



Open Tender for Procurement of COLOR COATED SHEET ref: MM/OPEN/COLOR COATED SHEET - 02/2014 DT 23.02.2015 DUE ON 24.03.2015 from Indigenous & Foreign manufacturers only.

ITEMS DESCRIPTION AND TENDER QUANTITY

Enq. SL. No	Item Description	Tender Quantity in SQ.Mtr/NOs	Tender Unit	Required Delivery date
1)	COLOR COATED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.6 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01 Date: 28-08-2012 (A/c NTPC Darlipalli (R825 & R826))	11300	SQ. Mtr	24.02.2016
		11300	SQ. Mtr	24.06.2016
2)	COLOR COATED PLAIN RIDGE (0.6X500X1250mm) WITH BASE METAL THICKNESS OF 0.6 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01 Date: 28-08-2012. (A/c NTPC Darlipalli (R825 & R826))	400	NOs	24.02.2016
		400	NOs	24.06.2016
3)	COLOR COATED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.5 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 02 Date: 18-01-2013 (A/c Kothakudam (R824))	7950	SQ. Mtr	24.07.2016
4)	COLOR COATED PLAIN RIDGE (0.5X500X1250mm) WITH BASE METAL THICKNESS OF 0.5 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013 (A/c Kothakudam (R824))	235	NOs	24.07.2016
5)	COLOR COATED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.5 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013 (A/c Wanakbori (R823))	8800	SQ. Mtr	24.07.2016
6)	COLOR COATED PLAIN RIDGE (0.5X500X1250mm) WITH BASE METAL THICKNESS OF 0.5 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013. (A/c Wanakbori (R823))	235	NOs	24.07.2016
7)	COLOR COATED TRAPEZOIDAL PROFILED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.5 MM AS PER SPECN REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013 . LENGTH OF PROFILED SHEET: 1600 MM. (A/C:IB VALLEY 3&4 :R652 & R653)	9500	SQ. Mtr	24.03.2016
		9500	SQ. Mtr	24.07.2016
8)	COLOR COATED PLAIN RIDGE OF SIZE 0.5 X 500 X 1250mm AS PER SPECN REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013 (A/C:IB VALLEY 3&4 :R652 & R653)	260	Nos	24.03.2016
		260	Nos	24.07.2016
9)	COLOR COATED TRAPEZOIDAL PROFILED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.6 MM AS PER SPECN REF:TEP:BHEL:BAP:AQCS:CC SHEET:REV01 DT 28.08.12.LENGTH OF PROFILED SHEET: 1600 MM (A/C:KARANPURA 1-3 :R664 TO R666)	9850	SQ. Mtr	24.03.2016
		9850	SQ. Mtr	24.09.2016
		9850	SQ. Mtr	24.03.2017
10)	COLOR COATED PLAIN RIDGE OF SIZE 0.6 X 500 X 1250mm AS PER SPECN REF: TEP:BHEL:BAP:AQCS: CC SHEET:REV01 DT 28.08.12. (A/C:KARANPURA 1-3 :R664 TO R666)	375	Nos	24.03.2016
		375	Nos	24.09.2016
		375	Nos	24.03.2017
11)	COLOR COATED TRAPEZOIDAL PROFILED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.5 MM AS PER SPECN REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013. LENGTH OF PROFILED SHEET: 1600 MM. (A/C:Ennore SEZ - R667 & R668)	7400	SQ. Mtr	24.06.2016
		7400	SQ. Mtr	24.08.2016
12)	COLOR COATED PLAIN RIDGE OF SIZE 0.5 X 500 X 1250mm AS PER SPECN REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013. (A/C:Ennore SEZ - R667 & R668)	215	Nos	24.06.2016
		215	Nos	24.08.2016

BIDDERS SHALL CAREFULLY READ THE FOLLOWING ANNEXURES/NOTES AND SHALL QUOTE THEIR BEST COMPETITIVE PRICE.



- **PLEASE REFER ANNEXURE-A FOR STANDARD TERMS & CONDITIONS,**
- **ANNEXURE-B FOR GENERAL TERMS AND CONDITIONS OF REVERSE AUCTION,**
- **ANNEXURE-C FOR ESSENTIAL COMMERCIAL TERMS AND CONDITIONS FOR INDIAN BIDDERS [BIDDERS SHALL SUBMIT THE DULY FILLED ANNEXURE-C ALONG WITH TECHNICAL BID (COVER-I)]**
- **ANNEXURE-D FOR TECHNO-COMMERCIAL DETAILS OF COLOR COATED SHEETS AND RIDGES [BIDDERS SHALL SUBMIT THE DULY FILLED ANNEXURE-D ALONG WITH TECHNICAL BID (COVER-I)].**
- **ANNEXURE-E for DESTINATION ADDRESSES**
- **ANNEXURE-F1 FOR COMMERCIAL TERMS AND CONDITIONS FOR FOREIGN BIDDERS**
- **ANNEXURE-F2 FOR REQUIREMENT OF TECHNICAL DETAILS /CONFIRMATION**
- **Technical Specification for Color coated Trapezoidal roofing sheets and Plain Ridge sheets ref: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01 Date: 28-08-2012 , TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013.**

- TENDER SHALL BE SUBMITTED IN TWO PARTS AS REFERRED IN ANNEXURE-A.
- ANY REVISED OFFER(S) SENT BY VENDORS ON THEIR OWN, AFTER THE TENDER OPENING, WILL BE TREATED AS "UNSOLICITED OFFER". SUCH OFFERS WILL NOT BE CONSIDERED AND NECESSARY ACTION AS DEEMED FIT WILL BE TAKEN BY BHEL ON THOSE VENDORS. HENCE COMPETITIVE OFFER TO BE GIVEN IN THE ORIGINAL QUOTE ITSELF.

IMPORTANT NOTE :

TENDER SHOULD BE SENT IN DUPLICATE IN A SEALED COVER. INNER COVER SEALED WITH TENDERER'S DISTINCTIVE SEAL AND SUPERSCRIBED WITH CORRECT TENDER NO., ITEM OF SUPPLY, DUE DATE OF OPENING AND VALIDITY OF THE OFFER ADDRESSED BY DESIGNATION TO Sr. MANAGER / PURCHASE, BHARAT HEAVY ELECTRICALS LIMITED, BOILER AUXILIARIES PLANT, INDIRA GANDHI INDUSTRIAL COMPLEX, RANIPET, VELLORE DISTRICT-632406.

01) OFFERERS ARE REQUESTED TO CAREFULLY READ THE FOLLOWING CONDITIONS AND GIVE THEIR SPECIFIC CONFIRMATION OF ACCEPTANCE IN TOTO.

2A) TIME IS THE ESSENCE OF CONTRACT.

2B) IN THE EVENT OF DELAY ON THE CONTRACT DELIVERY, LIQUIDATED DAMAGES (LD) WILL BE LEVIED.

2C) LD WILL BE LEVIED AT THE RATE OF 0.5 % PER WEEK OR PART THEREOF ON THE CONTRACT VALUE.

2D) THE LD CEILING WILL BE 15 %.

2E) LD WILL BE A MANDATORY CONDITION IN THE PURCHASE ORDER.

3) IF NO CONFIRMATION OR COMMENTS ARE INCLUDED IN THE INITIAL OFFER BY THE TENDERER, IN THE EVENT OF PLACEMENT OF ORDER, THE ORDER WILL BE RELEASED WITH THE STANDARD LD CONDITION GIVEN ABOVE.

4) THE CONDITION WILL BE INCLUDED IN THE ORDER WITHOUT ANY FURTHER REFERENCE TO THE OFFERER AND NO CHANGES WILL BE PERMISSIBLE, POST ORDER RELEASE.

MSME STATUS - This is applicable for Indian Vendors only

AS PER THE PUBLIC PROCUREMENT POLICY NOTIFIED BY THE CENTRAL GOVERNMENT, MICRO AND SMALL ENTERPRISES QUOTING WITHIN THE PRICE BAND OF L1+15% SHALL BE ALLOWED TO SUPPLY A PORTION OF THE REQUIREMENT UP TO 20% OF THE TENDER VALUE SUBJECT TO CONDITION THAT SUCH ENTERPRISES BRING DOWN THEIR PRICE TO L1 PRICE WHERE L1 PRICE IS FROM OTHER THAN A MICRO AND SMALL ENTERPRISE. IF L1 OFFER IS FROM A MICRO / SMALL ENTERPRISE, THIS PROVISION WILL NOT BE APPLICABLE. IN CASE MORE THAN ONE MICRO AND SMALL ENTERPRISE IS THERE WITHIN THIS SPAN, THE SUPPLY SHALL BE SHARED PROPORTIONATE TO THE TENDER QUANTITY. (70:30 OR 50:30:20 OF THE ELIGIBLE QUANTITY)

NOTE: SPECIAL PROVISION FOR MICRO AND SMALL ENTERPRISES OWNED BY SC OR ST: -

SUB TARGET OF 20% (I.E. 4% OUT OF 20%) WOULD BE EARMARKED FOR PROCUREMENT FROM MICRO AND SMALL ENTERPRISES OWNED BY THE SCHEDULED CASTE OR SCHEDULED TRIBE ENTREPRENEURS PROVIDED THAT IN EVENT OF FAILURE OF SUCH MICRO AND SMALL ENTERPRISES TO PARTICIPATE IN THE TENDER PROCESS OR MEET THE TENDER REQUIREMENTS AND THE L1 PRICE, THE 4% SUB-TARGET FOR PROCUREMENT EAR-MARKED MSE OWNED BY SCHEDULED CASTE OR SCHEDULED TRIBE ENTREPRENEURS SHALL BE MET FROM OTHER MSE ENTERPRISES/S. THE MSE CONCESSION IS SUBJECT TO CONDITION THAT LATEST VALID CERTIFICATE FOR MSE AND OWNERSHIP IS SUBMITTED ALONG WITH THE OFFER. OFFER/S RECEIVED WITHOUT THESE DOCUMENTS WILL BE TREATED AS NON-MSE AND ORDER FINALIZATION WILL BE DONE BASED ON THIS PREMISE. DOCUMENTS SUBMITTED AFTER BID-OPENING WILL NOT BE CONSIDERED IN THE TENDER.

THIS PROVISION FOR MSE WILL APPLY SUBJECT TO THE CONDITION THAT THE PARTICIPATING MSE MEETS THE TENDER REQUIREMENTS.

VALUE ADDED TAX

PLEASE INDICATE YOUR TIN (TAXPAYER IDENTIFICATION) NUMBER, COMMODITY CODE FOR EACH ITEM, DESPATCHING PLACE AND STATE, WHILE SUBMITTING YOUR OFFER.

E - PAYMENT

BHEL IS MAKING PAYMENTS THROUGH E-MODE. SUPPLIERS, WHO HAVE NOT AVAILED THEMSELVES OF THIS FACILITY, CAN E-MAIL TO PURCHASE EXECUTIVES TO OBTAIN NECESSARY FORMATS.



ANNEXURE – A to TENDER: MM/OPEN/COLOR COATED SHEET - 02/2014 DT 23.02.2015

DUE ON 24.03.2015

**STANDARD TERMS & CONDITIONS
(FOR GUIDANCE TO THE SUPPLIERS)**

A. Submission of Offer:

Sealed tenders super-scribed with Tender Number, Due Date, Item Name & Supplier's Name and Validity of the Offer shall be addressed to Sr Manager / Purchase (ESP), Bharat Heavy Electricals Limited, Boiler Auxiliaries Plant, Indira Gandhi Industrial Complex, Ranipet, Vellore District-632406, Tamilnadu, INDIA, so as to reach him on or before the due date and time specified in the tender. It shall contain two sealed covers in one envelope.

Sealed envelope super-scribed as "Cover I - Qualifying Requirements and Techno-commercial bid and Unpriced Bid", with Tender Number, Item Name, Tender Due Date & Supplier's Name, shall contain the following:

I: Techno-Commercial and Un-priced Bid

- a) **Complete technical Offer** with details, catalogues, as applicable.
- b) **Un-priced bid** (i.e. Bid without the Price),
- c) **Filled-in tender Annexure - C & D** for Procurement of Color coated Sheets & ridges enclosed with the Tender Document,
- d) **All relevant enclosures** of above documents / formats, if any.
- e) **PRE QUALIFICATION REQUIREMENT:** The bidder / vendor shall have supplied the color coated roofing sheet for quantity (minimum) of 200 MT in the past one year (i.e from 23.02.14) to any customer. The Bidder shall submit the invoice copy (without price) of supplies made with weight details, inspection report & Test certificate of color coated sheet as proof to meet the pre qualification requirement.
- f) **BHEL registered Vendors:** Vendors registered with any unit of BHEL, shall give details of their registration along with the category registered for. Such Vendors may be exempted from submitting their annual reports & Clientele list.
- g) **BHEL Order Reference:** If same or similar material has been supplied to any other Unit of BHEL, the Purchase Order details (reference number and date) should be enclosed.
- h) **Duly filled & signed Supplier Registration Form (SRF) of BHEL Ranipet (attached herewith) shall be submitted along with bidder's offer compulsorily. The Techno-commercially accepted vendors after evaluation of offers will be evaluated based on submitted SRF of the bidder in order to include in vendor directory of BAP for supply of Color coated sheets. The SRF is not required for already registered vendors with BHEL Ranipet for supply of Color coated sheets.**
- i) **Manufacturers only can submit their offer.**
- j) **Deviation summary** shall be submitted along with Technical Bid in two parts – giving the summary of technical deviations separately and the commercial deviations separately, if any and

Note:

- (i) The materials offered shall conform to the specification Ref and scope attached in the tender.
- (ii) In case the offered materials are not conforming to the Enquiry material Specification or such that the offered materials do not match the enquiry, such offers would not be considered for evaluation and would be rejected. Where equivalent specifications and materials are offered considering such offers will be at the sole discretion of BHEL. **Wherever alternative standards / specifications are offered by Bidder, the Bidder shall**



provide sufficient documentary evidence to ensure equivalence to the designated standards / specifications, failing which the offer would be considered as not technically acceptable and hence shall stand rejected.

(iii) All taxes and duties payable as extra on the quoted price should be specifically stated in both technical bid and price bid offer. Offer shall be submitted along with CST & TIN No. / Excise Tariff No. etc, failing which the purchaser will not be liable for payment of such taxes and duties. Our TIN No. 33243560005, CST No. 239383/11.06.91, BHEL ECC No. AAACB4146PXM008.

(iv) The un-priced bid is to be used to indicate relevant commercial implications without indicating price.

(v) Commercial terms are to be indicated clearly in the offer.

(vi) No changes shall be entertained once the bid is opened unless otherwise specifically agreed to in writing by BHEL.

(vii) Money values (except applicable Taxes, Duties, freight and insurance) shall not be indicated anywhere in the un-priced bid.

(viii) Time required for inspection (at Supplier's works), should be clearly given in terms of numbers of working days

(ix) It is advised that all the pages and annexure to the Techno-Commercial bid should be serially numbered, including indicating the total number of pages.

Sealed envelope super-scribed as "Cover – II (Price bid), with Tender Number, Item Name, Tender Due Date & Name of the Supplier", containing:

II. Sealed Cover super scribed "Cover II –Price Bid" shall contain the following:

Price Bid (i.e. with Price duly filled-in) shall be in conformance with the commercial terms as per Cover- I.

Rates shall be quoted on enquiry unit ie., **for Color coated sheets in SQ.Mtr.** and **for Ridges in No** only. **The Ex-works basic price of color coated sheets, ridges shall be quoted with an uniform price for various Enq. SL. No's (various projects).** The Prices shall be indicated in both figures and words. *[Vendor's offer (against each item of the enquiry) shall be mentioned with maximum weight applicable for color coated sheets & ridges after considering all the variation (as per BIS specification) like variation in thickness].*

Wherever there is a discrepancy between the figures and the words, the value as indicated by words shall be taken as the "Price" by the Purchaser. Similarly if there is a discrepancy between the Unit Price and the Value on account of arithmetical error in the computation of the Value (Price x Quantity), only the Unit Price would be taken by the Purchaser for consideration. No corrections would be permitted after the submission of the bids. Error statements should be completely erased / struck out and fresh values given in the offer, which should be initialled and attested by the tender submitting authority. Offers without the above may become liable for rejection.

Note:

(i) The price break-up should be in line with technical specification / scope of the tender. **(Cost of material, packing charges, forwarding charges, freight and insurance charges shall be shown appropriately, as applicable).**

(ii) **Price Shall be firm and no Price Variation Clause will be entertained and No advance payment will be made by BHEL.**

(iii) In case, there is a discrepancy in the commercial terms quoted between techno-commercial bid and price bid, the term as per the techno-commercial bid (Cover I) shall hold good and the commercial term quoted in the Price Bid (Cover II) shall not be considered.



(iv) In their own interest, all Tenderers are advised to double check their prices, applicable duties and taxes. If octroi is applicable, the same shall be on vendors account only. Since destination has been given in the tender, vendor has to ascertain the applicability of octroi.

(v) The quotation should be valid at least for a period of 90 days from the tender opening date.

(vi) Offers should be submitted in two sets, one original and one copy.

(vii) The offers should invariably contain Signature (in blue color) & Office Stamp of the Supplier. Any corrections / erasures in the offers should be initialled and stamped.

(viii) Bidders shall quote on FOR destination basis only as indicated in the tender.

B. Opening of Offers:

a) Tenders shall be submitted to us on or before the due date by 14.00Hrs and offers will be opened on the due date at 1430 Hours . Tenders received after 1400 Hours of due date would not be opened. The time indicated are Indian Standard Time (IST). Tenders received after 14:00 Hrs of due date would be designated as “Late Offer” and would be returned back to the Bidder unopened.

b) Supplier shall submit two covers (Cover-I: Techno-commercial bid & Cover-II: price bid) in one envelope only. If one cover containing all the bids techno-commercial bid & price bid together, the **bid is liable for rejection**. The decision to accept such bids shall be the sole discretion of BHEL.

c) Such of those Tenderers who wish to participate in the Tender Opening may have to depute their representatives. The representatives would be allowed to participate in the Tender opening only on submission of a signed and stamped authorization letter issued by the Supplier. Representatives without the Authorization Letter would not be allowed to participate in the Tender Opening. Representatives who turn up after the Tender opening time / start of the Tender opening would not be allowed to participate. After tender opening the details would not be given to such suppliers who choose to be absent at the time of Tender opening.

d) Details such as the Technical Specification, Delivery Terms, and Delivery Period and the Price details in the event of the sealed price bid opening, alone would be read out by the Tender Opening Officer. No other data will be read out.

e) In exceptional cases, at the discretion of BHEL, in the event of the named representative (named in the Tender Document) is unable to come due to unavoidable circumstances, then an alternative representative would be allowed, where the alternative representative should carry a revised original authorization certificate. Suppliers are advised to avoid such situations to avoid embarrassments on both sides

f) If so required, BHEL reserves the right to open the Price-Bids, *'in-camera'*. Intimation to this effect would be given to the Supplier by BHEL, before the opening of the Price-Bids.

g) Price Bid opening may be done through Reverse Auction method (English method). All tenderers would have to specifically give their acceptance for this in their bid/s (Refer annexure-B for General Terms and Conditions of Reverse Auction).

Note:

(i) Bids including all enclosures and supporting documents like catalogues, pamphlets, etc., shall be provided in ENGLISH language only.

(ii) At its option, BHEL may consider extending the due date/s for the tender openings. Sufficient notice would be given by BHEL for such extensions.

(iii) Specifications are the basic essence of the “Item” and all deviations shall be summarized and provided in a “Deviation Statement”, by listing the deviation point by point against each point, and



(iv) Vendor's offer (against each item of the enquiry) shall be mentioned with maximum weight applicable for color coated sheets & ridges after considering all the variation (as per BIS specification) like variation in thickness.

(v) At its option BHEL may choose to resort to opening of Price-Bids in conventional sealed bid opening mode instead of conducting the Reverse Auction (RA). All suppliers shall give specific acceptance for this clause along with the Techno-Commercial offer. If BHEL decides to open the price bid in conventional sealed bid opening mode, **Bidders would not be allowed to revise their prices due to change in mode of price bid opening.**

(vi) The decision of the type of price bid opening would be notified to all successful bidders before the Price Bid opening .

(vii) BHEL reserves the right to increase or decrease the tendered quantity and would order on respective L1 (on set basis) vendor at the lowest acceptable price to BHEL.

(viii) Offers for part quantities on item level basis are not acceptable to BHEL. While tenderers can quote for some or all the tendered items, **no supplier shall quote for partial quantity of any given enquiry item. Such partial offer would not be considered in the enquiry for that item.**

C. Evaluation of Offers:

a) The price bids of the technically acceptable offers alone, contained in Cover II shall be opened in case of conventional sealed price bid opening mode.

b) All bidders shall submit their offers by filling-in the format (**Annexure-D**) of the BHEL tender documents. Offers received in any other format are liable to be rejected. Bidders are asked to submit in BHEL's format for the purpose of standardisation & completeness - to help in offer evaluation.

c) Offer with any pre-conditions (like conditional discounts) for price are liable to be rejected / not considered. For evaluation, such conditions would be removed and only the base offer would be considered for evaluation and comparison.

d) **Color coated sheets and ridges required for a particular project shall be procured from a single source / bidder and price bids will be evaluated on set basis (Set means Color coated sheets & Ridges required for a particular project).**

e) Offer will be evaluated on final landed cost to BHEL at the destination basis.

f) In the event of any change in scope / quantity arising out of the discussions, offerers would be given a chance to submit their revised offer. The revised offer shall contain only the price addition / deletion for such change in the scope / quantities, on the original price quoted. The original price quoted shall not be changed by bidders on account of the technical discussions.

g) BHEL reserves the right to reject without assigning any reasons / load any offer with factors other than already specified for such offers having deviations to BHEL Specifications, Standard Terms & Conditions at its discretion. The decision of BHEL in this regard shall be final.

h) BHEL reserves the right to reject an offer due to unsatisfactory past performance during tender finalisation / execution of a contract at any of BHEL projects / units or if unsatisfactory performance report is received from the party/s referenced by the supplier at any time during tender finalisation.

i) BHEL reserves the right to operate Purchase / Price preference to Government of India Undertakings, which shall be given as per the guide lines of Government of India given from time to time and / or relax the Terms and Conditions of the tender.

j) For the purpose of comparing prices, tender prices shall be converted to Indian rupees and the conversion



shall be made by using the Import Bills Rate (IMP Bills) (exchange) rate quoted by the State Bank of India (SBI) on the date of opening of price bids published in the same day newspapers. This exchange rate will be followed till placement of order.

j) BHEL reserves the right to conduct negotiations on the "Price" and "Other Commercial Terms and Conditions" with the lowest ranked offerer at any time after the bid opening but before the release of the Purchase Order and

k) If so required by BHEL, Supplier may have to share their cost data / costing sheet with BHEL.

D. Execution of the Order:

a) BHEL will have the option to pre-inspect the materials at Supplier's works by BHEL's own inspector or by third party agency appointed by BHEL or BHEL's end customer/s but this does not absolve the Supplier from giving the specifications as agreed upon.

b) Inspection call for carrying out the inspection shall be given 45 days before the scheduled contract delivery date. BHEL requires clear 30 days notice to arrange for inspection. The Inspection date/s given by the Supplier shall be on firm basis.

c) Deviations, if any pointed out by the visiting Inspection team of BHEL shall be rectified by the vendor and the items as per specification shall be dispatched on or before the contract delivery date.

d) The final inspection for acceptance will, however, be carried out at the final destination.

e) The contract delivery date is the date of ex-works dispatch of the item for Indian suppliers. In case of import supplies, the contract delivery date is the date of B/L for either FOB / CFR terms. As carriage from the FOB sea-port is arranged by BHEL, in case of non-availability / delay of vessel / containers, the date of intimation of full readiness for dispatch, to the BHEL nominated shipping agent, by the Supplier shall be reckoned as the date of dispatch.

f) Travel & other local stay cost for the Inspectors sent by BHEL will be to BHEL account, but other Inspection Charges, if any shall be to the account of the Seller only.

g) The supplier shall arrange for packing suitably in all respects considering the peculiarity of the material involved for normal transport by sea / air / rail / road and suitably protected against effect of tropical salt laden atmosphere in the event of shipment being delayed at ports / store yards.

h) Foreign suppliers shall dispatch on FOB agreed Sea-Port / FCA agreed Air-Port basis. Indian suppliers shall dispatch on free delivery (door-delivery) at destination basis only. Unloading the materials at the final destination would be to the account of BHEL only.

i) In the event of any short supply, it shall be the responsibility of the supplier to deliver such short supplied/ missing items on Free-of-Cost basis at destination, including customs clearances at Indian Ports in the case of foreign suppliers.

j) Only those documents specified for payment shall be routed through bank for payment. All other documents specified in the Purchase Order shall be sent directly to BHEL, either with the consignment or separately.

k) **Materials shall be dispatched only after getting the dispatch clearance from BHEL** (Dispatch clearance would either be faxed / e-mailed as a scanned document / couriered.) and

l) The standard acceptable mode of payment for the materials is "Direct in 45 days for MSE vendors/90 days for Non-MSE vendors after receipt and acceptance of materials at our end for Indigenous Suppliers" and for foreign suppliers through an "At Sight L/c, payable after receipt of the documents at the opening bank",. Payment to Indian suppliers would be through Electronic Fund Transfer (EFT). In the event of an order, this EFT form has to be filled in and submitted by the Indian bidder.



- m) Wherever applicable, necessary Tax Deduction at Source (TDS) would be issued. Foreign Suppliers may check existence of any Double Taxation arrangement between the Government of India and their country.
- n) The Guarantee period shall start from the "Date of receipt and acceptance of the materials at destinations given in the enquiry".
- o) Any incidence of tax like Income tax, Service Tax and any other similar tax / duties / levies imposed by the Government of India, or the State Government, where the BHEL Unit is located, deductible at Source, during the tenure of the Order shall be deducted by BHEL and necessary certification of the deduction (Tax deduction at Source) would be given.
- p) The Guarantee period shall start from the "Date of receipt and acceptance of the materials at destinations given in the enquiry".
- q) **In the event of an order, the supplier's Invoice shall contain the details of Rate per SQ.Mtr of covered area, Number of sheets, Lorry way bill number & date, total covered area against the Invoice quantity along with total weight of the sheets (excluding packing weight).**

E] Termination of Inquiry / Orders:

- a) BHEL reserves the right to cancel any inquiry before opening of the tender, without assigning any reason.
- b) BHEL reserves the right to cancel any tender and refloat a fresh tender, at any time after opening of the tender, in case it finds the response to its tender as not meeting its requirement. This shall be at the sole discretion of BHEL.
- c) BHEL reserves the right to cancel the order for delay in supply beyond penalty period without any monetary or legal obligations and at the risk and cost of the Supplier. Any delay in getting the Export License cannot be quoted as an excuse for delayed delivery. BHEL reserves the right to cancel the order without any monetary or legal obligations, in case of delay in this regard and
- d) BHEL will levy penalty as Liquidated Damages (LD), for delay in delivery. The damages shall be at the rate of ½% per week or part thereof subject to a maximum of 15%. Delivery for the purpose of L.D, will be reckoned as the date of clearance of the Material / Equipment for dispatch by BHEL, in the event of non-availability / delay in vessels. Supplier shall deduct the applicable LD from the first installment payment when raising the claim for the same. The applicable LD if any would be communicated by BHEL along with the dispatch clearance.

F] Miscellaneous

i) Role

- a) The Supplier shall furnish an authenticated copy of the Agency Agreement with his agent detailing the precise relationship between them and their mutual interest in the business so as to consider the offer of Indian Agent for indigenous portion of the supply along with techno-commercial bid. For main materials/equipment, the offer shall be from Principal / Original material Manufacturer only.
- b) The Supplier shall furnish original authorization letter for the Indian Agent. The letter shall contain name, contact person, complete postal address including phone, fax and e-mail ID. It shall also spell out the type of services to be rendered by Indian Agent.
- c) Indian Agent & Agency commission: In order to maintain sanctity of the tender system, it is mandatory that one Agent cannot represent two Suppliers or quote on their behalf in a particular tender enquiry i.e. an Indian Agent can represent only one Foreign Manufacturer against a particular Tender. If any Agent represents more than one Suppliers all such offers will be rejected. The FOB / FCA / CFR price quoted by the foreign bidder shall include the agency commission. However, the agency commission component payable to their Indian Agents shall be shown separately in the Offer, either as a lump-sum or as a percentage of the quoted price. This will be paid by BHEL in Indian Rupees, on the (satisfactory commissioning &) acceptance of the material / equipment. For calculation of Rupee equivalent of Agency Commission, exchange rate as prevailing on the date of Purchase Order will be taken and
- d) For all discussions, technical clarification and negotiations etc. only the principal would be authorized for interaction with BHEL. The Agent shall not be a party to the discussions / negotiations and would not be normally allowed to participate.



ii) Terms & Conditions of Letter of Credit (L/C) for overseas suppliers (indicated for acceptance).

- a) Unconfirmed irrevocable Letter of Credit only will be opened by BHEL. Confirmation of L/C is not preferred by BHEL. L/C confirmation charges in case of confirmed L/C, shall be to Supplier's account only.
- b) Bank charges out side India are to the Supplier's account.
- c) L/C for shipment would be opened on receipt of Inspection call from Supplier or 2 months prior to the scheduled date of dispatch, whichever is later. The L/C would be valid for 75 days for shipment and for 15 days thereafter for negotiation. (Or if the supplier so requires: 69 + 21 days)
- d) In case of L/C extension caused by delays attributable to the Supplier, the L/C extension / commitment charges are to be borne by the Supplier.

iii) Other terms & conditions for letter of credit: - Documents for negotiation

- a) Signed Commercial invoice in quadruplicate, for a value not exceeding the draft amount, quoting the import License No and certifying goods evidencing shipment / airfreight of the merchandise are as per Applicant's Purchase Order. The amount of invoice after deducting Indian Agent's commission, if any, should not exceed the Credit amount. (The Indian agent's commission, if any, is payable in India in Indian rupees only).
- b) Certificate of Country of Origin, from the country of manufacture, issued by the Chamber of Commerce.
- c) One set of Original and two sets of Non-negotiable copies of 'signed', "unmarked", 'clean on board' Ocean Bill of Lading of a Conference Line Vessel, showing Shipper as "Government of India" Account M/s. Bharat Heavy Electrical Ltd, Unit: BHEL, Ranipet as consignee (The opening bank should not be notified as consignee), marked freight prepaid / payable at destination,

OR

Airway Bills / Air consignment notes / House Airway Bills showing the applicant as the consignee and marked freight payable at destination, indicating flight number and date."

- d) Packing list in 4 copies in English, indicating dimensions of each case / bundle / piece shipped, with weight and number of items and description of each item it contains.
- e) Certified copy of the fax / e-mail sent by the beneficiary to the applicant giving the following particulars of shipment, as the insurance is to be arranged by the Applicant in India: (a) Purchase Order Number & date; (b) Bill of Lading Number & date / Airway Bill No & dated and Flight no & date; (c) Name of vessel; (d) Port of Loading; (e) Number of case / pieces and weight; (f) Invoice Number, date and value (g) Purchase Order item number's despatched. The E mail / fax is to be sent within 2 working days of shipment.
- f) Beneficiary's certificate showing the relevant airmail / courier reference no. and date that the following clauses have been complied with:
 - 1] Beneficiary to forward by Registered Airmail / Courier one complete set of original documents and one set of non-negotiable documents within 3 working days of obtaining shipping documents to Regional Manager (ROD), Bharat Heavy Electricals Ltd, No. 165, Thambu Chetty Street, Chennai – 600 001. India. (Phone: +91-44-25341249, 25341240 / Fax - +91-44-25340787; e-mail: raja@rodchn.bhel.co.in)
 - 2] Beneficiary to courier at his cost 3 copies of complete set of non-negotiable documents to the Officer who released the Purchase Order.
 - 3] Declaration by the Supplier certifying that the contents in each case are not less than those entered in the invoices / packing list and that the invoicing for the supplies effected is strictly in accordance with agreed rates as stipulated in the Purchase Order.
 - 4] Declaration to the effect that all other documents as per purchase order has been couriered to the Purchase order releasing authority.
 - 5] The carrying steamer should be seaworthy, less than 25 years of age and approved by Lloyds / Classification Societies / General Insurance Corporation of India from time to time and
 - 6] Copy of Dispatch Clearance / Instruction issued by BHEL.

iv) Documents to be sent directly to the Purchaser prior to shipment : (Import Suppliers)

- a) Manufacturer's Original Internal Inspection / Test certificate in triplicate.
- b) Manufacturer's Original Guarantee certificate as per Purchase Order. The material shall be guaranteed for a period of 24 months after commissioning / putting into use.
- c) Inspection / Test Certificate issued by BHEL / Inspection agency specified in the Purchase Order. In the



event that Inspection prior to dispatch is not carried out by the Engineers of BHEL, the Inspection certificate of the third party so authorized by BHEL and
d) Any other documentation as specified in the Purchase Order.

G. Documents to be sent directly to the Purchaser prior to shipment (Indian Suppliers):

- a) Manufacturer's Original Internal Inspection report / Test certificate in triplicate.
- b) Manufacturer's Original Guarantee certificate as per Purchase Order. The material shall be guaranteed for a period of 12 months from the date of acceptance of the materials at final destination or 18 months from the date of dispatch whichever is earlier. The acceptance would be evidenced by material receipt at final destination.
- c) Inspection / Test Certificate issued by BHEL / Inspection agency specified in the Purchase Order. In the event that Inspection prior to dispatch is not carried out by the Engineers of BHEL, the Inspection certificate of the third party so authorized by BHEL and
- d) Any other documentation as specified in the Purchase Order.

H. Conditions for transportation:

- a) All shipping documents shall show the Purchase Order Number & Date, project name.
- b) **Transshipment is to be avoided.**
- c) The transport document must contain all the conditions of carriage on the original document.
- d) Suppliers shall dispatch the materials, freight prepaid, on door-delivery basis (FOR Destination – Destination: Respective Sites) preferably through any one of the approved carriers of BHEL only.
- e) **Loading on deck is not permitted. The transport document must not contain a provision that goods may be carried on deck.**
- f) A transport document which is produced or appearing to have been produced by reprographic, automated or computerized systems or as carbon copy will be accepted as an original document provided that it is marked as original and is ink-signed.
- g) The transport document must contain all the conditions of carriage on the original document.
- h) The transport document must not indicate the place of destination as being different from the port of discharge.
- i) The transport document must not contain the indication 'intended' or similar qualification in relation to the vessel or other means of transport or port of loading or port of discharge.
- j) The transport document must be issued by the carrier or his agent and not by any freight forwarder.
- k) Transport documents bearing reference by stamp or otherwise, to costs additional to the freight charges are not acceptable.
- l) The Bills of Exchange must be dated and presentation of documents for negotiation must not be later than 15 days after the date of shipment / airfreight and in any case not later than the expiry date of the Credit.
- m) Each case / bundle / piece should be painted with 4 " wide yellow colour strip around it for facilitating easy identification at port of discharge.
- n) In case of consignments where individual items as per Purchase Order are listed in the packing list / Invoice, the price and values for each and every item should be indicated.
- o) Material shall be dispatched through the agency nominated by BHEL.
- p) Indian suppliers shall dispatch the equipment, freight prepaid, on door-delivery basis (FOR Destination – Destination: BHEL Stores) through any one of the approved carriers of BHEL only and
- q) In the event there is a delay by the Supplier in negotiating the document, any demurrage / wharfage arising out of the same shall be to the account of the Supplier and shall be deducted from the final payment. Also, in such cases, the Supplier shall authorize the Steamer / Shipping agent to freely release the consignment to BHEL

I. Delivery period

The contractual delivery period will be reckoned from the date of LOI, which shall be binding on the contract. Suppliers shall quote their best delivery period. Delivery is the essence of all contracts for BHEL.

J. Liquidated Damages Clause:

BHEL will levy penalty as Liquidated Damages (LD), for delay in delivery. The penalty shall be at the rate of ½% per week or part thereof subject to a maximum of 10%. Delivery for purpose of L.D, will be reckoned as the date of the ex-works dispatch of the materials by the Supplier. Applicable LD will be deducted from suppliers bills for the delayed portion. The LD would apply on the undelivered portion only. In case of



reasons attributable to BHEL for the delay in delivery (for e.g. delay in arranging the pre-inspection) then the delivery time would be reset to the extent of the time delay attributable to BHEL, with waiver of the LD. Delivery being the essence of BHEL's contract requirements, In the event that a Supplier does not accept the LD condition above, the offer would be loaded to the extent of the shortfall with respect to upper limit specified above. Offers which do not accept for any LD would stand rejected.

The offer/s of such of those bidders who do not accept for levy of liquidated damages (LD) for delay in delivery is likely to be summarisely rejected. No correspondence would be entertained by BHEL in this regard, on this subject. BHEL specifically draws the need of this mandatory requirement to the notice of all Bidders. The Price Bid of such of those bidders failing to meet this requirement, would not be considered for the Price-Bid Opening.

K. Force Majeure:

If at any time during the currency of this contract, the performance in whole or in part, by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events), then provided notice of happening of any such events is given by either party to other within ten days from the date of occurrence thereof, neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by the purchaser subject to prompt notification by the seller to the purchaser of the particulars of the events and supply to the purchaser if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.

L. Cancellation of Order:

In the event of non-performance of the contract by the Supplier, BHEL reserves the right to cancel the order with issue of a written notice. BHEL would provide a curing period of 30 days, for the Supplier to rectify the situation. If the Supplier fails to rectify the reason/s that led to the issue of cancellation notice by BHEL, then the cancellation order would be issued automatically by BHEL, without further recourse to the Seller. BHEL will not pay any cancellation charges or any other charges / damages to the Supplier, arising out such cancellation. In the event of the non-performance of the supply contract, by the Supplier, the rights of BHEL include, in addition to canceling the order, to take alternate purchase action at the cost and risk of the supplier. The additional expenditure to be incurred by BHEL in such alternate purchase would be to the account of the supplier. (Risk Purchase). This remedy would be in addition to the invoking of the CEBG on grounds of failure of the Supplier in executing the Contract and any other legal remedies."

M. Others:

- a) In case of any contradiction in the terms and conditions given here and elsewhere in the other documents of the tender, it shall be the responsibility of the tenderer to get it clarified from BHEL. The officer authorized to provide such clarifications is the Sr Manager/Purchase-ESP, e-mail ID: tvgopal@bhelrpt.co.in and akpalanisamy@bhelrpt.co.in.
- b) Alterations to the conditions of the Tender can be done only by the authorized officer, at any time before the date and time of tender opening. Such changes, if any, would be communicated in writing and / or hosted in the web-page.
- c) If any Supplier attempts to bribe, or pay commission, gift or any advantage or bring in undue influence either by himself or on his behalf any one including a stranger to the tender, in addition to instituting legal proceedings as per the extant laws prevailing, will disqualify the supplier from this tender and all future tenders of BHEL. Decision of the Purchaser would be final in this matter.
- d) The laws governing this transaction shall be the laws in India.



e) In the event of an order, Supplier shall agree to settlement of disputes or differences, if any, by way of arbitration, in accordance with the "Rule of Arbitration" of the Indian Council of Arbitration.

The language in the tender documents downloaded by the Bidders shall at no point of time be changed, altered or modified in any manner by the Tenderer. If such changes are made by any tenderer, it shall be considered as tampering with BHEL's terms and the offer shall be summarily rejected, whenever it is noticed by BHEL. Such Bidders would be disqualified from the Bidding Process and their offers would be forfeited / Bank Guarantees invoked. They would also not be allowed to participate in future tenders of BHEL.

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## ANNEXURE – B

### GENERAL TERMS AND CONDITIONS OF REVERSE AUCTION

Against this enquiry for the subject item / system with detailed scope of supply as per enquiry specifications, BHEL may resort to "REVERSE AUCTION PROCEDURE", i.e ON LINE BIDDING ON INTERNET.

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
3. In case of reverse auction, BHEL will inform the vendor in writing, the details of Service provider to enable them to contact & get trained. Also will be informed later regarding reverse action terms & condition.
4. Business rules like event date, time, Start price, Bid decrement, extensions etc., also will be communicated through service provider for compliance.
5. Vendors have to fax the compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to participate in the event.
6. BHEL will provide the calculation sheet (e.g EXCEL sheet) which will help to arrive at "Total cost to BHEL like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Service and loading Factors with others Commercial terms & conditions for each of the vendor to enable them to fill-in the price and keep it ready for keying in during the Auction.
7. Reverse Auction will be conducted on scheduled date & time.
8. At the end of Reverse Auction event, the lowest bidder value will be known on the network.
9. The lowest bidder has to Fax the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service Provider within 24 hours of auctions without fail.
10. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure.
11. Cancellation of RA: Even where BHEL has specified Reverse Auction as the mode of competitive bidding in the tender enquiry, BHEL reserves the right to cancel the RA and go in for competitive sealed price bidding.

In that event, BHEL would intimate the acceptable offerers of the same in writing. The decision of BHEL to replace RA with competitive sealed bidding would be final and would be binding on all the technically qualified bidders. Such decision would be communicated to the technically successful bidders and BHEL is under no obligation to assign any reason for changing the mode of bidding from RA to sealed cover competitive bidding.

It shall be presumed that all bidders participating in this tender have read this condition and have accepted this, in submitting their offer.

Bidders would then given an opportunity to submit their reduction impact price bid if any, in sealed cover, which would be considered together with the price bids submitted along with the original/technical offer and other impact price bids if any arising out of changes in the technical scope. In case tenderers choose not to offer any reduction impact, then they would have to submit a statement to that effect, also in a sealed cover for opening along with price bid/s.



**ANNEXURE – C to TENDER: MM/OPEN/COLOR COATED SHEET - 02/2014 DT 23.02.2015**

**Essential Commercial Terms & Conditions (To be filled in full and to be submitted along with Techno Commercial Bid)**

| S. No | TERMS & CONDITIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Bidders confirmation/Details     |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| 1)    | <b>Price (shall be firm till supply completion)</b><br>a) FOR / Destination incl. Freight & Insurance<br>b) FOR / Destination - freight & Insurance (breakup shall be given against Point No: 7 & 8).                                                                                                                                                                                                                                                                                                                                                                              |                                  |
| 2)    | <b>ED in %</b> (Excise Invoice to be given for Cenvat benefit) for IB valley, Kothagudam & Wanakbori projects<br><br>Being Mega power project, ED is Exempted for NTPC Darlipalli & Karanpura Projects. BHEL will provide necessary documents for availing ED exemption and ED shall be exempted for the supply for these Projects.                                                                                                                                                                                                                                                | Agreed for availing ED exemption |
| 3)    | <b>ST in %</b> (CST against form 'C' / VAT)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  |
| 4)    | <b>Octroi charges</b> if any to be included in bidders' scope.<br>(Since enquiry destination has been given, vendor has to ascertain the applicability of octroi)                                                                                                                                                                                                                                                                                                                                                                                                                  | Suppliers Account only           |
| 5)    | <b>Packing &amp; forwarding:</b> included                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                  |
| 6)    | <b>Delivery Term:</b> FOR DESTINATION<br><b>Delivery Place:</b> As per Annexure-D<br>FREIGHT AND INSURANCE SHALL BE INDICATED SEPARATELY in Annexure-D.                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |
| 7)    | <b>Time required to submit Drawing for approval after release of P.O.</b><br>(maximum 2 weeks)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                  |
| 8)    | Specific compliance to our Technical specification ref: <b>TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01 Date: 28-08-2012 &amp; TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013</b> (Please confirm after completely reading the specification)<br>Bidders shall submit the signed copy of Technical specification ref: <b>TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01 Date: 28-08-2012 &amp; TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013</b> along with their offer.                                                                                                      |                                  |
| 9)    | <b>Delivery period of product from the date of Drawing approval:</b> (delivery period shall be quoted clearly for supply of total tender quantity and also mention monthly delivery quantity)                                                                                                                                                                                                                                                                                                                                                                                      |                                  |
| 10)   | <b>L.D. Clause:</b> Standard L.D Clause will be @ 0.5% per week or part there of subject to a Maximum of 10% for the undelivered PO portion.<br><br><b>IF ANY BIDDER ACCEPTS ONLY PART LD, THE UNACCEPTED PORTION OF LD WILL BE LOADED ON THE OFFERS OF SUCH BIDDERS.</b><br><br><i>The offer/s of such of those bidders who do not accept for levy of any liquidated damages (LD) for delay in delivery is likely to be summarisely rejected.</i>                                                                                                                                 |                                  |
| 11)   | <b>Terms of Payment:</b><br>(A) In case of NON-MSE vendors, 100% payment within 90 days of receipt and acceptance of materials at our stores / Receipt of materials at BHEL site (In case of DTS items).<br>(B) In case of registered MSE vendors, 100% payment within 45 days of receipt and acceptance of materials at our stores / Receipt of materials at BHEL site (In case of DTS items).<br>(C) No other payment term will be accepted. If any bidder do not accept our standard payment term, their offer will be rejected summarily.<br>No advance payment will be given. |                                  |



| S. No                                | TERMS & CONDITIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Bidders confirmation/Details         |                                                                                                                               |  |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--|
| 12)                                  | <p><b>Offer Validity:</b> The Validity shall be 90 days from the date of Technical Bid opening. Any offer with validity of less than 90 days, is liable for rejection.</p> <p>In case, price bids are opened through Reverse Auction, the offered price in Reverse Auction shall be valid for 45 days from the date of Reverse Auction.</p>                                                                                                                                                                                                                                                       |                                      |                                                                                                                               |  |
| 13)                                  | <table border="1"> <tr> <td>INSPECTION BEFORE DESPATCH</td> <td>Will be done at Vendor's Works before Dispatch by BHEL / BHEL's customer / BHEL's authorized Inspection agency</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                | INSPECTION BEFORE DESPATCH           | Will be done at Vendor's Works before Dispatch by BHEL / BHEL's customer / BHEL's authorized Inspection agency                |  |
| INSPECTION BEFORE DESPATCH           | Will be done at Vendor's Works before Dispatch by BHEL / BHEL's customer / BHEL's authorized Inspection agency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                      |                                                                                                                               |  |
| 14)                                  | <table border="1"> <tr> <td>TEST CERTIFICATE</td> <td>Required</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | TEST CERTIFICATE                     | Required                                                                                                                      |  |
| TEST CERTIFICATE                     | Required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                      |                                                                                                                               |  |
| 15)                                  | <p><b>BHEL Standard Guarantee Clause:</b> Your confirmation to our standard Guarantee clause that the materials are to be guaranteed for satisfactory performance for a period of twelve months from the date of commissioning / putting into use (or) eighteen months from the dispatch which ever is earlier and if any defect is noticed during the above period, the same shall be rectified/replaced free of cost on Ranipet / Destination basis within a reasonable time. To this effect a Guarantee certificate should be sent along with the dispatch documents in the event an order</p> |                                      |                                                                                                                               |  |
| 16)                                  | <p><b>Risk Purchase Clause:</b> 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 seller has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute thereof. The seller shall be liable for all losses and extra expenditure which the purchaser may sustain by reason of such risk purchases in addition to penalty at the rates of LD clause agreed.</p>  |                                      |                                                                                                                               |  |
| 17)                                  | <p>Performance Bank Guarantee should be submitted for 10% of PO value in BHEL's format obtained from BHEL consortium of banks for the guarantee period + claim period of 3 months</p> <p>Bank Guarantee from indigenous suppliers shall be in the prescribed form and from the list of bankers, provided by BHEL.</p>                                                                                                                                                                                                                                                                             |                                      |                                                                                                                               |  |
| 18)                                  | <table border="1"> <tr> <td>Issue of Material Dispatch clearance</td> <td>Based on Test certificates, Test reports along with BHEL/BHEL AUTHORISED AGENCY inspection reports, in the event of ordering.</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                       | Issue of Material Dispatch clearance | Based on Test certificates, Test reports along with BHEL/BHEL AUTHORISED AGENCY inspection reports, in the event of ordering. |  |
| Issue of Material Dispatch clearance | Based on Test certificates, Test reports along with BHEL/BHEL AUTHORISED AGENCY inspection reports, in the event of ordering.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                               |  |
| 19)                                  | No quantity tolerance is acceptable to BHEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                      |                                                                                                                               |  |
| 20)                                  | Manufacturing tolerance is allowed as per IS 513. If manufacturing tolerance is necessary, consider it to arrive the maximum weight of sheet and ridge.                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                                                                                                               |  |
| 21)                                  | The required no of sheets applicable for each project, based on vendors offer, will be confirmed by BHEL-RANIPET, after technical evaluation of offer and drawing of supplier.                                                                                                                                                                                                                                                                                                                                                                                                                    |                                      |                                                                                                                               |  |
| 22)                                  | <u><a href="#">For each project, the mentioned required no of sheets in the attached filled up Annexure III along with offer are adequate for the covered area indicated in the enquiry.</a></u>                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |                                                                                                                               |  |
| 23)                                  | <u><a href="#">Reverse Auction (R/A) / Bidding through Internet: Supplier confirmation required.</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                      |                                                                                                                               |  |

THE ABOVE FORMAT SHALL BE COMPLETELY FILLED AND DEVIATION IF ANY SHALL BE CLEARLY SPELT OUT. NO COLUMN SHOULD BE LEFT BLANK WITHOUT FILLING UP WHICH MAY LEAD TO REJECTION OF OFFER. IF THERE IS ANY CONTRADICTION BETWEEN THE OFFER AND THIS CONFIRMATION ANNEXURE, THE ADVANTAGEOUS POINT TO BHEL WILL BE CONSIDERED.

VENDOR'S SIGN & SEAL



**Annexure-E**

**DESTINATION ADDRESSES**

| <b>ENQ SL NO</b> | <b>PROJECT NAME</b> | <b>PROJECT DESTINATION / DELIVERY PLACE</b>                                                                                                  |
|------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 1                | NTPC DARLIPALI      | AGM (Projects ) NTPC LTD<br>DARLIPALI SUPER THERMAL PROJECT<br>P.O DARLIPALI, VIA SARGIPALI, ZINC NAGAR, SUNDARGAR<br>(ODISHA)-770072        |
| 2                |                     |                                                                                                                                              |
| 3                | Kothakudam          | Kothagudam, Near Paloncha village,Khammam Dist,Telangana                                                                                     |
| 4                |                     |                                                                                                                                              |
| 5                | Wanakbori           | Wanakbori Thermal Power Station Unit -8 (1 x 800 mw)<br>Gujarat State Electricity Company Ltd ,Wanakbori<br>Dist - Kheda Gujarat             |
| 6                |                     |                                                                                                                                              |
| 7                | IB Valley           | Odisha Power Generation Corporation Ltd<br>IB Thermal Power Project, Unit # 3 & # 4, Banharpalli Village<br>Jharsuguda Dist. 768234, Odisha. |
| 8                |                     |                                                                                                                                              |
| 9                | Karanpura           | Karanpura Thermal Power Project, NTPC Ltd, Karanpura, Jharkhand.                                                                             |
| 10               |                     |                                                                                                                                              |
| 11               | Ennore SEZ          | Ennore SEZ Power project, Ennore, Tamilnadu                                                                                                  |
| 12               |                     |                                                                                                                                              |

| MM/OPEN/COLOR COATED SHEET - 02/2014 DT 23.02.2015 - Annexure-D for Color coated profiled sheets /Plain sheets |                                                                                                                                                                                                                                     |                                                            |                                      |                                     |                                                                       |                                                                           |                                                                   |                                                                                  |                                    |                                                                                                                               |                                                        |                          |               |                                                         |                                         |                                                                           |
|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------|-------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------|---------------|---------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------|
| Enq No.                                                                                                        | Description                                                                                                                                                                                                                         | Total Enquiry Qty in SQ.Mtr (Total Covered area in SQ.Mtr) | Offered base metal Thickness (in mm) | Offered length of the sheet (in mm) | Total Offered Covered Area (in Sq.Mtr) (Excluding overlap dimensions) | Covered width of the Offered sheet (in mm) (Excluding overlap dimensions) | Covered Area per Sheet (in SQ.Mtr) (Excluding overlap dimensions) | Total no of sheets required to meet total Enq. Qty (Total covered area)[in Nos.] | Weight of Sheet per Sq.Mtr (in kg) | Total weight offered to cover the Enquiry Qty, considering all variations viz. weight and qty, meeting the Enquiry Qty(in MT) | Offered Basic Rate per Sq.Mtr of Covered Area (in Rs.) | ED (including CESS) in % | VAT/ CST in % | Total Freight Amount (including Octroi)per SQ.Mtr in Rs | Total Insurance Amount per SQ.Mtr in Rs | Deviation if any shall be specified clearly (against each enquiry SL. No) |
| 1                                                                                                              | COLOR COATED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.6 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01 Date: 28-08-2012 (A/c NTPC Darlipalli (R825 & R826))                                           | 22600                                                      | 0.6                                  |                                     |                                                                       |                                                                           |                                                                   |                                                                                  |                                    |                                                                                                                               |                                                        | Exempted                 |               |                                                         |                                         |                                                                           |
| 3                                                                                                              | COLOR COATED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.5 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS:CC SHEET:Rev 00 Date: 18-01-2013 (A/c Kothakudam (R824))                                                         | 7950                                                       | 0.5                                  |                                     |                                                                       |                                                                           |                                                                   |                                                                                  |                                    |                                                                                                                               |                                                        |                          |               |                                                         |                                         |                                                                           |
| 5                                                                                                              | COLOR COATED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.5 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013 (A/c Wanakbori (R823))                                                        | 8800                                                       | 0.5                                  |                                     |                                                                       |                                                                           |                                                                   |                                                                                  |                                    |                                                                                                                               |                                                        |                          |               |                                                         |                                         |                                                                           |
| 7                                                                                                              | COLOR COATED TRAPEZOIDAL PROFILED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.5 MM AS PER SPECN REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013 . LENGTH OF PROFILED SHEET: 1600 MM. (A/C:IB VALLEY 3&4 :R652 & R653) | 19000                                                      | 0.5                                  |                                     |                                                                       |                                                                           |                                                                   |                                                                                  |                                    |                                                                                                                               |                                                        |                          |               |                                                         |                                         |                                                                           |
| 9                                                                                                              | COLOR COATED TRAPEZOIDAL PROFILED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.6 MM AS PER SPECN REF:TEP: BHEL:BAP:AQCS:CC SHEET: REV01 DT 28.08.12. LENGTH OF PROFILED SHEET: 1600 MM (A/C:KARANPURA 1-3 :R664 TO R666)            | 29550                                                      | 0.6                                  |                                     |                                                                       |                                                                           |                                                                   |                                                                                  |                                    |                                                                                                                               |                                                        | Exempted                 |               |                                                         |                                         |                                                                           |
| 11                                                                                                             | COLOR COATED TRAPEZOIDAL PROFILED ROOFING SHEET WITH BASE METAL THICKNESS OF 0.5 MM AS PER SPECN REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013. LENGTH OF PROFILED SHEET: 1600 MM. (A/C:Ennore SEZ - R667 & R668)    | 14800                                                      | 0.5                                  |                                     |                                                                       |                                                                           |                                                                   |                                                                                  |                                    |                                                                                                                               |                                                        |                          |               |                                                         |                                         |                                                                           |

| Enq S/No.                                                                                                                                                                                                                  | Description                                                                                                                                                                                               | Total Enquiry Qty in Nos | Offered Thickness (in mm) | Offered length of the sheet (in mm) | width of the Offered sheet (in mm) | Total no of sheets required to meet total Enq. Qty | Weight of Sheet per No (in kg) | Total weight offered to cover the Enquiry Qty, considering all variations viz. weight and qty, meeting the Enquiry Qty (in MT) | Offered Basic Rate per sheet (in Rs.) | ED (including CESS) in % | VAT/ CST in % | Total Freight Amount (including Octroi)per sheet in Rs | Total Insurance Amount per Sheet in Rs |  |  | Deviation if any shall be specified clearly (against each enquiry SL. No) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------|-------------------------------------|------------------------------------|----------------------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------------------|---------------|--------------------------------------------------------|----------------------------------------|--|--|---------------------------------------------------------------------------|
| 2                                                                                                                                                                                                                          | COLOR COATED PLAIN RIDGE (0.6X500X1250mm) WITH BASE METAL THICKNESS OF 0.6 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01 Date: 28-08-2012. (A/c NTPC Darlipalli (R825 & R826)) | 800                      | 0.6                       |                                     |                                    |                                                    |                                |                                                                                                                                |                                       | Exempted                 |               |                                                        |                                        |  |  |                                                                           |
| 4                                                                                                                                                                                                                          | COLOR COATED PLAIN RIDGE (0.5X500X1250mm) WITH BASE METAL THICKNESS OF 0.5 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013 (A/c Kothakudam (R824))              | 235                      | 0.5                       |                                     |                                    |                                                    |                                |                                                                                                                                |                                       |                          |               |                                                        |                                        |  |  |                                                                           |
| 6                                                                                                                                                                                                                          | COLOR COATED PLAIN RIDGE (0.5X500X1250mm) WITH BASE METAL THICKNESS OF 0.5 MM AS PER TECH SPECIFICATION REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013. (A/c Wanakbori (R823))              | 235                      | 0.5                       |                                     |                                    |                                                    |                                |                                                                                                                                |                                       |                          |               |                                                        |                                        |  |  |                                                                           |
| 8                                                                                                                                                                                                                          | COLOR COATED PLAIN RIDGE OF SIZE 0.5 X 500 X 1250mm AS PER SPECN REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013 (A/C:IB VALLEY 3&4 :R652 & R653)                                            | 520                      | 0.5                       |                                     |                                    |                                                    |                                |                                                                                                                                |                                       |                          |               |                                                        |                                        |  |  |                                                                           |
| 10                                                                                                                                                                                                                         | COLOR COATED PLAIN RIDGE OF SIZE 0.6 X 500 X 1250mm AS PER SPECN REF:TEP:BHEL:BAP: AQCS: CC SHEET:REV01 DT 28.08.12. (A/C:KARANPURA 1-3 :R664 TO R666)                                                    | 1125                     | 0.6                       |                                     |                                    |                                                    |                                |                                                                                                                                |                                       | Exempted                 |               |                                                        |                                        |  |  |                                                                           |
| 12                                                                                                                                                                                                                         | COLOR COATED PLAIN RIDGE OF SIZE 0.5 X 500 X 1250mm AS PER SPECN REF: TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00 Date: 18-01-2013. (A/C:Ennore SEZ - R667 & R668)                                             | 430                      | 0.5                       |                                     |                                    |                                                    |                                |                                                                                                                                |                                       |                          |               |                                                        |                                        |  |  |                                                                           |
|                                                                                                                                                                                                                            | Note:                                                                                                                                                                                                     |                          |                           |                                     |                                    |                                                    |                                |                                                                                                                                |                                       |                          |               |                                                        |                                        |  |  |                                                                           |
| 1. Covered width means excluding overlap width dimensions on both edges of width [Example:Covered Area = Profiled sheet width of (excluding overlapping dimension)1.00Mtr x Profiled sheet length of 3.60 Mtr=3.6 Sq.Mtr]. |                                                                                                                                                                                                           |                          |                           |                                     |                                    |                                                    |                                |                                                                                                                                |                                       |                          |               |                                                        |                                        |  |  |                                                                           |

**ANNEXURE –F1**  
**COMMERCIAL TERMS AND CONDITIONS**

**(To be filled in full and to be submitted along with offer)**

| SL. NO. | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BHEL'S REQUIREMENT                                                                                                                      | SUPPLIER'S COMMENTS |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1)      | PRICE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Firm till completion of order.[ offer with Price Variation Clause is not acceptable ]                                                   |                     |
| 2)      | DELIVERY TERMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | CFR Chennai Sea Port basis<br>[ final Destination as per Enquiry ]                                                                      |                     |
| 3)      | PACKING&FORWARDING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | To be included. [ if extra indicate in % ]                                                                                              |                     |
| 4)      | FREIGHT & INSURANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Freight to be included. Insurance to BHEL a/c. [ if extra indicate in % ]<br>Applicable Ocean freight is to be indicated separately.    |                     |
| 5)      | PAYMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 100% payment thro an unconfirmed Irrevocable Letter of Credit only.[ L/c validity period will be 3 months including negotiation period] |                     |
| 6)      | DELIVERY PERIOD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | To be indicated by vendor                                                                                                               |                     |
| 7)      | L.D.CLAUSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | As indicated in Enquiry [ as per IMPORTANT NOTE ] @ 0.5% per week subject to a maximum of 10% for the delayed delivery.                 |                     |
| 8)      | OFFER VALIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Minimum 90 days from the date of tender opening.                                                                                        |                     |
| 9)      | TEST CERTIFICATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Required                                                                                                                                |                     |
| 10)     | <b>BHEL Standard Guarantee Clause:</b> Your confirmation to our standard Guarantee clause that the materials are to be guaranteed for satisfactory performance for a period of twelve months from the date of commissioning / putting into use (or) eighteen months from the dispatch which ever is earlier and if any defect is noticed during the above period, the same shall be rectified/replaced free of cost on Ranipet/ Destination basis within a reasonable time. To this effect a Guarantee certificate should be sent along with the dispatch documents in the event an order |                                                                                                                                         |                     |
| 11)     | <b>Risk Purchase Clause:</b> 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 seller has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute thereof. The seller shall be liable for all losses and extra expenditure which the purchaser may sustain by reason of such risk purchases in addition to penalty at the rates of LD clause agreed. |                                                                                                                                         |                     |
| 12)     | Installation Supervision and Commissioning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Vendor's scope, if required [Please refer to Enquiry Technical Specification.]                                                          |                     |
| 13)     | O&M MANUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | As per enquiry / specification.                                                                                                         |                     |
| 14)     | WEIGHT OF THE CONSIGNMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Weight of each item & Total consignment weight are to be furnished along with offer.                                                    |                     |
| 15)     | SPECIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Clause wise / Point wise confirmation to be given in TOTO for all specifications& to be submitted along with offer.                     |                     |
| 16)     | SPECIFICATION DEVIATION DISPOSITION REPORT [SDDR]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Attached SDDR to be filled & submit along with offer.(Even NO deviation is taken, NIL report to be submitted).                          |                     |
| 17)     | Place of Manufacture & Supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | To be indicated by vendor                                                                                                               |                     |

**Note: Offer will be evaluated on the basis of Total cost to BHEL at the final destination.**

Date :

Signature With Seal

**ANNEURE – F2**

**REQUIREMENT OF TECHNICAL DETAILS /CONFIRMATION**

**(To be filled in full and to be submitted along with Techno Commercial Bid)**

| <b>S.NO</b> | <b>DESCRIPTION</b>                                | <b>BHEL'S REQUIREMENT</b>                                                                                                     | <b>SUPPLIER'S COMMENTS</b> |
|-------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 01          | SPECIFICATION                                     | Clause wise / Point wise confirmation to be given in TOTO for all specifications & to be submitted along with offer.          |                            |
| 02          | DATA SHEET / DRGS                                 | Filled Data Sheet and vendor'sr Drgs are to be submitted along with offer.( if applicable ).                                  |                            |
| 03          | QUALITY PLAN                                      | To confirm applicable QP will be followed. (OR) Your Quality Plan to be submitted for our review & approval along with offer. |                            |
| 04          | SPECIFICATION DEVIATION DISPOSITION REPORT (SDDR) | Attached SDDR to be filled & submit along with offer. (Even NO deviation is taken, NIL report to be submitted).               |                            |

**( To be submitted along with the offer )**

| <b>SPECIFICATION DEVIATION DISPOSITION REPORT</b> |        |                                                                                    |                     |
|---------------------------------------------------|--------|------------------------------------------------------------------------------------|---------------------|
| Specn                                             |        | Item                                                                               |                     |
| Enq.No & Date                                     |        |                                                                                    |                     |
| Vendor Name                                       |        |                                                                                    |                     |
| SPECN                                             |        |                                                                                    |                     |
| Page                                              | Clause | Details Of Deviation With Reason                                                   | Disposition By Bhel |
|                                                   |        |                                                                                    |                     |
| Signature Of Vendor                               |        |                                                                                    | Reviewed By         |
|                                                   |        |                                                                                    |                     |
|                                                   |        | “ AGREED DEVIATION “<br>if any to be incorporated in the PO in the event of order. | APPROVED BY         |
|                                                   |        |                                                                                    |                     |

Date :

SIGNATURE WITH SEAL

# Technical Specification for Color coated Roof decking Trapezoidal sheets

TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00

Date: 18-01-13 Page 01 of 02

Applicable standards: Color coated trapezoidal sheets as per Indian Standard IS 14246 or Equivalent International Standards JIS G 3312 or ASTM A 755 or EN 10169-1 or Equivalent.

| Sl.No. | Description                                                                                                                                                          | Design Requirement                                                                                                                            |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1.0    | <b>Application:</b> These color coated roof decking trapezoidal sheets and are fixed using self-tapping screws                                                       |                                                                                                                                               |
| 2.0    | <b>Material:</b> (Trapezoidal sheet as well as Plain Ridge sheet)                                                                                                    |                                                                                                                                               |
| 2.1    | Base Metal Nominal Thickness                                                                                                                                         | 0.5 mm                                                                                                                                        |
| 2.1    | Material Specification                                                                                                                                               | As Per IS 513- MILD STEEL or Equivalent applicable as per above referred standards. Thickness tolerance shall be as per IS 513 or Equivalent. |
| 2.2    | Yield Strength                                                                                                                                                       | Minimum 240 MPa (As applicable to IS 513 CR2 or Equivalent)                                                                                   |
| 3.0    | <b>Roofing sheet:</b>                                                                                                                                                |                                                                                                                                               |
| 3.1    | Profile of the sheet                                                                                                                                                 | Trapezoidal profile                                                                                                                           |
| 3.2    | Minimum Covered width required not counting the overlap length on both sides of sheet.                                                                               | 930 mm (without overlap)                                                                                                                      |
| 3.3    | Length of the roofing sheet                                                                                                                                          | 1600 mm                                                                                                                                       |
| 3.4    | Minimum weight of the Trapezoidal profiled sheet (i.e. with Trapezoidal profile in shape), with base metal thickness of 0.6mm, required per square meter area.       | 4.32 KG (Raw material weight without painting)                                                                                                |
| 3.5    | Minimum overlap required between adjacent roofing sheets.(Width overlap)                                                                                             | 75 mm over length of the sheet.                                                                                                               |
| 3.6    | Quantity Requirement: According to the covered width offered (Clause 3.2) and maintaining the length as per Clause 3.3), total covered area indicated to be offered. |                                                                                                                                               |
| 3.6.1  | Total covered area required.                                                                                                                                         | As per Enquiry.                                                                                                                               |
| 4.0    | <b>Plain Ridge sheet: Plain sheet without bending.</b>                                                                                                               |                                                                                                                                               |
| 4.1    | Size of the Ridge sheet required.                                                                                                                                    | 500mm (Width) x 1250mm (Length)                                                                                                               |
| 4.2    | <b>No of Ridges required</b>                                                                                                                                         | <b>As per Enquiry.</b>                                                                                                                        |
| 5.0    | <b>Galvanizing and Painting applicable for both Trapezoidal and Plain ridge sheet</b>                                                                                |                                                                                                                                               |
| 5.1    | Galvanizing requirement                                                                                                                                              | Base metal galvanised Zinc coating 275 grams / Sq. Meter of IS 277 or as applicable to Equivalent standards indicated as above.               |
| 12     | Top side paint                                                                                                                                                       | 20 microns (Dry Film Thickness) Silicon Modified Paint. Color -5012 RAL Blue.                                                                 |
| 13     | Bottom side paint                                                                                                                                                    | 7 microns (Dry Film Thickness) Silicon Modified Paint. Color – 9002 RAL Grey.                                                                 |
| 14     | Durability of paint                                                                                                                                                  | Class-2 of IS 14246 or as applicable to Equivalent standards indicated as above.                                                              |
| 15     | Drawing shall be submitted along with the offer for                                                                                                                  | Trapezoidal Profile sheet with dimensions.                                                                                                    |

2015

# Technical Specification for Color coated Roof decking Trapezoidal roofing sheets

TEP: BHEL: BAP: AQCS: CC SHEET: Rev 00

Date: 18-01-13 Page: 02 of 02

1. All the above minimum design requirements are to be met by the vendor and the sheets are to be supplied as per **Indian Standard IS 14246 or Equivalent International Standards JIS G 3312 or ASTM A 755 or EN 10169-1 or Equivalent.**
2. The vendor should confirm while quote in their offer that the supplied Trapezoidal profile roofing sheet will meet the minimum weight requirement as mentioned in Clause 3.4.
3. Taking care of the minimum overlap required between the sheets as mentioned, the vendor should indicate the number of roofing sheets required to meet the covered area mentioned in our enquiry. The vendor should confirm in their offer that the supplied number of sheets will be adequate for the covered area indicated in our specification without which offer will not be evaluated and will be rejected. In the event of discrepancy between number of sheets quoted by the vendor and the total covered area specified, the total covered area will be binding on the vendor.
4. The vendor should quote the rate for the total covered area only as indicated in our enquiry for the Trapezoidal profiled roofing sheet, without which offer will not be evaluated.
5. For the Ridge sheet the vendor should quote the rate per one number of ridge sheet as per the above specification, without which offer will not be evaluated. The evaluation criteria will be based on rate quoted per ridge sheet.
6. The vendor's offer shall have the following details without fail for offer evaluation:

## 6.1 Color Coated Trapezoidal Roofing sheet

| Enq sl no | Offered Thickness in mm | Length of the sheet in mm | Total offered covered Area in Sq Mtr | Covered width of the offered sheet in mm | Total no of sheet offered to meet total covered area | Weight of sheet per Sq.Mtr of Covered Area in KG | Total Weight offered in MT on considering all Variations viz weight & Qty . |
|-----------|-------------------------|---------------------------|--------------------------------------|------------------------------------------|------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------|
|           |                         | 1600                      |                                      |                                          |                                                      |                                                  |                                                                             |

## 6.2 Ridge Sheet

| Enq sl no | Offered Thickness in mm | Width in mm | Length of the sheet in mm | Total no of sheets offered | Weight per Ridge sheet in KG | Total Weight offered in MT on considering all Variations viz weight |
|-----------|-------------------------|-------------|---------------------------|----------------------------|------------------------------|---------------------------------------------------------------------|
|           |                         | 500         | 1250                      | As per Enquiry             |                              |                                                                     |

# Technical Specification for Color coated Trapezoidal roofing sheets and Plain Ridge sheets

TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01

Date: ~~27-07-2012~~ 28-08-12 Page 01 of 02

**Applicable standards: Color coated trapezoidal sheets as per Indian Standard IS 14246 or Equivalent International Standards JIS G 3312 or ASTM A 755 or EN 10169-1 or Equivalent.**

| Sl.No.     | Description                                                                                                                                                                                                                     | Design Requirement                                                                                                                            |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1.0</b> | <b>Application: These color coated trapezoidal roofing sheets and plain ridge sheets are fixed using self-tapping screws with purlins envisaged in the Electrostatic Precipitator pent house to protect ESP roof equipment.</b> |                                                                                                                                               |
| <b>2.0</b> | <b>Material: (Trapezoidal sheet as well as Plain Ridge sheet)</b>                                                                                                                                                               |                                                                                                                                               |
| 2.1        | Base Metal Nominal Thickness                                                                                                                                                                                                    | 0.6 mm                                                                                                                                        |
| 2.1        | Material Specification                                                                                                                                                                                                          | As Per IS 513- MILD STEEL or Equivalent applicable as per above referred standards. Thickness tolerance shall be as per IS 513 or Equivalent. |
| 2.2        | Yield Strength                                                                                                                                                                                                                  | Minimum 240 MPa (As applicable to IS 513 CR2 or Equivalent)                                                                                   |
| <b>3.0</b> | <b>Roofing sheet:</b>                                                                                                                                                                                                           |                                                                                                                                               |
| 3.1        | Profile of the sheet                                                                                                                                                                                                            | Trapezoidal profile                                                                                                                           |
| 3.2        | Minimum Covered width required not counting the overlap length on both sides of sheet.                                                                                                                                          | 930 mm (without overlap)                                                                                                                      |
| 3.3        | Length of the roofing sheet                                                                                                                                                                                                     | 1600 mm                                                                                                                                       |
| 3.4        | Minimum weight of the Trapezoidal profiled sheet (i.e. with Trapezoidal profile in shape), with base metal thickness of 0.6mm, required per square meter area.                                                                  | 5. 30 KG (Raw material weight without painting)                                                                                               |
| 3.5        | Minimum overlap required between adjacent roofing sheets.(Width overlap)                                                                                                                                                        | 75 mm over length of the sheet.                                                                                                               |
| 3.6        | Quantity Requirement: According to the covered width offered (Clause 3.2) and maintaining the length as per Clause 3.3), total covered area indicated to be offered.                                                            |                                                                                                                                               |
| 3.6.1      | Total covered area required.                                                                                                                                                                                                    | As per Enquiry.                                                                                                                               |
| <b>4.0</b> | <b>Plain Ridge sheet: Plain sheet without bending.</b>                                                                                                                                                                          |                                                                                                                                               |
| 4.1        | Size of the Ridge sheet required.                                                                                                                                                                                               | 500mm (Width) x 1250mm (Length)                                                                                                               |
| <b>4.2</b> | <b>No of Ridges required</b>                                                                                                                                                                                                    |                                                                                                                                               |
| <b>5.0</b> | <b>Galvanizing and Painting applicable for both Trapezoidal and Plain ridge sheet</b>                                                                                                                                           |                                                                                                                                               |
| 5.1        | Galvanizing requirement                                                                                                                                                                                                         | Base metal galvanised Zinc coating 275 grams / Sq. Meter of IS 277 or as applicable to Equivalent standards indicated as above.               |
| 12         | Top side paint                                                                                                                                                                                                                  | 20 microns (Dry Film Thickness) Silicon Modified Paint. Color -5012 RAL Blue.                                                                 |
| 13         | Bottom side paint                                                                                                                                                                                                               | 7 microns (Dry Film Thickness) Silicon Modified Paint. Color – 9002 RAL Grey.                                                                 |
| 14         | Durability of paint                                                                                                                                                                                                             | Class-2 of IS 14246 or as applicable to Equivalent standards indicated as above.                                                              |
| 15         | Drawing shall be submitted along with the offer for                                                                                                                                                                             | Trapezoidal Profile sheet with dimensions.                                                                                                    |

# Technical Specification for Color coated Trapezoidal roofing sheets and Plain Ridge sheets

TEP: BHEL: BAP: AQCS: CC SHEET: Rev 01

Date: ~~27-07-2012~~ 28-08-12 Page: 02 of 02

- All the above minimum design requirements are to be met by the vendor and the sheets are to be supplied as per **Indian Standard IS 14246 or Equivalent International Standards JIS G 3312 or ASTM A 755 or EN 10169-1 or Equivalent.**
- The vendor should confirm while quote in their offer that the supplied Trapezoidal profile roofing sheet will meet the minimum weight requirement as mentioned in Clause 3.4.
- Taking care of the minimum overlap required between the sheets as mentioned, the vendor should indicate the number of roofing sheets required to meet the covered area mentioned in our enquiry. The vendor should confirm in their offer that the supplied number of sheets will be adequate for the covered area indicated in our specification without which offer will not be evaluated and will be rejected. In the event of discrepancy between number of sheets quoted by the vendor and the total covered area specified, the total covered area will be binding on the vendor.
- The vendor should quote the rate for the total covered area only as indicated in our enquiry for the Trapezoidal profiled roofing sheet, without which offer will not be evaluated.
- For the Ridge sheet the vendor should quote the rate per one number of ridge sheet as per the above specification, without which offer will not be evaluated. The evaluation criteria will be based on rate quoted per ridge sheet.
- The vendor's offer shall have the following details without fail for offer evaluation:

## 6.1 Color Coated Trapezoidal Roofing sheet

| Enq sl no | Offered Thickness in mm | Length of the sheet in mm | Total offered covered Area in Sq Mtr | Covered width of the offered sheet in mm | Total no of sheet offered to meet total covered area | Weight of sheet per Sq.Mtr of Covered Area in KG | Total Weight offered in MT on considering all Variations viz weight & Qty . |
|-----------|-------------------------|---------------------------|--------------------------------------|------------------------------------------|------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------|
|           |                         | 1600                      |                                      |                                          |                                                      |                                                  |                                                                             |

## 6.2 Ridge Sheet

| Enq sl no | Offered Thickness in mm | Width in mm | Length of the sheet in mm | Total no of sheets offered | Weight per Ridge sheet in KG | Total Weight offered in MT on considering all Variations viz weight |
|-----------|-------------------------|-------------|---------------------------|----------------------------|------------------------------|---------------------------------------------------------------------|
|           |                         | 500         | 1250                      | <b>As per Enquiry</b>      |                              |                                                                     |