

PROJECT:- RESTORATION OF OBRA B TPS UNIT 12 & 1:
ENQUIRY No.-PE/PG/ORP/E-6185/2019 Dtd. 22.04.2019
BILL OF QUANTITIES (1.1KV EPR INSULATED FIRE SURVIVAL CABLES)

(A) MAIN SUPPLY

1.1 kV Fire Survival cable with stranded, compacted, plain annealed copper conductor, EPR insulation, HOFR Inner Sheath, GS Round Wire Armour for multicore cable and AI Round Wire Armour for single core cable, HOFR Outer Sheath generally conforming to IS :9968 (Part-1) and BH&L specification.

S.No.	Item code	Item name	UOM	Ordered Quantity	LOT-I QUANTITY	Drum Length	HSN CODE	Domestic (i.e., Indian) Content (in % by value)	UNIT PRICE (EX-WORKS) (Rs.)	TOTAL PRICE (EX-WORKS) (Rs.)	Freight Incl. service tax@.....of Ex-works (Rs.)	IGST@.....% on Total Ex-works + Freight (Rs.)	Total FOR Site Price. (Rs.)
A1	507-42002-A	5C - 2.5- ARMoured	MTR	4000	4000	500	8544						
A2	507-42004-A	1C - 400- ARMoured	MTR	2000	2000	500	8544						
A3	507-42013-A	2C - 95- ARMoured	MTR	1500	1500	500	8544						
TOTAL PRICE (Rs.)													

NOTES :

- Quantities indicated above for S. No. (A) shall be known as Order Quantities. The variation in quantities of all sizes shall be +/-30% of contract value
- The bidder shall indicate the unit price of each type and size of cables listed as per the BOQ-Cum-Price Schedule. The unit prices shall apply for adjustment of variation in quantity as stipulated above.
- Lot-I quantities indicated above shall be cleared for manufacturing along with PO. However, manufacturing of the cables shall be taken up by the successful bidder only after approval of technical and quality documentation. Subsequent lots shall be cleared for manufacture based on progress of engineering & site requirements.
- The standard drum length shall be 500 meters as indicated above. Tolerance on individual drum length shall be $\pm 5\%$.
- Overall tolerance on total dispatched quantity of each size shall be (-) 2% and (+) 0% except where the total ordered quantity is one single drum length of 500m, in which case it shall be -5%/0%. Cables consumed for testing and inspection shall be to bidder's account.
- For each individual cable size, one short length of not less than 200m may be accepted only in the final drum length to complete the supply (except where the total ordered quantity is one single drum length of 500m). The overall tolerance limits stipulated above shall continue to apply (in case short lengths are accepted).
- In case of the quantities of any one lot cleared by BH&L for manufacturing are manufactured and offered for inspection by successful bidder in more than one batch, BH&L reserves the right to witness type testing on all batches without any price implications.
- Bidder shall indicate unit price of cables inclusive of type test charges. No separate charges shall be payable for type tests.

(Signature)
 (22/4/19)



PVC ANNEXURE

ANNEXURE-II

Price Variation Formulae
OBRA'B' TPS UNIT 12 & 13 (RESTORATION JOB)
EPR INSULATED FIRE SURVIVAL CABLE

1. Prices shall be variable as per following PVC formulae as per IEEMA. The price shall be limited to +20% of total Ex-works price actually supplied (cable size wise) & -ve price variation shall be unlimited. PVC shall be limited for the metals for which rates published by IEEMA.

CABLE TYPE	CONDUCTOR	FORMULA	TABLE REF
LT EPR INSULATED SIRE SURVIVAL Cables	(Cu conductor,)	$P = P_0 + CuF (Cu-Cu_0) + CCFCu (CC-CC_0) + FeW (Fe-Fe_0) + ALF (Al-Al_0)$	as applicable as per IEEMA

Note:

- Quantity Variation:** The variation in quantities of all sizes for Main item (A) put together shall be limited to (-) 30% to (+) 30% of the total contract value derived on the basis of the Ordered quantities of main item (A).
- PVC** shall be applicable for Order Qty. and subsequent lots.
- Base date for prices (as per **IEEMA**):

Initial Price:

Base date shall be **March-2019**

Final Price:

The first working day of month, one month prior to the **date of delivery**.

Note: The date of delivery is the date on which the cable is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

- PVC shall be payable within agreed contractual delivery period. In case of delay is attributable to vendor, for the payment purpose, the PVC shall be calculated based on rates applicable as on the date of expiry of contractual delivery date or actual delivery date, whichever is beneficial to BHEL.

Applicable Factors-

Factors/Cable Size	5C-2.5 (GS armoured)	2C-95 (GS armoured)	1C-400 (Al armoured)
CuF	0.117	1.802	3.703
CCFCu	0.206	0.389	0.372
FeW	0.342	1.011	-----
ALF	-----	----	0.424