BHEL / BOI
		CIRCOR	AHMEDABAD	
		BHEL	INDIA	
		BOMAFSA SPECIAL VALVE	INDIA	
		MECASTER FLOW SOLUTION PVT. LTD.	NARODA, AHMEDABAD	
		JIANGSU ZHONGWEI MACHINERY MANUFACTURING CO., LTD.	CHINA	
		CHINA VALVE CO., LTD.	CHINA	
		L&T	INDIA	
116	PUMP- HORIZONTAL CENTRIFUGAL	WPIL	GHAZIABAD/KOLKATTA	BHEL / BOI
		FLOWMORE	GHAZIABAD	
		KBL	KIRLOSKARVADI	
		KSB	PUNE/CHINA	
		MATHER & PLATT	PUNE	
		FLOWSERVE CONTROLS INDIA LTD		
		SULZER PUMPS	MUMBAI/CHINA	
		SAM TURBO	COIMBATORE	
		GRUNDFOS PUMPS PVT. LTD.	CHENNAI	
		EBARA MACHINERY ZIBO CO. LTD.	CHINA	
		DALIAN SONGLONG PUMP MANUFACTURE CO., LTD.	CHINA	
		DALIAN DEEP BLUE PUMP CO., LTD.	CHINA	
		Guangzhou Xinheng Pump Manufacturing Co., Ltd.	China	
		SHANGHAI PUMP MANUFACTURE CO.,	CHINA	
		XYLEM	CHINA	
		TORISHIMA	CHINA	
		HITACHI PUMP MANUFACTURING (WUXI) CO., LTD.	CHINA	
		ANDRITZ (CHINA) LTD.	CHINA	
		FLOWSERVE FLUID MOTION AND CONTROL (SUZHOU) CO., LTD.	CHINA	
		RUHRPUMPEN CHINA CO. LTD.	CHINA	
		Jiangsu Double-Wheel Pump Machinery Co., Ltd.	CHINA	
		ARMSTRONG PUMPS	BANGALORE	
		CHANGSHA PUMP	CHINA	
		JIANGSU SHUANGDA PUMP	CHINA	
117	RUBBER LINING FOR PRESSURE VESSEL & PIPES- WTP	RISHI INDUSTRIES	SONIPAT	BHEL /
		JASMINO POLYMERTECH PVT. LTD.	RAIGAD	
		ELASTOMER LINING WORKS	THANE	
		INDUSTRIAL LINING	VADODARA	
		LATHIA POLYMER	AHMEDABAD	
		MADRAS INDUSTRIAL LINING	CHENNAI	
		SHRI RAM RUBTECH	VADODARA	
		SHIV RUBTECH	AHMEDABAD	
		WESTERN RUBBER	NAVI MUMBAI	
		C. DOCTOR	INDIA	BHEL
		PATEL AIRTEMP	INDIA	
		MULTIMAX ENGINEERSWORKS	INDIA	
		DONGWHA ENTEC CO. LTD	KOREA	
		PROGEN SYS TECH LTD	INDIA	
		BARODA EQUIPMENT & VESSELS PVT LTD	INDIA	

118	SCAPH/RAPH/DE SUPERHEATER- STEAM COIL AIR PRE HEATER	BHEL	INDIA	
		DONGHWA MACHINERY & ENGINEERING CO.LTD.	KOREA	
		SHINHAN HEAT EXCHANGER CO.,LTD	KOREA	
		SHEATH TECH KOREA CO.,LTD	KOREA	
		ILHWA ENGINEERING CO.,LTD	KOREA	
		GE	INDIA	
		OAK ENERGY (FORMERLY ALSTOM)	INDIA	
		SHANGHAI BOILER WORKS	CHINA	
		L & T HOWDEN	INDIA	
		HOWDEN HUA ENGINEERING CO.	CHINA	
		THERMAX	INDIA	
		UNIVERSAL HEAT EXCHANGER	INDIA	
		WUXI HUATONG	CHINA	
		QINGDAO DANENG	CHINA	
		JINAN SHANYUAN	CHINA	
119	STEAM TRAP	SPIRAX MARSHALL	INDIA	BOI Customer control not required.
		GREAVES COTTON	INDIA	
		FORBES MARSHAL	PUNE	
		UNIKLINGER	AHMEDNAGAR	
		VIRGO ENGINEERS	PUNE	
		PENNANT	PUNE	
		THERMAX	INDIA	
120	TUBE: CARBON/LOW ALLOY SEAMLESS TUBE(T ₁₁ , T ₁₂ , T ₁₂ -, T ₂₂ , CS, T ₉₁) FOR BTG	DONGFANG BOILER GROUP CO.,	CHINA	BHEL
		VALLOUREC & MANNESMANN TUBEES	FRANCE/ GERMANY	
		TENNARIS GLOBAL SERVICES S.A.	URUGUAY/ ITALY	
		NIPPON STEEL & SUMITIMO METAL CORPORATION	JAPAN	
		JIANGSU CHANGDE STEEL TUBE SHARE CO.LTD	CHINA	
		YANGZHOU LONTRIN STEEL TUBE CO.LTD	CHINA	
		SUMITOMO METAL / NSSMC	JAPAN	
		HENGYANG	CHINA	
		TIANJIN PIPE CORPORATION	CHINA	
		JIANGSU CHENGDE	CHINA	
		INNER MONGOLIA NORTHERN HEAVY INDUSTRIES GROUP	CHINA	
		CHANGZHOU CHANGBAO	CHINA	
		YANGZHOU CHENGDE STEEL PIPE	CHINA	
		YANGZHOU LONTRIN	CHINA	
		BAOSHAN IRON AND STEEL	CHINA	
121	TUBE: STAINLESS STEEL TUBE(SUPER 304H, SUPER DUPLEX) FOR BTG	SUMITOMO METAL / NSSMC	JAPAN	
		SANYO SPECIAL STEEL	JAPAN	
		SALZGITTER MANNESMANN STAINLESS TUBE (SMST, DMV)	ITALY	
		TUBACEX TUBOS INOXIDABLES SPA	SPAIN	
		POSCO SPECIALTY STEEL	KOREA	
		NSC / NSSMC	JAPAN	
		RATNAMANI	INDIA	
		KUZE	JAPAN	
		TPS	GERMANY	
		ZM ,SWITZELAND	SWITZELAND	
		SANDVIK	SWEDEN	
		KOBE STEEL	JAPAN	
		PLYMOUTH	USA	
		CENTRAVIS ,UKRAINE	UKRAINE	
		TISCO	CHINA	
		HUADI STEEL GROUP	CHINA	
		NIPPON STEEL CORPORATION	JAPAN	
122	VALVES-BUTTERFLY VALVE (CS & CI)	SAMSHIN	KOREA	BHEL
		DKC CONTROL VALVE	KOREA	
		DONGHAE VALVE	KOREA	
		TYCO VALVES	HALOL, VADODARA	
		BRAY CONTROLS (INDIA) PVT. LTD.	VADODARA	
		WEIR BDK	HUBLI	
		ADVANCE VALVES	NOIDA	
		KBL	PUNE	
		FOURESS ENGINEERING	BANGALORE	
		CRANE PROCESS	PUNE	
		INTERVALVE	PUNE	
		GM VALVES	RAJKOT	
		KSB	COIMBATORE	
		SHANGHAI VALVES	CHINA	

		XIAMEN FREET FLUID CONTROL CO. LTD.	CHINA	
		L&T	CHENNAI/COIMBATORE	
		QINGDAO POWER STATION VALVE	CHINA	
		DURKEN	USA	
		BRAY	USA	
		Trillium Weir	CHINA	
		KEystone	USA	
		HE HARBIN POWER PLANT VALVE COMPANY LIMITED.	CHINA	
123	VALVE- DIAPHRAGM VALVE (AUTO & MANUAL)	CRANE PROCESS	PUNE	# Refer Note
		WEIR BDK	HUBLI	
		PROCON ENGINEERS	MUMBAI	
		ANTICO	VALSAD	
		KBL	INDIA	
		DEMBLA	INDIA	
		GEMU	GERMANY	
		SED	GERMANY	
124	VALVES-LOW PRESSURE GATE, GLOBE, CHECK AND BALL VALVES (CAST STEEL)	AUDCO	INDIA	# Refer Note
		WEIR BDK	HUBLI	
		KBL VALVES	PUNE/KONDHAPURI	
		FOURESS ENGINEERING	MUMBAI	
		KSB	COIMBATORE	
		INTERVALVE	PUNE	
		CHINA SHUANGHENG	CHINA	
		FREET	CHINA	
		BHEL	TRICHY	
		LEADER	JALANDHAR	
		STEEL STRONG VALVES	SANAND, MUMBAI	
		OSWAL INDUSTRIES LTD	AHMEDABAD	
		GM ENGG	RAJKOT	
		VELAN VALVE	INDIA	
		SAMSHIN	KOREA	
		TYCO	ITALY	
		ADWARD	SINGAPORE	
		HP/KVT	KOREA/NETHERLANDS	
		FORBES MARSHALL		
		NITON VALVES PVT LTD	MUMBAI	
		MICRO FINISH VALVES	HUBLI	
		CRANE PROCESS	PUNE	
		L&T	CHENNAI/COIMBATORE	
		QINGDAO POWER STATION VALVE	CHINA	
		HE HARBIN POWER PLANT VALVE COMPANY LIMITED.	CHINA	
125	VALVE-SAFETY VALVE	BHEL	TRICHY	BHEL
		SHANGHAI VALVES	CHINA	
		PENTAIR SANMAR	INDIA/ USA	
		SPIRAX MARSHALL	USA	
		OKANO VALVE	JAPAN	
		FUKUI	JAPAN	
		BOPP & REUTHER	GERMANY	
		SEMPELL AG	GERMANY	
		MEIWA CORPORATION	JAPAN	
		RIENEKE GMBH	GERMANY	
		DRESSER	USA	
		TYCO SANMAR LIMITED	INDIA	
		KSB	GERMANY	
		CROSSBY	USA	
		WEIRBDK	INDIA/ FRANCE	
		LESSER	GERMANY ₅	
		FORBES MARSHALL	INDIA	
		BOPP & REUTHER	GERMANY	
		MEIWA CORPORATION	JAPAN	
		SEMPELL	GERMANY	

For these items, refer "Final Resolution on categorization of materials wrt. Annexure-17 Dated15-9-23"

General Note: BHEL`s unit wise vendor list signed by MEL QA may also be referred for the above list of items, as applicable

		VENDOR LIST NO.	REV.	VALID
		QA/VENDOR/ELEC/001	00	TILL RELEASE OF NEXT REVISION
Section: Electrical				
Approved Vendor List of Electrical Items for Projects				
ELECTRICAL VENDOR LIST				
Sl. No	Item Name	Vendor Name	Location	BHEL Remarks (Category) A. BHEL Mfg. / B. Raw Material C. BOP Bought Outs
1.	Generator	Shanghai Electric Group Co., Ltd.	China	BHEL
		DOOSAN	KOREA	
		SIEMENS	GERMANY	
		L&T - MHPS TG COMPANY	HAZIRA	
		BHEL	HARIDWAR	
		Toshiba	Japan/China	
		GE	WORLDWIDE	
		Dongfang Electric Group Co., Ltd.	China	
2.	GENERATOR'S EXCITATION SYSTEM (STATIC)	GE	CHINA	BHEL
		ALSTOM	GERMANY / POLAND / NOIDA	
		EMERSON	NOIDA	
		ABB	BANGALORE	
		NARI	CHINA	
		TOSHIBA CO.	JAPAN	
3	400kV Disconnector	Xian Xd High Voltage Apparatus Co., Ltd.	China	Not In Scope
		Henan Pinggao High Voltage Switchgear Co., Ltd	China	
		New Northeast Electric Group High Voltage Switchgear Co., Ltd	China	
		Shandong Taikai Disconnecter Co., Ltd	China	
4	MV Cable	Jiangsu Hegtong power cable co ltd	China	Not In Scope
		Qingdao Hanhe Cable Co., Ltd	China	
		Phelps Dodge Yantai Cable Co. Ltd	China	
		Jiangsu Dongfeng Cable Co. Ltd.,	China	
		Anhui Huaneng Cable Group Co. Ltd	China	
		Shangdong Hanhe Cable Co. Ltd	China	
5	LV Dry Transformer	Hainan Jinpan Electric Co., Ltd.	China	BHEL
		China Electric Equipment Group Corporat	China	
		Nanjing Daqo Transformer Co., Ltd	China	
6	MV Switchgear	Daqo Group	China	Not In Scope
		Shandong Taikai SWGR	China	
		XD Baoji Electric Co., Ltd	China	
7	Battery	Hoppecke Power System (Shanghai) Co., Ltd.	China	BOP Bought Outs
		ALCAD	China	
		Saft	France	
		HBL	China	
		Haze Battery Company Ltd	China	
8	DG Set	Perkins	China	Not In Scope
		Cummins	China	
		Mitsubishi	China	
9	Generator Circuit Breaker	ABB	Swiss	Not In Scope
		Ge(Alstom)	France	
		MHI	Japan	
10	UPS	Qingdao Pyramid Electric Engineering	China	BOP Bought Outs
		AEG	China	
		Emerson	China	
11	Generator transformer Protection Relays	Nanjing Nari-Relays Electric Co., Ltd.	China	Not In Scope
		ABB	China	
		SIEMENS	China	
		Guodian Nanjing Automation Co. Ltd	China	
		GE	China	
	Generator transformer, Station	Baoding Tianwei Baobian Electric Co., Ltd.	China	Not In Scope

12	Transformer and Unit transformer & Standby Transformer & Reactor	Xian XD Transformer Co., Ltd.	China	
		TBEA Shenyang Transformer Co., Ltd.	China	
13	GIS	Pinggao Group	China	Not In Scope
		ABB	China	
		SIEYUAN ELECTRIC CO., LTD	China	
14	Current transformer	Xian Xd	China	Not In Scope
		Norit HV Transformer Shandong Takal	China	
		Shandong Takal	China	
15	Capacitor Voltage Transformer	Xian Xd	China	Not In Scope
		Norit HV Transformer Shandong Takal	China	
		Shandong Takal	China	
16	Lightning Arrestor	Piaggao Group	China	Not In Scope
		Xian Xd	China	
17	Bus Duct	Shandong Alfa Dachi Electric Co., Ltd	China	Not In Scope
		C&S	HARIDWAR/NOIDA	
		POWER GEAR	BANGALORE	
		BUSBAR SYSTEM PVT LTD BANGALORE	BANGALORE	
		JIANGSU DAQO ENCLOSURE BUSBAR CO., LTD	CHINA	
		BHEL	JHANSI	
		BEIJING POWER EQUIPMENT	CHINA	
		DACHI ALFA	CHINA	
18	Control Panel for Generator Aux	Schneider	Germany	
		C&S	India	
		EIC	India	
		Massibus	India	
		Blumenbecker	Poland	
		ABB	India	
		GE	India	
19	Excitation AC-DC Bus duct	Etacom	Belgium	NOT IN SCOPE
		REEP	India	
		C&S	NOIDA	
20	Excitation System	Alstom Power Systems GmbH	Germany	BHEL
		Alstom Power Sp. z o.o	Poland	
		GEPIL (former ALSTOM PAC)	India	
		ABB	India	
		GE	Poland	
		GE	USA	
21	Stator Frame	Alstom	Shahabad	BHEL
		Alstom Power Sp Z O o	Poland	
		Alstom Beizong Power (Beijing)	China	
		DHI	China	
		Alstom Bharat Forge Power Ltd	India	
		ISGEC	India	
		KCP	India	
		Juneng	China	
22	Stator End Shield	Alstom Power Sp Z O o	Poland	BHEL
		Alstom Beizong Power (Beijing)	China	
		ISGEC	India	
		Alstom Bharat Forge Power Ltd	India	
		Energy Machines Pvt td	India	
23	Bushing CT / Generator CT	Prayog	India	NOT IN SCOPE
		Pragati	India	
		KAPPA	India	
		JSL Industries	India	
		Mehru Electricals	India	
		Mahendra Electricals	India	
		Shenyang Instrument Transformer	China	
		Dalian Instrument transformer	India	
24	Terminal Bushing	Trench (Emly)	France	# Refer Note
		HSP	Germany	
		Passoni & Villa	Italy	
25	Excitation Transformer	BHEL	JHANSI	NOT APPLICABLE
		VIJAY	HYDERABAD	
		Kirloskar Electric C	PUNE	
		RITZ INSTRUMENT XMER GMBH	GERMANY	
		RAYCHEM RPG	PUNE	
		TOSHIBA	INDIA	
		TBEA	CHINA	
		ABB	SWITZERLAND/ FINLAND/VADODARA	
		SIEMENS	GERMANY / India	
		PROLEC GE	CHENNAI	
		KEC	BANGALORE	
		WEG	BRAZIL, HOSUR (TAMIL NADU - INDIA)	BHEL

26	HT MOTORS	DONGFANG ELECTRICAL MACHINERY CO.,LTD.	China	
		Marathon Regal Beloit Wuxi Co. Ltd.	China	
		HYOSUNG	KOREA	
		HYUNDAI	KOREA	
		SHANGHAI ELECTRIC MACHINERY CO LTD	CHINA	
		XIANGTAN ELECTRIC MACHINERY CO.LTD	CHINA	
27	LT MOTORS	CGL	AHMEDNAGAR	BOI
		MARATHON ELECTRIC	KOLKATA	
		Marathon Regal Beloit Wuxi Co. Ltd.	China	
		Siemens	China	
		ABB	FARIDABAD,CHINA	
		BHARAT BIJALI	MUMBAI	
		KEC	BANGALORE/HUBLI	
		BHEL	BHOPAL	
		SHANGHAI ELECTRIC COMPANY	CHINA	
		XIANGTAN ELECTRIC MANUFACTURING CO LTD	CHINA	
		SIEMENS LTD	MUMBAI, CHINA	
		JYOTI LTD.	BARODA	
		NGEF	HUBLI	
		SHANGHAI SHANGDIAN ELECTRIC MACHINERY	CHINA	
		JIANGSU DAZHONG ELECTRIC MOTORS CO. LTD	CHINA	
28	HT SWITCHGEAR PANELS (FOR MAIN PLANT PACKAGE OF THERMAL & AUXILIARY PACAKGE)	ABB	NASHIK	NOT IN SCOPE
		SCHNEIDER	HALOL	
		SIEMENS	MUMBAI	
		CGL	NASHIK	
		L&T	AHMEDNAGAR	
		DAQO GROUP	CHINA	
		SHANDONG TAIKAI SWITCHGEAR	CHINA	
		XD ELECTRIC CO. LTD	CHINA	
		ZHONGSHAN MINGYANG ELECTRICAL CO. LTD CHINA	CHINA	
		TIANSHUI CHANGCHENG ELECTRIC	CHINA	
		BEIJING BEIKAI SWITCHGEAR	CHINA	
29	HT PANELS(FOR AUXILIARY PACKAGES)	TECHNO CRAFT	THANE	NOT IN SCOPE
		NARKHEDE UDYOG	NASHIK	
		PRISTINE SWITCHGEAR	PUNE	
		AARTECH SOLONICS LTD	BHOPAL	
		C&S ELECTRIC MV PVT LTD INDIA	NOIDA	
		STELMAC LIMITED	AHMEDABAD	
		TRISQUARE SWITCHGEARS PVT LTD	SONIPAT	
		KIRLOSKAR ELECTRIC LTD	MYSORE, KARNATAKA	
		SHandong Taikai	CHINA	
		Xd Baoji	CHINA	
		TOSHIBA	HYDERABAD	
		DAQO GROUP	CHINA	
		ABB	NASHIK	BOI
		GE	BANGLORE	
		SIEMENS	MUMBAI/ Shanghai	
		L & T	AHMEDNAGAR	
		SCHNEIDER SWITCHGEAR	NASHIK/BANGALORE /HALOL	
		C & S	HARIDWAR	
		SHANGHAI GENERAL GUANGIAN ENGG CO	CHINA	

30	LT SWITCHGEAR PANEL (MCC/PMCC/PC C)	DAQO GROUP	CHINA	
		SHndong Taikai	CHINA	
		Xd Baoji	CHINA	
		AKSHAR ELECTRIC PANEL	BARODA	
		MILSTONE	GURGAON/SAHIBABA D/RUDRAPUR	
		UNILEC ENGINEERS	GURGAON	
		ELECTO CONTROL SYSTEM	NOIDA	
		TRISQUARE SWITCHGEARS PVT LTD	SONIPAT	
		PYROTECH ELECTRONICS PVT LTD	UDAIPUR	
		SICHUAN ELECTRIC	CHINA	
		SICHUAN CHUANKAI SWITCHGEAR	CHINA	
31	LT PANEL (ACDB/DCDB/M LDB/ELDB /LOCAL STARTER PANEL)	RYB SWITCHGEAR	DELHI	BOI
		MANISH ENGINEERING	MUMBAI	
		UNILEC ENGINEERS	BHIWADI	
		CHANDRA ELECTRICAL & ELECTRONICS	AURANGABAD	
		JASPER ELECTRICALS	NOIDA	
		AKSHAR ELECTRIC	BARODA	
		ZENTIH	THANE	
		MAKTEL	VADODARA	
		INDUSTRIAL CONTROL	AHMEDABAD	
		POSITRONICS	-	
		ELCHEMECH	AHMEDABAD	
		OM ELECTRICALS	AHMEDABAD	
		ELECTO CONTROL SYSTEM	NOIDA	
		RISHA CONTROL	NEW DELHI	
		STERLING GENERATORS	SILVASA	
		PRISTINE SWITCHGEARS (SCHNEIDER)		
		NARKHEDE UDYOG (ABB)		
		BHARAT ENGINEERS	VADODARA	
		ATOZ	NOIDA	
		BCH	FARIDABAD	
		SIEMENS	MUMBAI	
		LUNAR ENGINEERING PVT LTD	SACHIN,SURAT	
		VIDYUT CONTROL (I) PVT LTD	GHAZIABAD	
		PYROTECH ELECTRONICS PVT LTD	UDAIPUR	
		PYROTECH ELECTRONICS PVT LTD	UDAIPUR	
		C & S	HARIDWAR	
		SHANGHAI WIN-POWER CORPORATION	CHINA	
32	VARIABLE FREQUENCY DRIVE (VFD)	SIEMENS	NASHIK	BOI
		ROCKWELL	SAHIBABAD, UP	
		GE	BANGALORE	
		ABB	BANGALORE	
		YOKOGAWA	JAPAN	
		L&T	MUMBAI	
		ALLEN BRADLEY	--	
		AMTECH ELECTRONICS INDIA LTD	GANDHINAGAR	
		HITACHI HI-REL POWER ELECTRONICS PVT LTD.	SANAND,AHMEDABA D	
		ABB	WORLD WIDE	
		GE	WORLD WIDE	
33	PLC PANELS	ABB	BANGALORE	NOT IN SCOPE
		GE	BANGALORE	
		SIEMENS	MUMBAI	
		L&T	MUMBAI	
		SCHNEIDER	DELHI	
		ROCKWELL AUTOMATION	SAHIBABAD	
		AMTECH ELECTRONICS INDIA LTD	GANDHINAGAR	
		Shanghai Institute of Process Automation Instrumentation	CHINA	
		Beijing Far East Instrument Co., Ltd.	CHINA	
		Xi'an Xingyi Control System Co.,Ltd.	CHINA	
	SOFT STARTER PANEL	JAYASHREE ELECTRON PVT LTD	PUNE	BOI
		AMTECH ELECTRONICS INDIA LTD	GANDHINAGAR	
		GUODIAN NANZI	CHINA	
		SHANGHAI WIN-POWER CORPORATION	CHINA	

35	THYRISTOR PANEL	SIEMENS	MUMBAI	BOI
		GE	BANGALORE	
		HONEY WELL	PUNE	
		L&T	MUMBAI	
		EUROTHERM	USA	
		DEC	CHINA	
		FEIDA	CHINA	
36	HT CABLES	POYCAB WIRES	DAMAN	Not in Scope
		KEI	BHIWADI	
		RAVIN CABLE	PUNE	
		UNIVERSAL CABLE	SATNA	
		STERLITE TECHNOLOGIES LTD.	HARIDWAR	
		GUPTA POWER		Not in Scope
		CCI	NASHIK	
		TORRENT CABLE	NADIAD	
		UNIFLEX CABLE	VALSAD	
		HAVELLS CABLE	ALWAR	
		NICCO CABLE	KOLKATA	
		FINOLEX	MUMBAI	
		CMI ENERGY INDIA LTD	BADDI	
		KEC INTERNATIONAL (RPG)	VADODARA	
		PARAMOUNT COMMUNICATION LTD	ALWAR	
		GEMSCAB INDUSTRIES LTD	BHIWADI, RAJASTHAN	
		PHELPS DODGE YANTAI CABLE COMPANY LTD	CHINA	
		ANHUI HUANENG CABLE GROUP CO. LTD	CHINA	
		JIANGSU HENG TONG POWER CABLE CO. LTD	CHINA	
		QINGDAO HANHE CABLE CO. LTD	CHINA	
37	LT POWER CABLE	DELTON	HYDERABAD	BOI
		SUYOG ELECTRICALS	VADODARA	
		BANSALI CABLES	ALWAR	
		CMI ENERGY INDIA LTD	BADDI	
		KEC INTERNATIONAL (RPG)	VADODARA / SILVASSA	
		TC COMMUNICATION	GHAZIABAD	
		SPECIAL CABLES PVT LTD	RUDRAPUR	
		NAGANWALA IMPEX PVT LTD	ALWAR, RAJASTHAN	
		PARAMOUNT COMMUNICATION LTD	ALWAR, RAJASTHAN	
		ATLAS CABLE AND ACCESSORIES	GANDHIDHAM	
		GEMSCAB INDUSTRIES LTD	BHIWADI, RAJASTHAN	
		Far East Cable Co., Ltd.	CHINA	
		JIANGSU JIANGYANG CABLES	CHINA	
38	CONTROL & INSTRUMENTATION CABLE	POYCAB WIRES	DAMAN	
		SUYOG ELECTRICALS	VADODARA	
		CORDS CABLE	BHIWADI	
		THERMO CABLE	HYDERABAD	
		UNIVERSAL CABLE	SATNA	
		KEI	BHIWADI	
		BANSALI CABLE	BHIWADI	
		CABLE COORPORATION OF INDIA	NASHIK	
		DELTON	FARIDABAD	
		HAVELLS CABLE	BHIWADI	
		CMI ENERGY INDIA LTD	BADDI	
		LAPP INDIA	BANGALORE	
		KEC INTERNATIONAL (RPG)	VADODARA / SILVASSA	
		TC COMMUNICATION	GHAZIABAD	BOUGHT OUT ITEM
		SPECIAL CABLES PVT LTD	RUDRAPUR	
		PARAMOUNT COMMUNICATION LTD	ALWAR	
		ATLAS CABLE AND ACCESSORIES	GANDHIDHAM	
		GEMSCAB INDUSTRIES LTD	BHIWADI, RAJASTHAN	
		JIANGSU JIANGYANG CABLES	CHINA	
		OPTICS & ALLIED	BANGALORE	BOUGHT OUT ITEM
		BELDEN	--	

39	FIBER OPTIC CABLE	UNI-FLEX	--	
		BIRLA ERICSSON	REWA	
		TERACOM GOA	USHA	
		MARTIN (UM CABLES LTD.)	SILVASSA	
		PARAMOUNT COMMUNICATIONS LTD	ALWAR, RAJASTHAN	
		FINOLEX CABLE	GOA / PUNE	
		Qingdao Hanhe Cable Co.,Ltd.		
		Jiangsu Jiangyang Cable Co.,Ltd.		
40	LT PVC Cable	POYCAB WIRES	--	BOI
		KEI	--	
		THERMO CABLE	HYDERABAD	
		SIECHEM	PONDICHERRY	
		UNIVERSAL CABLE	--	
		LAPP	--	
		PARAMOUNT COMMUNICATION LTD	ALWAR, RAJASTHAN	
		UNIFLEX CABLES (APAR)	--	
		SICHUAN CABLES	CHINA	
		WUXI CABLES	CHINA	
		Far East Cable Co., Ltd.	CHINA	
		JIANGSU JIANGYANG CABLES	CHINA	
		Tianjin Daily Prosperity Science & Technology	CHINA	
41	WIRES	POYCAB WIRES	DAMAN	BOI
		KEI	SILVASSA/BHIWADI	
		RPG	SILVASSA	
		TORRENT CABLE	NADIAD	
		HAVELLS CABLE	BHIWADI	
		UNIVERSAL CABLE	SATNA	
		SUYOG	KALOL	
		FINOLEX	PUNE	
		LAPP	BANGLORE	
		GENEREAL CABLE	BADDI	
		ROLLIFLEX CABLES PVT. LTD.	DAMAN	
		SICHUAN CABLES	CHINA	
		WUXI CABLES	CHINA	
		Far East Cable Co., Ltd.	CHINA	
		JIANGSU JIANGYANG CABLES	CHINA	
		Tianjin Daily Prosperity Science & Technology	CHINA	
42	BUS BAR TRUNKING SYSTEM (BBT)/ SANDWICHED TYPE BUS DUCT	SCHNEIDER	VADODARA	NOT IN SCOPE
		CGL	--	
		L&T	--	
		SIEMENS	--	
		GODREJ	--	
		C&S	--	
		LEGRAND	--	
43	GI LATTICE STEEL & PIPE STRUCTURE	MJ ENGINEERS	BHIWADI	NOT IN SCOPE
		GLOBAL SMELTERS LTD.STR DIVISION	UNNAO, UP	
		ARCHON ENGINEERING	KALOL,GANDHINAGA R	
		GOODLUCK STEEL & TUBE LTD.	BULANDSHAHR, UP	
		AGARWAL FOUNDARIES	MEDAK, AP	
		R.S. INFRA PROJECTS LTD	GHAZIABAD	
		ANAND UDHYOG THANE	INDIA	
		KANADE ANAND UDHYOG	THANE	
44	GENERATOR'S AIR COOLER FOR BRUSH GEAR (IF APPLICABLE)	GEA	GERMANY, INDIA,	NOT APPLICABLE
			POLAND	
		COLD & HOT	SWITZERLAND	
		KELVION (GEA ECOFLEX)	INDIA	
45	GENERATOR'S BEARING	GTE GLEITLAGERTECHNIK-ESSEN	GERMANY	BHEL
		GERMANY RENK	GERMANY	
46	GENERATOR'S BUSHING CURRENT TRANSFORMER	TOSHIBA CORPORATION	JAPAN	NOT IN SCOPE
		ABB	JAPAN	
		TRENCH	FRANCE	
		SIEMENS LTD -- HSP		
		PRAYOG	INDIA	
		PRAGATI	INDIA	
		KAPPA	INDIA	
		MAHENDRA ELECTRICALS	INDIA	
		DALIAN INSTRUMENT TRANSFORMER	INDIA	
		JSL INDUSTRIES	INDIA	
		DALIAN NORTH TRANSFORMER	CHINA	
		DALIAN FIRST TRANSFORMER	CHINA	
		SHENYANG TRANSFORMER	CHINA	
		SCHNEIDER	ERMANY, INDIA	
		C&S	INDIA	

		DHI	CHINA	
		ALSTOM BHARAT FORGE POWER LTD	INDIA	
		ISGEC	INDIA	
		JUNENG	CHINA	
		DFEM	CHINA	
61	GENERATOR'S STATOR FRAME END SHIELD	ALSTOM POWER SP Z O O	POLAND	
		ALSTOM BEIZONG POWER (BEIJING)	CHINA	
		ALSTOM BHARAT FORGE POWER LTD	INDIA	BHEL
		ENERGY MACHINES PVT LTD	INDIA	
		DFEM	CHINA	
62	GENERATOR'S TERMINAL BUSHING	TRENCH (EMLY)	FRANCE	BHEL
		HSP	GERMANY	
		SANZHOU NANE ZHONG (SUZHOU JIU & ZHENG ELECTRIC)	CHINA	# Refer Note
		PASSONI & VILLA	ITALY	

For these items, refer "Final Resolution on categorization of materials wrt. Annexure-17 Dated 15-9-23"

General Note: BHEL's unit wise vendor list signed by MEL QA may also be referred for the above list of items, as applicable

Digitally signed
by Deepak Vij
Date:
2023.09.16
11:28:50
+05'30'

SN	ITEM DESCRIPTION	VENDORS	Remarks
1	PRESSURE/D. P. / FLOW TRANSMITTERS	FUJI ELECTRIC, INDIA	Approved
2	JUNCTION BOX	EMECON CONTROLS PVT. LTD., NEW DELHI	Approved
		PYROTECH ELECTRONICS PVT LTD, UDAIPUR	Approved
		BCH ELECTRIC LIMITED, NEW DELHI	Approved
3	DC STARTER CONTROL PANEL	BCH ELECTRIC LTD., NEW DELHI	Approved
		PRIMA AUTOMATION (INDIA) PVT. LTD., GANDHI NAGAR	Approved
		COTMAC ELECTRONICS PVT. LTD., PUNE	Approved
		C&S ELECTRIC LTD., NOIDA	Approved
4	SOLENOID VALVES	BOSCH REXROTH (INDIA) PRIVATE, AHMEDABAD	Approved
		VOITH TURBO PRIVATE LIMITED, HYDERABAD	Approved
5	LIMIT SWITCHES	HONEYWELL AUTOMATION INDIA, GURGAON	Approved
		SIEMENS LIMITED, GURGAON	Approved
6	THERMOCOUPLE / RTD / THERMOWELL	EMERSON , DAMAN	Approved
		GIC (THERMAL INSTRUMENTS), MUMBAI	Approved
		GAUGE BOURDEN, PANWEL	Approved
		TOSHNIWAL INDUSTRIES PVT. LTD., AJMER	Approved
		WIKA, PUNE	Approved
7	LEVEL SWITCH (CAPACITANCE TYPE)	SIEMENS, GURGAON	Approved
		SBEM, PUNE	Approved
		NIVO CONTROLS, INDORE	Approved
		PUNE TECHTROL, PUNE	Approved
		CHEMTROLS, GOA	Approved
		SIGME INDUSTRIES, MUMBAI	Approved
8	LEVEL SWITCH (FLOAT/DISPLACER TYPE)	ENDRESS+HAUSER, GERMANY/AURANGABAD	Approved
		MAGNETROL, BELGIUM	Approved
		SBEM, PUNE	Approved
		NIVO CONTROLS, INDORE	Approved
		PUNE TECHTROL, PUNE	Approved
		LEVCON, KOLKATA	Approved
		SIEMENS, GURGAON	Approved
		CHEMTROLS, GOA	Approved
		SIGME INDUSTRIES, MUMBAI	Approved
9	PRESSURE / D. P. GAUGES	DRESSOR, USA/GERMANY	Approved
		SIEMENS, GURGAON	Details Required
		PRECISION MASS, GANDHINAGAR	Approved
		BAUMER, VAPI	Approved
10	TEMPERATURE GAUGES	H.GURU INSTRUMENTS (P) LTD., NEW DELHI	Approved
		TEMPSENS INSTRUMENTS (I) PVT., UDAIPUR	Approved
		PRECISION MASS PRODUCTS (P) LT, GANDHINAGAR	Approved
11	CONDUCTIVITY ANALYSER	FORBES MARSHALL, PUNE	Approved
		ABB, DEHRADUN	Approved

		HACH COMPANY, USA	Approved
12	LEVEL TRANSMITTER (RADAR TYPE)	VEGA INDIA LEVEL AND PRESSURE, PUNE	Approved
		V AUTOMAT, NEW DELHI	Approved
		HONEYWELL, GURGAON	Approved
13	PRESSURE/D.P. SWITCH	INDFOS, GHAZIABAD	Approved
		SIEMENS, INDIA	Details Required
		BAUMER TECHNOLOGIES, INDIA	Approved
14	LEVEL GAUGES	SBEM, PUNE	Approved
		SIEMENS, GURGAON	Details Required