An ISO 9001 Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant**)**
Tiruchirappalli – 620014, TAMIL NADU, INDIA
Purchase / PCPS

TITLE	Phone: +91 431 2574043 Fax : +91 431 252 0233 / 0525 Email : imuthu@bheltry.co.in majothi@bheltry.co.in
TRANSLATION OF O&M MANUAL, ENGINEERING DOCUMENTS FROM ENGLISH LANGUAGE TO RUSSIAN LANGUAGE FOR 6 Lacs OF WORDS.	

	Reference Number: Enquiry MM/PCPS/ TRANSLATION FROM ENGLISH TO RUSSIAN LANGUAGE.	**Enquiry Date: 28.11.2011**	**Due date for submission of quotation: 21.12.2011**
You are requested to quote the Enquiry number date and due date in all your correspondences. This is only a request for quotation and not an order			

BHEL/Trichy is looking for ..... Translation of O & M Manual, Engineering Documents from English language to Russian language for 6 lacs of words.

ENCLOSURE :

1) SPECIFICATIONS FOR TRANSLATION FROM ENGLISH LANGUAGE TO RUSSIAN LANGUAGE AS PER SPECIFICATION NO.: SPEC NO:FBC & HRSG: TRANS:RUSSIAN:001/REV NO:00 DATED 18.12.2010,PAGE:1 OF 2 TO PAGE: 2 OF 2.
2) UNIT OPERATING PROCEDURE AS PER SPEC REF:FBC&HRSG:TRANS:RUSSIAN:001:ANNEXURE-1 FROM PAGE 1 OF 10 TO PAGE 10 OF 10.

BHEL commercial terms & conditions with Price Bid formats and all annexure can be downloaded from BHEL web site http://www.bhel.com or from the Government tender website http://tenders.gov.in (public sector units) Bharat Heavy Electricals Limited) under enquiry reference "**MM/PCPS/TRANSLATION FROM ENGLISH TO RUSSIAN LANGUAGE**"

Tenders should reach us before 14:00 hours on the due date Technical bid will be opened at 14:30 hours on the due date Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present.	Yours faithfully, For **Bharath Heavy Electricals Limited** Purchase Officer / Purchase/ PCPS

SPEC NO:FBC&HRSG:TRANS:RUSSIAN:001
Rev No :00

DATE :18-12-2010

SPECIFICATION FOR TRANSLATION FROM ENGLISH LANGUAGE TO RUSSIAN LANGUAGE

SPEC NO:FBC&HRSG:TRANS:RUSSIAN:001
Rev No :00

SPECIFICATION FOR TRANSLATION FROM ENGLISH LANGUAGE TO RUSSIAN LANGUAGE

Sl. No	Description	BHEL's Requirement	Vendor's confirmation along with offer. YES / NO/any other confirmation
1.	Intent of specification	To translate the texts in technical write-ups and engineering drawings	
2.	Deliverable - Translation of Technical write-up	a) The English Documents will be furnished in word, excel, pdf and scanned document with images by BHEL. Vendor to translate the document in Russian without altering the meaning.	
		b) The meaning of every sentence after translation shall not alter.	
3.	Deliverable - Translation of texts in Engineering drawings	a) BHEL will provide the drawing's texts as input in excel for translation. Vendor to translate the document in Russian without altering the meaning.	
		b) The length of translated text in a line shall not be exceeding the length of the same line of English version.	
4.	The word count during invoicing shall be done such that one word not charged due to it's repeatition in the write ups or text in drawing.		

5. One number of engineering document is enclosed :-
   a) Annexure-1, Specification no: FBC&HRSG:TRANS:RUSSIAN:001:ANNEXURE-I.

   Vendor to translate the above English document in Russian and furnish the translated document along with the offer. Offer, received without the translated document will be rejected.

6. Total number of words to be translated : 6 Lacs (approximately)

Prepared	Checked	Approved
R.Selvakumar	*H.Bose*	*B.Sarkar*
R. Sankar	H Bose	B Sarkar

1.0 INTRODUCTION:

The procedures included in this section are of a basic nature, intended to serve as a guide in following proper sequence and precautions during initial stages of operation. Since the Heat Recovery Steam Generator is only a part of the overall plant which must operate in unison, specific and detailed values are to be incorporated to refine the procedure after sufficient experience is gained and the opportunity to fine tune controls to conform with actual operating requirements and characteristics.
Reference should be made to respective Manufacturer's instructions regarding pre- operational and operational procedures for auxiliary equipment.

Before proceeding further refer to the documents mentioned at the end of the unit operating procedure.

2.0 PRE OPERATING PROCEDURES:

2.1 Clean-up:

Before initial start-up with the admission of GT exhaust gas and prior to each subsequent cold start-up, after maintenance has been done on the Unit, it should be inspected and cleaned both internally and externally. All foreign material should be removed from pressure parts. Any grating, pipe lines, electric conduit etc., that might restrict normal expansion of the Unit, should be cleared. All personnel should be cleared from the hot gas path inside the HRSG and Access doors closed.

2.2 Chemical cleaning:

Specific procedures for alkali boil out are given separately.

2.3 Blowing steam lines:

Prior to starting up a new Unit or restarting an older Unit following major pressure parts repairs, the main steam line should be steam blown to remove scale and foreign matter. This should be done after chemical cleaning and prior to setting safety valves. Detailed procedures for steam line blowing are given separately.

2.4 Setting of safety valves:

Setting of safety valves is carried out next. Refer to safety valve manual for instructions for setting procedures.

3.0 COLD START UP

3.1 Preparation for service:

3.1.1 Ensure that the unit has been chemically cleaned, that the steam lines have been blown, that the safety valves have been set and that the Unit has been filled to the start-up level with properly treated feed water.

3.1.2 Ensure that all instruments are calibrated and all instrumentation, control systems and interlocks have been checked and are available for service.

3.1.3 Ensure that all mechanical equipment have been checked and are available for service.

3.1.4 Ensure that the feed water system, equipment have been checked and is available for operation. It is recommended that during start-up, the feed water be controlled remote - manually until sufficient flow is established. Ensure that feed water quality is as per the recommendation.

3.1.5 Ensure that the GT exhaust system has been checked and is available for service. Ensure proper operation of GT, its compressor cleanness, IGV opening, its steam/water injection (if any) to deliver the required GTE gas flow at specified gas temperature and composition. Deviation if any shall be informed to BHEL for review of further course of action.

3.1.6 Ensure that SF system of HRSG has been checked as per Burner O&M and is available for service.

3.1.7 If the HRSG has been recently filled up with feed water or stored as per recommended preservation procedures, the steps 3.1.8.1 to 3.1.8.4 shall be skipped and step 3.1.8.5 can be directly followed.

3.1.8.1 Open all the vent valves and drain valves of economisers, evaporators and the drum.

3.1.8.2 Slowly fill the economisers and evaporators using the cold boiler feed water up to start-up level. If cold boiler feed water is not available and hot boiler water is to be used, the temperature difference of metal and water should not be more than 30 Deg.C.

3.1.8.3 Close all the drain valves except SH drain valves after 5 minutes.

3.1.8.4 When the water level in drum reaches the normal water level, vent valves of economiser are to be closed after ensuring that there is no air in the system.

3.1.8.5 Water level in drum can be adjusted to normal water level with the help of respective emergency drain (intermittent blow down valves).

3.1.9 Purge the HRSG as per NFPA requirements.

Now the HRSG is ready for receiving the GT exhaust gases. HRSG can be taken into service, in cold start-up in the following mode.

The procedure should ensure that no damage to the HRSG and its components is caused during start-ups. THE HEATING RATE DURING START UP AND THE COOLING RATE DURING SHUT DOWN IS ONE MAJOR ASPECT TO BE TAKEN CARE OF. Variation in temperature during start up or shut down causes stresses in the boiler components, particularly in the drum and can cause damage to the drum if the rate of temperature rise / pressure rise is very high. During the initial start up of a new Unit, it is recommended that a relatively slow rate of pressure increase be allowed in order to allow sufficient time for checking expansion movements and to permit the operators to become familiar with the characteristics of the Unit and its auxiliaries.

3.3 Start-up procedure (Ref. start-up curve):

3.3.1 Cold start-up in GT mode:

3.3.1.1 The GT load shall be adjusted such that the GT exhaust temperature is less than 400 Deg.C as per start-up curve.

3.3.1.2 Hold the GT at the above load. During the warming up period, maintain the drum water level. Initially water level will raise and continuous blow down, if required, emergency blow down also, can be used to maintain water level in sight in the water level gauge glass. Continue warming up at this rate till steaming starts.

3.3.1.3 After warming up, increase rate of flow of gases through the HRSG, as per the start-up curve. Steaming will start with resultant increase in drum pressure. The pressure rise is controlled by regulating the start-up vent.

3.3.1.4 Close the drum vents when continuous flow of steam is established and drum pressure is around 2.0 Kg/cm^2 (g).

3.3.1.5 While the Unit is heating up, frequent check up of expansion movements of drum, vents, hanger rod, columns and also the restrains in vents & drain lines should be made.

3.3.1.6 Maintain drum water level at normal. Adjust the feed water supply to the Unit as necessary to maintain normal water level. Feed water control

should be placed on automatic as soon as possible and practicable after continuous feed water flow has been established.

3.3.1.7 As drum pressure increases, progressively adjust the main steam line start up vent ensuring drum water level and rate of pressure rise are within limits.

3.3.1.9 Increase GT load gradually up to rated load ensuring that steam pressure, temperature and flow rates do not exceed the values given in start-up curve.

3.3.1.10 Check all operating instruments and controls and ensure their correctness in unfired mode of operation. Any deviations to be informed to BHEL (T)

3.3.2 WPH Operation

Before Start Up

3.3.2.1 Ensure that the Water preheater system is chemically cleaned and lines have been steam blown and ready for operation. Ensure that all the control systems have been checked and are available for service. Ensure that all instrumentation and associated mechanical equipment have been checked and are available for service.

3.3.2.2 The availability of WPH/DM water pump is to be ensured.

3.3.2.3 Open all vent and drain valves of Water Preheater (WPH).

3.3.2.4 Slowly fill the Water preheater with cold Boiler Feed Water. If Cold Boiler feed water is not available, and hot boiler feed water can be used ensuring that the temperature difference of metal and water should not be more than 30°C.

3.3.2.5 Close all the drains of the Water preheater.

During Start Up

3.3.2.6 All the Vent valves of Water preheater are to be closed after ensuring that there is no air in the system.

3.3.2.7 Flow in the Water preheater to be established by gradual opening of both Inlet and Outlet valves taking due care to avoid steaming in the system.

Normal Operation

3.3.2.8 The Water preheater has been designed to raise the temperature of water before entering the deaerator.

3.3.2.9 Water preheater is also provided with water- side bypass to facilitate bypassing during steaming of water preheater particularly during low load operation of HRSG .

Bypass Operation

3.3.2.10 Necessary motor operated valves are provided at inlet, outlet and bypass lines. The total bypass of Water preheater is to be carried out whenever required. The valves at the inlet outlet and bypass lines of Water preheater are to be closed completely and the make up water is to be diverted through the bypass line.

3.3.2.11 When Water preheater is bypassed for long periods, the bypassed modules are to be completely drained by opening the drain valves and the Water preheater is to be kept dry.

3.3.3 Introduction of supplementary firing:

For introduction of SF system, the following instructions/operations shall be carefully followed.

3.3.3.1 Most of the time GT will operate at Base load condition. However in case of operational limitations on Gas Turbine loading, supplementary firing can be introduced to keep HRSG in operation.

3.3.3.2 Feed water temperature entering to economiser shall not be less than the recommended value in predicted performance as the case may be.

3.3.3.3 The GT and HRSG fuels are as per predicted performance.

3.3.3.4 Start SF system by opening the isolation valve of the burner system. While starting, the fuel control valve shall be corresponding to the minimum flow condition. This minimum flow condition shall be strictly adhered to the fuel pressure shall be kept at minimum when the burner elements are being brought into service. The HRSG fuel pressure at burner shall be at least above the recommended value as SF system is brought in to service. This value may require refinement based on trial operation and site adjustment. Upward revision shall however be with the approval of BHEL, Trichy.

3.3.3.6 Further increase in firing shall be gradual at the rate of 3% of MCR steam flow per minute till the steam generation reaches the rated parameters and not exceeding MCR steam flow.

3.3.3.7 The HRSG flue temperature after the duct burner and the superheater metal temperature shall be checked periodically, particularly when load on HRSG is raised. In case the flue gas temperature exceeds to the limit value, the firing rate control shall be reduced by 10% and become stay put and control changed over to manual.

3.3.3.8 Reasons for increase in flue gas/metal temperature shall be checked before putting back the firing system on auto. In any case firing rate shall be restricted such that the flue gas/metal temperature is within acceptable limit specified above.

3.3.3.9 GT. load may be reduced to the required level (but in any case not less than 50% load) after reaching the required steam generation at full load but not exceeding MCR steam generation with GTE temperature always above steam outlet temp. During this period of GT load reduction, supplementary firing shall be kept constant and shall not be increased, even if the steam output decreases. Firing rate may be increased gradually to meet the steam temperature requirement (SF input restricted to value to reach MCR flow at Design ambient, GT rated load but not exceeding MCR steam generation) ensuring the gas temperature and metal temperatures do not exceed the above values. Sufficient care shall be taken to ensure steam generation not less than recommended value at any point of SF Mode operation.

4.0 HOT START-UP IN GT MODE: (AFTER 4 HOURS OF SHUT DOWN)

4.1 Purge the HRSG as per NFPA requirements.

4.2 Reduce the GT load to suit the conditions indicated in the cold start up curve.

4.3 After ensuring continuous steam flow through superheater, GT load shall be increased gradually to reach Rated load value. Ensure that rate of increase of steam generation, steam pressure and steam temperature is within limits.

4.4 Introduce SF system to increase the steam generation. For introducing the SF system, instructions/operations specified under start-up procedure (section 3.3.3) shall be strictly adhered to.

5.0. SHUTTING: DOWN:

The following procedure is for normal shut down. This is based on the assumption that the Unit is operating and it is intended to reduce the pressure to zero and cool the Unit completely.

5.1 Stop supplementary firing. Slowly. Allow the pressure to drop with reduction in load to accelerate cooling. The load reduction should be slow enough to ensure that the HRSG cooling rate is not more than 100 Deg.C per hour. Once the pressure drops by 2 Kg/cm^2 below the normal operating pressure close the main steam stop valve.

5.2 Check the expansion movement of the Unit as load is being reduced.

5.3. Immediately after closing the main steam stop valve, crack open the main steam drain. Open drum vent when pressure reaches 1.5 to 2.0 Kg/Sq.cm (g).

6.0 EMERGENCY PROCEDURES:

6.1 Low water level:

6.1.1 If the water level falls out of sight in the water level gauge, due to failure of feed water supply or some other fault, except in the case of momentary fluctuations that might occur with extraordinary changes in load, appropriate action should be taken at once to stop supplementary firing,if SF system is in service.

6.1.2 If feed water has become available, gradually re-establish the level in the drum. if HRSG is in GT mode, augumenting air (in case of Naphtha Firing), seal air fan and scanner air fan shall be kept in operation

6.1.3 If tube failure is suspected, reduce the steam pressure gradually by opening the main steam line drain. Open the drum vents when the pressure drops below 1.5 Kg/cm^2 (g) and drain the Unit following normal draining procedure once pressure drops to atmospheric pressure. Determine the cause of low water level and examine the Unit for the effects of possible overheating such as leaks and distortion of pressure parts.

6.1.4 Repair any leaks etc.

6.1.5 Following the repairs, hydrostatically test the Unit at working pressure before putting the Unit back in service.

6.2 High water level:

Abnormally high water level should be avoided as it may lead to moisture carryover. If the water level rises above the recommended normal operating range, proceed as follows:

6.2.1 Reduce the water level immediately by opening the emergency blow down valves.

6.2.2 Reduce the steaming rate, if necessary, and place feed water control on manual. If water carryover should occur, as indicated by rapid fluctuations in the outlet steam temperature, proceed as follow:

6.2.3 Reduce the steaming rate.

6.2.4 If the water level is abnormally high, reduce the level by opening the emergency blow down valves and place feed water control on manual.

6.2.5 Investigate the water conditions. (alkalinity and solids)

6.2.6 Investigate the water condition of the drum as soon as opportunity is there.

6.3 Tube failure:

The following instructions regarding tube failures are of a general nature. It must be understood that conditions may arise which will require exercise of judgement by the operators. Trip SF system once a tube failure is suspected. Never continue HRSG operation with supplementary firing in service under such tube failure conditions.

6.3.1 Superheater tubes:

In case of a leak or tube failure, which does not involve a serious drain on the feed water supply, the water level should be maintained, and the unit taken out in normal manner. If the tube failure results in a loss of steam as great that water level cannot be maintained with the feed water supply available, use the method outlined below:

6.3.1.1 Shut off feed water to the Unit.

6.3.1.2 After the Unit is cooled enough to permit a man to enter it, make a thorough inspection of pressure parts for any indication of damage resulting from loss of water level. Report the tube failure and operated data to BHEL,Trichy. After necessary repairs have been made, apply a hydrostatic test and obtain the approval of proper authorities before putting the Unit back in service.

6.3.2 Evaporator tubes:

In case of a leak or tube failure, which does not involve a serious drain on the feed water supply, the water level should be maintained, and the unit taken out in normal manner. If the tube failure results in a loss of steam as great that water level cannot be maintained with the feed water supply available, use the method outlined below:

6.3.2.1 Shut off feed water to the Unit.

6.3.2.2 After the Unit is cooled enough to permit a man to enter it, make a thorough inspection of pressure parts for any indication of damage resulting from loss of water level. After necessary repairs have been made, apply a hydrostatic test and obtain the approval of proper authorities before putting the Unit back in service.

6.3.3 Economiser tubes:

An economiser tube leak can be detected by sound and/or increased feed water requirements. The leak should be investigated at the earliest possible time and the Unit shut down in a normal manner. Water leaks in economiser can cause considerable erosion damage to adjacent tubes. Any decision to continue operation with known leaks should be made with this in mind.

6.3.4. Water Preheater Tubes:

A Water preheater tube leak can be detected by sound and/or increased make up water requirements. The leak should be investigated at the earliest possible time and the Unit shut down in a normal manner. Water leaks in Water preheater can cause considerable erosion damage to adjacent tubes. On identification of leakage, the heat transfer section shall be bypassed on waterside to avoid further damage as well as loss of condensate.

7.0 WALK DOWN CHECK-OFF LIST:

One of the most important benefits of a "Walk down check-off" of a Unit is derived from the operator keeping his eyes and ears open for any unusual condition and reporting his findings to his supervisor. Potential damage to equipment can be avoided if abnormal conditions are detected in time.

1) Look for any unusual traces of water on the floor or leaking from casing joints.
2) Look for valve and valve packing leaks.
3) Be on the lookout for any unusual condition (discoloration, hot spots etc.) on boiler casing.
4) Check for unusual noises, overheating of bearings and for adequate lubrication of all motors and driven equipment.

The following are some specific items that should be observed at least once a day:

1) Look for leaks in gauge glasses and water column.
2) Check for broken observation port glasses.
3) Check for broken seal air and HRSG fuel pipe hoses.
4) Look for leakage of gases through casing joints.
1) Listen for leaking safety valves.
2) Look for non-operating instruments.
3) Trials operate non-operating stand-by equipments.

During every start up from cold,

1) Check for proper expansions of HRSG to ensure no hang-ups to occur.
2) Check spring hangers on boiler support and on steam lines for proper functioning.

Latest revision of following drawing/documents shall be referred before proceeding with start up of HRSG.

1) General arrangement
2) Pressure Parts Arrangement -Elevation.
3) Pressure Parts Arrangement -Plan.
4) Scheme of water and steam circuit.
5) Scheme of air and flue gas path.
6) Cold Start Up Curve
7) PPA expansion movement diagram
8) Deaerator data sheet and operating instruction.
9) Spray and feed control valve data sheet and operating instruction.
10) Gas Turbine operating instruction.
11) HRSG control logics
12) System control and safety interlocks logics.
13) Column and expansion movement diagrams.
14) Constant and variable load hanger expansion details

BHEL/FBC&HRSG/Purchase

TERMS AND CONDITIONS (for ENQUIRY)

1 (a) QUOTATION: Each tender should be sent in double cover, inner cover should be sealed with tender's distinctive seal and superscribed with correct tender No. item of supply and due date of opening. The outer cover should only bear the address of this office and should not have any indication that a tender is within. Two or more quotation should not be sent in one cover but the quotation against each tender should be sent separately to avoid confusion. Tender should not be addressed to any individual's name but only by designation.

(b) Tenders should be free from CORRECTION AND ERASURES. Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

© Price should be net F.O.R dispatching station inclusive of risk in transit and remain valid for 60 days from due date.

(d) If any Sales Tax is payable as extra to the quoted price it should be specifically stated in quotations along with CST & TNGST No. failing which the purchaser will not be liable for payment of Sales Tax. Our T N G S T No.3560005 Dt.01-04-1995, CST No.239383 Dt.11.06.1991.

(e) No revision of prices will be entertained after tenders are opened.

(f) Manufacturer's Name, Trade Mark or Patent No. if any should be specified. Illustrative leaflets giving technical particulars are required along with quotation wherever necessary.

(g) Product with I S I Certification marks will be preferred.

h) The Purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any tender in part or full without assigning any reason whatsoever.

2. SAMPLES: Wherever possible ,sample should be submitted separately whether specifically requested or not so as to reach the Purchaser on or before the due date of the enquiry. They should be clearly marked with the enquiry No and the date on the outside cover to facilitate identification.

3. PACKING AND MARKING: The supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit.

4 TERMS OF PAYMENT: Payment will be made within 30 days of satisfactory receipt of materials at site. Wherever required by the purchaser, the successful tenderer must send the operation & maintenance manuals, test certificate, drawings etc., for the materials ordered. These should be sent immediately after dispatch of the materials and a statement to that effect should be made in the invoice. Failure to comply with this provision will result in delay in payment of the bills. Goods dispatched either by V P P or by the document presented through bank will not be accepted unless agreed to by the Purchaser.

The duplicate copy of the invoice meant for the transporters should accompany the material as stipulated under C.E Rules 52A and 173C (or) 57GG. A Photostat copy of the above invoice for each delivery challen should be submitted along with the original bills routed through bank or submitted directly to BHEL Finance Department.

5 SECURITY DEPOSIT: For purchases over Rs.5,000/- the successful tenderer/s may be requested to furnish a Bank Guarantee. Security Deposit for an appropriate value as may be determined by BHEL.

6 LIQUIDATED DAMAGES/PENALTY AND INTEREST ON ADVANCES FOR DELAY IN DELIVERY:

If the supplier fails to deliver the raw material / equipment / components within the period in the contract the purchaser shall deduct Liquidated Damages a sum equivalent to 0.5% of the price for each week of delay up to a maximum of 15% of the price of the delayed/undelivered goods. In addition to the recovery of interest at normal cash credit rate plus 2% for the unadjusted portion of the advances. If the delay in delivery of a part contributes to delay in execution of total system. LD and interest on advances will be recovered on the total contract price/total advance paid.

7 RISK PURCHASE: Alternatively the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has filed to delivery or dispatch within the time stipulated as aforesaid of if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases in addition to penalty at the rate mentioned in clause 6 above.

8 PREFERENTIAL DELIVERY: It should be noted if a contract is placed on a higher tender as a result of this invitation to tender in preference to the lowest acceptable offer in consideration of the earlier delivery, the seller will be liable to pay to the purchaser the difference between the contract rate and that of the lowest acceptable tender on the basis of final price F O R destination, including all elements of freights, sales tax, duties and other incidental in case of complete supplies in terms of such contract within the date of delivery specified in the tender and incorporated in the contract.

9 MODVAT/CREDIT: If any Excise Duty is payable, the chapter head/sub-head reference and the rate of the duty should be quoted. If the tender is availing MODVAT credit for his input materials, the effect of proforma credit should be passed on to the purchaser. Tender under " MODVAT" shall be preferred.

10 GENERAL : The Purchaser reserves the right to split up the tender and place order for individual items with different tenders and also increase or decrease the quantity.

Any other conditions which might have been quoted by the Seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted in by Purchaser will not be applicable to the contract.

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT AND THE EXPIRY DATE OF BG MUST BE AFTER 60 DAYS FROM THE DATE OF COMPLETION OF WARRANTY PERIOD)

PERFORMANCE BANK GUARANTEE

In accordance of M/s. Bharat Heavy Electricals Limited (A Government of India undertaking, a company incorporated under the Companies Act 1956 having its Registered Office at "BHEL House", SIRI Fort, New Delhi 110 049) through its High Pressure Boiler Plant Division located at Tiruverumbur, Tiruchirapalli- 620 014 (hereinafter called 'the Company') having entered into a contract with …….hereinafter called ' the said contractor ' which term includes 'suppliers' for the purpose of this Bond and under the terms and conditions of the contract No……. Dt ……. Between BHEL, Trichy and as per the contract, the contractor / supplier is to furnish a performance Bank guarantee for Rs. ……. for the due performance of the equipment to be supplied under the above referred contract and for the fulfillment of all the terms and conditions of the contract, We ……..(indicate the name of the bank) (herein after referred to as the bank) at the request of …….. (Contractor(s)) do here by undertake to pay the company an amount not exceeding Rs…….against any loss or damage caused to or suffered or would be caused to or suffered by the company by reason of any breach by the said contractor (s) of any of the terms and conditions contained in the said agreement.

2. We ……..(indicate the name of the bank with full address), do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement or by the reason of the contractor(s) 'failure to perform' the said agreement. 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._____.

3. We undertake to pay unconditionally to the Company any money so demanded notwithstanding any dispute(s) raised by the Contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute and unequivocal. The payment under this guarantee would not wait till the disputes have been decided by any Court or Tribunal or in the arbitration proceedings or by any other authority. The payment so made by us under this Bond shall be a valid discharge of liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.

4. We…….(indicate the name of Bank), 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 Agreement and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till_____Office / Department/ Division of the Company certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. (I) Unless a demand or claim under this guarantee is made on us in writing on or before the _____we shall be discharged from all the liability under this guarantee thereafter. But where such claim or demand has been preferred by the Company with the Bank before the expiry of the said date, the claim shall be enforceable notwithstanding the fact that the said enforcement is effected after the said date.

(ii) For the purpose of this clause, any letter making demand on the Bank by M/s. BHEL dispatched by Registered Post with Ack.Due or by Telegram or by any Electronic media addressed to the above mentioned address of the Bank shall be deemed to be the claim / demand in writing referred to above irrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the bank personally.

6. We ……..(indicate the name of Bank), further agree with the company that the Company 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 agreement or to extend time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said Contractor(s) or for any forbearence, act or omission on the part of the company or any indulgence by the company to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating would, but for this provision, have effect of not so relieving us.

7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

8. It shall not be necessary for the company to proceed against the contractor before proceeding against the guarantor-bank and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the company may have obtained or obtain from the Contractor shall, at the time when proceedings are taken against the guarantor hereunder be outstanding or unrealised.

9. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at Tiruchirapalli.

10. The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the proper authority granted to him/them by the guarantor

11. We ……(indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the company in writing.

In witness whereof we…….., (indicate the name of Bank) have hereunto setout Bank Seal the_____day _____month 200

LIST OF NATIONALISED BANKS

01.	**ALLAHABAD BANK**
02.	**ANDHRA BANK**
03.	**BANK OF INDIA**
04.	**BANK OF BARODA**
05.	**BANK OF MAHARASTRA**
06.	**BHARATH OVERSEAS BANK**
07.	**CANARA BANK**
08.	**CENTRAL BANK OF INDIA**
09.	**CORPORATION BANK**
10.	**DENA BANK**
11.	**INDIAN BANK**
12.	**INDIAN OVERSEAS BANK**
13.	**OREINTAL BANK OF COMERCE**
14.	**PUNJAB NATIONAL BANK**
15.	**PUNJAB AND SIND BANK**
16.	**STATE BANK OF INDIA**
17.	**STATE BANK OF TRAVANCORE**
18.	**STATE BANK OF MYSORE**
19.	**STATE BANK OF BIKANER & JAIPUR**
20.	**STATE BANK OF HYDERABAD**
21.	**STATE BANK OF PATIALA**
22.	**STATE BANK OF MAHARASTRA**
23.	**SYNDICATE BANK**
24.	**UCO BANK**
25.	**UNION BANK OF INDIA**
26.	**UNITED BANK OF INDIA**
27.	**VIJAYA BANK**

OTHER BANKS	
28	ABN AMRO BANK N.V.
29	CITI BANK N.A.
30	DEUTSCHE BANK AG
31	HDFC BANK LTD.
32	ICICI BANK LTD.
33	IDBI LTD.
34	STANDARD CHARTERED BANK
35	THE HONGKONG AND SHANGHAI BANKING CORPORATION LTD.

BHEL / PCPS / Purchase

TERMS & CONDITIONS *(FOR IMPORT ENQUIRY)*

I OFFER:

Offer in English Language and in Triplicate in a sealed cover super scribing the Enquiry Number and the due date shall be submitted (addressed) to:

The Sr.Manager/Purchase/PCPS
Building No.79
Bharat Heavy Electricals Limited
High Pressure Boiler Plant
TIRUCHIRAPALLI – 620 014
Tamil Nadu, India

Offer should be firm for net FOB Nearest Sea Port and C&F Chennai Port price indicating the shipping specifications and the earliest delivery in respect of offers from overseas suppliers. Offer from indigenous sources shall be firm for F.O.R TIRUCHIRAPALI.

II DOCUMENTS:

(i) offer should be accompanied by detailed technical literature, Catalogue and detailed dimensional drawing in English and In Triplicate or otherwise, the offer will not be considered.

(ii) In case Overseas suppliers route their offer through their accredited selling agents, a letter of authority should be furnished mentioning the name and address of their selling agents who are authorized to bid, negotiate and concluded a contract on their behalf.

III AGENCY COMMISSION:

(i) In respect of the offer from Overseas suppliers, agency commission, if any, payable to their agents in India, shall invariably be shown separately in the pro forma invoice and this will be paid by us IN INDIA in Indian Rupees, on satisfactory completion of the contract.

(ii) If overseas principal has any tie up with any third party in respect of Agency Commission it should be declared while submitting the offers.

(iii) Copies of current Agency Agreement / Authorization Letter in respect of Agency Commission shall be furnished along with offer, if not made available earlier.

(iv) For calculation of Rupees equivalent of Agency Commission, exchange rate as prevailing on the date of order will be taken.

IV SPARES:

The tender should quote separately for spares that are required for two years trouble free operations. The spares offer should accompany the offer of main equipment otherwise the quotation will be overlooked.

V VALIDITY:

The offers for main equipment and spares shall be kept open for acceptance for 120 days (one hundred and twenty days) from the date of opening of the tender.

VI TEST CERTIFICATES, OPERATING AND MAINTENANCE MANUALS:

The tender shall clearly mention in their offer that the Test certificate and Operating and Maintenance Manuals etc., as called for in the Technical specification in the required number of copies will be provided at no extra cost. If any amount is payable as extra, the same shall be indicated separately in the offer.

VII TERMS OF PAYMENT :

In the event of an order the Purchase will arrange for an Irrevocable Letter of Credit against presentation of documents. Under no circumstances confirmed and irrevocable letter of credit will be established by the Purchase.

VIII GENERAL:

(i) Preference will be given to suitable indigenous or ex-stock imported offers failing which imported offers from incoming consignment against the indigenous supplies " stock and sale licence" will be accepted. If stock and sale licence is not available with the indigenous suppliers, the same shall be indicated in their offer.

(ii) Bank Guarantee: The supplier in the event of an order should furnish a Bank Guarantee from an approved Bank at no extra cost in a pro forma which will be supplied to the Supplier, along with the order, for an amount equipment to 10% of the value of the contract. The Bank Guarantee should remain in full force and effect during the period that would be taken for successful completion of the contract and shall continue to be enforceable till 12 months from the date of receipt of consignment at Purchaser's site or 18 months from the date of last shipment at the Port of delivery whichever is earlier.

XI LD/PENALTY AND INTEREST ON ADVANCES FOR DELAY IN DELIERY:

" If the supplier fails to deliver the equipment / components within the period specified in the contract the Purchaser shall deduct Liquidated Damages a sum equivalent to 0.5% of the price for each week of delay up to maximum 15% of the price of the delayed / undelivered goods, in addition to the recovery of interest at normal cash credit rate plus 2% for the unadjusted portion of the advances. If the delay in delivery of a part contributes to delay in execution of total system, LD and interest on advances will be recovered on the total contract price / total advance paid"

BHARAT HEAVY ELECTRICALS LIMITED, TRICHY

PCPS / PURCHASE

Ref:TP/MM/PCPS/RUSSIAN TRANSLATION Dated:28.11.2011

SPECIAL CONDITIONS

1. This tender is for the Job of Translation of O&M manual from English language to Russian language as per our specification No: FBC&HRSG:TRANS:RUSSIAN:001 dated 18.12.2010 (containing 2 pages).

2. The offered price shall be valid for 6 months from the date of price bid opening.

3. The vendor shall have adequate experience in this translation job.

4. The tender is in TWO parts. Techno-commercial Bid consisting of Technical Bid with Commercial terms & conditions along with Quality plan for the translation in-line with our requirements and another part containing Price Bid. Both Techno-Commercial bid and Price Bids are to be submitted in separate sealed covers. In addition to technical and commercial conditions, vendors who are not registered as vendors of BHEL, Trichy have to submit the filled in "Supplier Registration Forms" (available in www.bhel.com website) along with the technical bid. Based on this and other conditions, as well as capacity and capability, vendor will be shortlisted. Both these covers are to be put in a single cover duly super scribing the Enquiry Number. The technical bid with commercial terms and conditions will be opened on the due date and based on the acceptance of techno-commercial bid and vendor evaluation, the price bid of the qualified vendors will be opened on a suitable date with due intimation.

Following will be the criteria for short-listing the vendors

- Evaluation of dully filled Supplier Registration Forms.
- Availability of minimum manufacturing, handling, testing and measuring facilities as detailed in the Supplier Registration Form.
- BHEL will have the right for spot assessment of the facilities.
- Meeting our techno-commercial requirements of the enquiry.
- Customer approval for the vendors before ordering.
- Accepting and entering into Integrity Pact (IP)

5. BHEL reserves the right to increase or decrease the tender quantity and split the tendered quantity among more than one vendor and place orders accordingly in any proportion based on commitment , requirement and supplier's capability in terms of delivery and quality as assessed by BHEL.

6. BHEL reserves the right to Negotiate with the L1 vendor.

7. BHEL reserves the right to re-float the tender opened, if L1 price is not the lowest applicable price to them inter-alia other reasons.

8. Conformance to the following Commercial terms shall be clearly indicated failing which the offer will be liable for rejection:

(a) Payment Terms: BHEL standard payment is 100% payment within 45 days from the date of submission of the translated documents. English word's count will be used for payment.
(b) Taxes & Duties : To be mentioned by the bidder as the case may be depending upon the location of the Bidder's location.
(c) Freight: Freight / Transit / Courier charges that are likely to be incurred on part of the bidder for the supply of translated documents shall be clearly included in the price offer.
(d) Insurance: Insurance shall be arranged by BHEL.
(e) Packing & Forwarding: Packing and Forwarding charges shall be included in the price offer(if any)
(f) LD clause: For the delayed delivery, LD will be applicable at 0.5% per week to a maximum of 15% on the undelivered portion of supply after the delivery due date.
(g) Delivery period: Due date for completion is 31.05.2012.
(h) Performance Bank Guarantee(PBG): PBG for 10% of the order value shall be submitted, valid for a period of 18 months from the date of completion of supply as per format attached.
(i) Validity of offer: Your offer should have minimum validity of 6 months and the quoted rates shall be kept firm till the completion of the job.
(j) Dispatch destination: The translated documents are to be dispatched to BHEL, Trichy-14.
(k) Other applicable commercial terms & conditions shall be clearly spelt out in the offer.

9. One number of Engineering document is enclosed along with this NIT (SPEC REF:FBC&HRSG:TRANS:RUSSIAN:001:ANNEXURE-1 containing 10 pages). Vendor should translate this Engineering document in English language into Russian language and furnish the translated document along with the offer. Offer received without the translated document will be rejected.

10. The offer should reach our BHEL office on or before 21.12.2011 at 14.00 hrs.

11. Full details can be downloaded from BHEL's website http://www.bhel.com (Tender Notifications page > NIT_xxxxx) or from the Govt. Tenders website http://tenders.gov.in (Public Sector Units > Bharat Heavy Electricals Limited page against Ref. No. NIT_xxxxx).Interested parties may submit their offers to the following address, along with vendor registration requirement in BHEL format hosted in BHEL web site.

SR. MANAGER / PURCHASE / PCPS, 4TH FLOOR, BLDG.79, Bharat Heavy Electricals Ltd.,
HIGH PRESSURE BOILER PLANT, TIRUCHIRAPPALLI - 620 014, TAMILNADU, INDIA.
Ph: (0431) 2574043, FAX: 2520233
E-Mail: imuthu@bheltry.co.in, majothi@bheltry.co.in.

Sr.Manager/Purchase/PCPS

QUOTATION DATA SHEET

THE TENDERS SHALL FURNISH THE PARTICULARS CALLED FOR IN THE QUOTATION DATA SHEET ENCLOSED AND SUBMIT THE FILLED IN DATA SHEET ALONG WITH THE QUOTATION WITHOUT FAIL OFFERS WITH INCOMPLETE INFORMATION IN DATA SHEET ARE LIABLE FOR REJECTION. IN CASE OF DISCREPENCY, INFORMATION CONTAINED IN THIS DATA SHEET SHALL BE CONSIDERED FOR EVALUATION.

PLEASE STRIKE OUT WHICHEVER IS NOT APPLICABLE:

PROJECT: ENQ.NO & DATE :

DUE DATE :

01	VALIDITY	UPTO
02	DELIVERY PERIOD	. . . . . MONTHS / WEEKS
03	DELIVERY PLACE	
	(a) EX-WORKS PLACE	
	(b) FOR / DESPATCHING POINT	
04	EXCISE DUTY	. . . . . % / NOT APPLICABLE
05	TAX	. . . . . % / NOT APPLICABLE
	(a) C S T	. . . . . % / NOT APPLICABLE
	(b) LOCAL TAXES (SUPPLY WITHIN THE STATE)	. . . . . % / NOT APPLICABLE
06	OCTROI CHARGES	. . . . . % / NOT APPLICABLE
07	PACKING CHARGES	. . . . . % / NOT APPLICABLE
08	FORWARDING CHARGES	. . . . . % / NOT APPLICABLE
09	FREIGHT CHARGES	. . . . . % / NOT APPLICABLE
10	INSURANCE CHARGES	. . . . . % / NOT APPLICABLE
11	TESTING / IBR CHARGES (LUMPSUM)	. . . . . % / NOT APPLICABLE
12	COMMISSIONING CHARGES (LUMPSUM)	. . . . . % / NOT APPLICABLE
13	PAYMENT TERMS	
14	ACCEPTANCE FOR PROVIDING BANK GUARANTEE AS PER BHEL PROFORMA	YES / NO / APPLICABLE
15	DIMENSIONAL DRGS / DATA SHHETS	ENCLOSED / NOT APPLICABLE
16	ANY OTHER ADDITIONAL FACTORS	
17	LD CLAUSE @ 0.5% PER WEEK MAXIMUM 15% FOR THE DELAYED DESPATCHING	
18	GUARANTEE PERIOD SHALL BE 18 / 24 MONTHS	

WE CONFIRM THAT THE STATUTORY LEVIES, DUTIES, TAXES ETC FURNISHED ABOVE ARE BASED ON THE LATEST GOVT NOTIFICATION. WE ALSO CONFIRM THAT WE HAVE GONE THROUGH ALL THE CONDITIONS OF THE ENQUIRY AND OUR OFFER IS ACCORDINGLY SUBMITTED

SIGNATURE WITH SEAL