

BHARAT HEAVY ELECTRICALS LIMITED,
(A Government of India Enterprises)
Heavy Plates & Vessels Plant
Visakhapatnam – 530 012 INDIA.
Web Site: www.bhpl.com



Phone : +91(0891) 6681309, 494
+91(0891) 6681396
Fax : +91(0891) 6681700
E-Mail : skmishra@bhpl.com

NOTICE INVITING TENDER(NIT)

**Category of Tender: TWO BID
(PRICED + UN - PRICED)**

SUB: OFC CABLING & NETWORKING

Our Ref: **MM/2/10/3750/CAP/W-072/5073**

DATE: 22.07.2014

Sealed quotations in duplicate are invited from suppliers on **or before 13.08.2014 SUPERSCRIBING OUR REFERENCE AND CATEGORY OF TENDER** on the cover, for supply of the under mentioned stores within the above due date, otherwise send **REGRET LETTER**, strictly subject to the Terms & Conditions attached herewith.
LATE TENDERS ARE NOT ACCEPTABLE.

ITEM No.	DESCRIPTION / SPECN. / SIZE	QTY
1.	OFC Cabling & networking	LOT
	Encl: 1. Qualifying Criteria PART A 2 Pages 2. Technical Specifications PART B 11 Pages 3. General Terms/ commercial terms and conditions (INCLUDING CHECK LIST) 9 Pages	

For BHARAT HEAVY ELECTRICALS LIMITED,

For Sr. MANAGER (MM)

SECTION - I

Sl. No.	DESCRIPTION	BIDDERS OFFER
1.0	ELIGIBILITY CRITERIA	
	Eligibility criteria for Bidders	
1.1	The bidder should be a company / firm registered in India.	
1.2	The bidder should be an existing Network System Integrator for more than 5 years (Supporting documents for the same to be submitted with technical offer).	
1.3	The bidder should possess ISO 9001 certification. The certifications should be current and the scope should include Network implementation.	
1.4	<p>The bidder should have experience in executing Enterprise Networks. The bidder should have successfully executed Enterprise LANs during the last 5 years meeting the conditions below</p> <p>1. The bidder shall meet any of the below two points (a or b)</p> <p>a) At least Two Enterprise LANs, each with order value of not less than Rs. 1.25 Crores,</p> <p align="center">Or</p> <p>b) At least One Enterprise LAN, with order value of Rs. 2 Crores</p> <p align="center">And</p> <p>2. The bidder should also have successfully executed at least One Enterprise LAN 5 years with order value of not less Rs 75 Lakhs on outright purchase basis.</p>	
1.5	PO copies and commissioning certificates (for points 4) should be enclosed. PO's and evidences shall be in the name of bidder. POs and evidences in the name other than that of bidder shall not be considered.	
1.6	The bidder should not be under Hold or Blacklist by any of BHEL units or BHPV as on bid opening date. The bidder should give a declaration on this.	
1.7	The OEMs for passives and racks shall be ISO 9000 certified.	
1.8	The bidder should enclose authorization letters to participate in this tender, from respective OEMs for passives and racks	

SECTION - I

Sl. No.	DESCRIPTION	BIDDERS OFFER
2.0	General	
2.1	Certificates and evidences should be provided as a proof for all the above mentioned eligibility criteria.	
2.2	If bidder / OEM do not fulfill any of the eligibility criteria mentioned above, the offer will be rejected.	
2.3	The BIDDER / VENDOR shall submit the offer in TWO PARTS. 1. Technical Offer [with PART A & PART B]& commercial offer 2. Price Bid.	
2.4	The Technical Offer shall contain a comparative statement of Technical Specifications demanded by BHEL and Offer Details submitted by the Bidder, against each clause. A just ' CONFIRMED ' or ' COMPLIED ' or ' YES ' or ' NO-DEVIATION ' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	
2.5	The Technical Offer shall be supported by product Catalogues & Data Sheets and also technical details of Bought-Out-Items with copies of Product Catalogue to the extent possible.	
2.6	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation.	

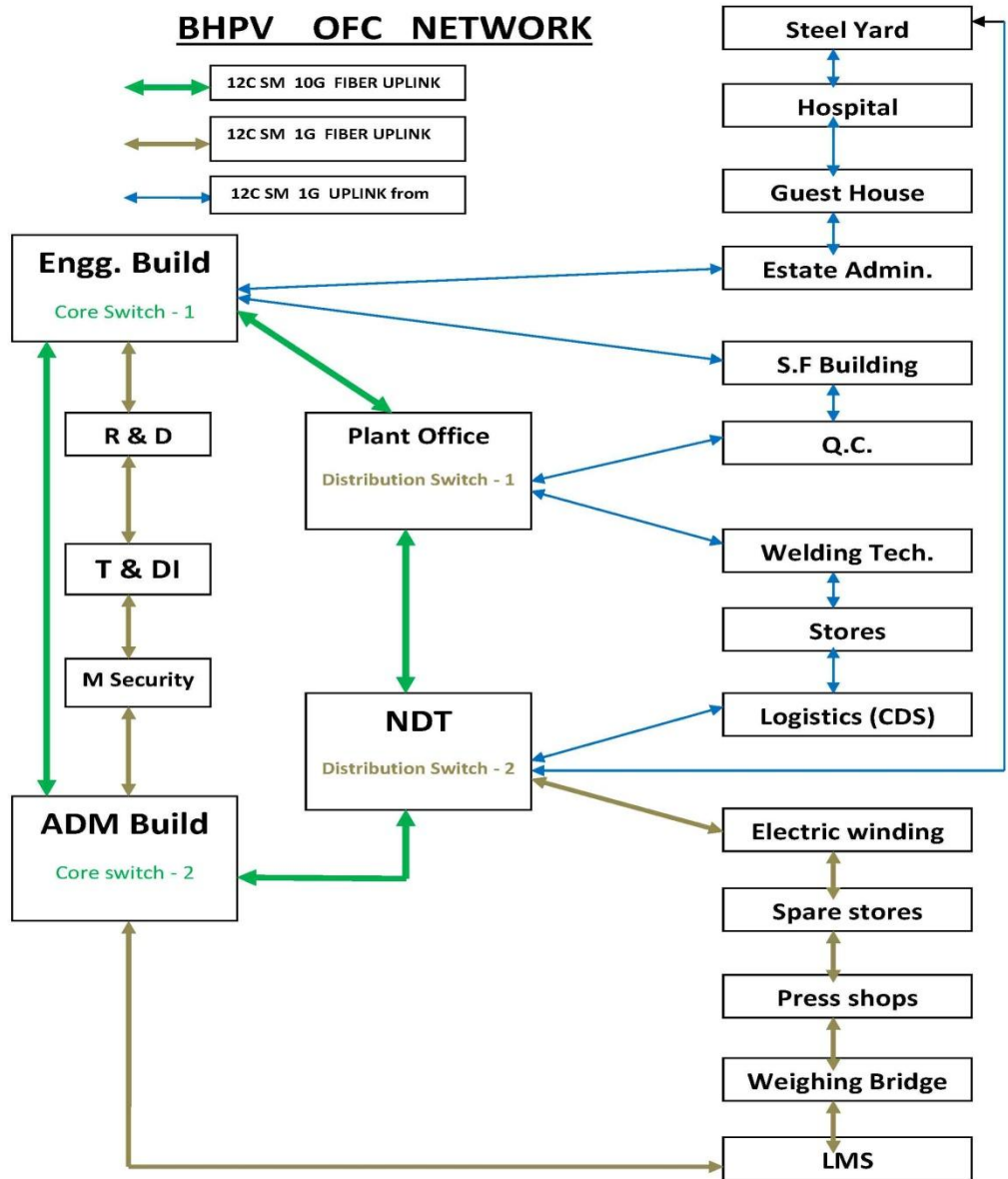
GENERAL

A new LAN is proposed to be implemented in HPVP – BHEL Visakhapatnam. UTP and fiber links are to be newly laid and terminated.

This proposal consists of the following:

1. Supply and laying of fiber optic cables, UTP cables and cable terminations.
2. Establishment of connectivity, testing, commissioning and documentation.
3. Maintenance of all the above supplied components for a period of 2 years.

Sl. No.	DESCRIPTION / SPECIFICATION	BIDDER'S OFFER
1.0	SPECIAL INSTRUCTIONS TO THE BIDDER	
1.1	The offer shall be submitted in full, covering the total scope. Partial offer will not be accepted and will not be considered for evaluation.	
1.2	The bidder shall sign all the pages of the Tender document and all the supporting documents. Signing of the document means that the bidder has fully understood the Tender and complies with all the requirements.	
1.3	The bidder shall give cross reference for all the points, clearly mentioning the supporting document and highlight the reference portion in the document.	
1.6	All the passive items quoted should be from same make.	
1.7	Bidder shall supply and use the necessary HDPE / Casing capping / Conduit / GI pipe of ISI standard.	



Sl. No.	DESCRIPTION / SPECIFICATION			BIDDER'S OFFER
2.3	Scope of Work			
2.3.1	Supply and laying of fiber optic cables/ copper cables and cable terminations.			
2.3.2	Supply and Installation of Racks, LIU's, IO's and Patch panels.			
2.3.3	Termination of fiber / UTP cables at LIU's, IO's and Patch panels.			
2.3.4	Establishment of connectivity, testing and commissioning.			
2.3.5	The fiber / UTP cable and terminations, covered under the scope shall be tested and test report shall be submitted.			
2.3.6	All installations shall be done by certified technicians and the bidder should submit the certification credentials of the technicians.			
2.3.7	The fiber cable within the scope of the bidder should be certified for a life span of 20 years.			
2.3.8	The materials shall be moved to the respective place of work within the campus by the bidder.			
2.3.9	The bidder should provide sample for the passive components, if required.			
3.2	Bill Of Material			
	Description	Unit	Qty	
A	Cat6 4 UTP cable	m	25000	
B	Cat 6 Single Information Outlets	Nos	500	
C	Cat 6 Patch Panel	Nos	40	
D	Cat6 UTP patch cord – 2m	Nos	500	
E	Cat6 UTP patch cord – 5 m	Nos	500	
F	Outdoor single mode Fiber optic cable	m	22000	
G	24 port rack mount LIU	Nos	35	
H	SM Pigtail – 1mtr	Nos	840	
I	Duplex SC-LC Single Mode Fiber Patch Cord – 3 Meter	Nos	70	
J	Duplex SC-SC Single Mode Fiber Patch Cord – 3 Meter	Nos	30	
K	Floor Mount Rack - 42 U	Nos	2	
L	Floor Mount Rack - 24 U	Nos	2	
M	Wall Mount Rack - 12U	Nos	25	
N	Cable Route Marker	Nos	300	
O	10 % of the quantity specified at A to N shall be supplied as spare.			
3.2.1	Material Specification			
3.2.1.1	Cat 6 UTP cable:	Vendor to Confirm & furnish details as applicable		
3.2.1.1.1	Make	Molex / Panduit / Schneider / Systimax / ADC Krone / AMP / Legrand		
3.2.1.1.2	Category	Should meet minimum Category 6 requirements		

Sl. No.	DESCRIPTION / SPECIFICATION		BIDDER'S OFFER
3.2.1.1.3	Type of Conductors and Grade	4 Pair Solid Conductors 23 AWG	
3.2.1.1.4	Standards	EIA/TIA 568-C.2, Class E 11801-2002	
3.2.1.1.5	Gigabit Requirements	Should meet or exceed Gigabit Ethernet requirements at 100 meters	
3.2.1.1.6	Separator	Cross / Star Spine to separate 4 Pairs of UTP Cable	
3.2.1.1.7	Pull Thread / Strip Thread	Cable Pull Tension Thread inside the UTP Cable	
3.2.1.1.8	Certification	UL Listed, ETL Tested and Verified and ROHS Compliant	
3.2.1.1.9	Colour	Blue	
3.2.1.2	Cat 6 Single Information Outlet:	Vendor to Confirm & furnish details as applicable	
3.2.1.2.1	Make	Molex / Panduit / Schneider / Systimax / ADC Krone / AMP / Legrand	
3.2.1.2.2	Category	Should meet minimum Category 6 requirements	
3.2.1.2.3	Connector contacts	Copper alloy with contact plating of 50Micron Gold / 100Micron Nickel	
3.2.1.2.4	Insertion Cycles	2500	
3.2.1.2.5	IDC Contact Plating	Tin/Lead Plate	
3.2.1.2.6	Standards	EIA/TIA 568-B, ETL Verified CAT6 Component, UL Listed and ROHS Compliant	
3.2.1.2.7	Gigabit Requirements	Should meet or exceed Gigabit Ethernet Requirements	
3.2.1.2.8	Faceplate	Polycarbonate Hi-Grade Plastic FR Grade & UV Resistant shuttered face plate.	
3.2.1.2.9	Mount box	Surface Mount Box with screws	
3.2.1.3	Cat 6 Patch Panel:	Vendor to Confirm & furnish details as applicable	
3.2.1.3.1	Make	Molex / Panduit / Schneider / Systimax / ADC Krone / AMP / Legrand	
3.2.1.3.2	No. of Ports	Fully loaded 24 ports with modular 6 blocks	
3.2.1.3.3	Mounting	Standard 19" rack mount	
3.2.1.3.4	Panel	DC01 galvanized steel sheet	

Sl. No.	DESCRIPTION / SPECIFICATION		BIDDER'S OFFER
3.2.1.3.5	Standards	EIA/TIA 568A/B, ETL Verified CAT6 Component, UL Listed and ROHS Compliant	
3.2.1.3.6	Insulation resistance	≤ 500 mΩ at 100 V DC	
3.2.1.4	Cat 6 UTP patch cord:	Vendor to Confirm & furnish details as applicable	
3.2.1.4.1	Make	Molex / Panduit / Schneider / Systimax / ADC Krone / AMP/Legrand	
3.2.1.4.2	Type of conductor	4 Pair 23 AWG stranded copper wire	
3.2.1.4.3	Copper	Multistranded copper in conductor PVC	
3.2.1.4.4	Standards	EIA/TIA 568A/B, ETL Verified CAT6 Component, UL Listed and ROHS Compliant	
3.2.1.5	Outdoor Single mode Fiber Optic cable:	Vendor to Confirm & furnish details as applicable	
3.2.1.5.1	Make	Molex / Panduit / Schneider / Systimax / ADC Krone / AMP/Legrand	
3.2.1.5.2	Type of Fiber	12 Single mode 9/125 micron Loose Tube armored with ROHS Compliant	
3.2.1.5.3	Application	Outdoor / Underground	
3.2.1.5.4	Jacket	UV Stabilized Polyethylene MDPE Sheath	
3.2.1.5.5	Armouring	Corrugated Steel Tape Armour (ECCS Tape), Thickness > 0.15mm	
3.2.1.5.6	Strength Member	Water blocked E-Glass fiber elements OR Two Steel Wires	
3.2.1.5.7	Standard	ISO IEC 11801 TIA/EIA 598	
3.2.1.5.8	Attenuation	0.4dB/km over 1310nm to 1625nm	
3.2.1.6	24 Port Rack mount LIU:	Vendor to Confirm & furnish details as applicable	
3.2.1.6.1	Make	Molex / Panduit / Schneider / Systimax / ADC Krone / AMP/Legrand	
3.2.1.6.2	Rack Mount	19" rack mounted with 1U height, Sliding Drawer Type	
3.2.1.6.3	Material	Fully Powder Coated Steel Body	
3.2.1.6.4	Accommodation	Accept 24 SC Duplex Adaptors	
3.2.1.6.5	Labelling	Labelling for port identification	

Sl. No.	DESCRIPTION / SPECIFICATION		BIDDER'S OFFER
3.2.1.6.6	Certification	ROHS Compliant	
3.2.1.6.7	Coupler	Fully Loaded SC Duplex Type with ROHS Compliant	
3.2.1.6.8	Specification Standard	ISO/IEC 11801	
3.2.1.7	Single mode Pigtail:	Vendor to Confirm & furnish details as applicable	
3.2.1.7.1	Make	Molex / Panduit / Schneider / Systimax / ADC Krone / AMP/Legrand	
3.2.1.7.2	Type of connectors	SC Connector	
3.2.1.7.3	Polishing	100% Factory polished	
3.2.1.7.4	Standards	ROHS Compliant	
3.2.1.7.5	Insertion Loss	Less than 0.3 db dB per connector	
3.2.1.8	Duplex Single Mode Fiber Patch cord:	Vendor to Confirm & furnish details as applicable	
3.2.1.8.1	Make	Molex / Panduit / Schneider / Systimax / ADC Krone / AMP/Legrand	
3.2.1.8.2	Type of connectors	SC-SC / SC-LC	
3.2.1.8.3	Polishing	100% Factory polished	
3.2.1.8.4	Insertion Loss	Less than 0.3 db dB per connector	
3.2.1.8.5	Standards	ROHS Compliant	
3.2.1.8.6	Jacket colour	Yellow	
3.2.1.9	Floor-Mount Rack - 42 U:	Vendor to Confirm & furnish details as applicable	
3.2.1.9.1	Make	APW President / Rittel / Netrack	
3.2.1.9.2	Size	19" width	
3.2.1.9.3	Height	42U	
3.2.1.9.4	Depth	800 mm	
3.2.1.9.5	Side Panels	Both Side panels shall be of removable type and access-protected with lock and key.	
3.2.1.9.6	Back Panel	Back panel shall be of hinged type and access-protected with lock and key.	
3.2.1.9.7	Front Panel	Full length Glass Front door of hinged type and access-protected with lock and key	
3.2.1.9.8	Mounting hardware	42 Nos.	
3.2.1.9.9	Power strip	Power strip with 12 Nos. of 5A, 3 pin socket	
3.2.1.9.10	Provision for cable entry	Bottom & top	

Sl. No.	DESCRIPTION / SPECIFICATION		BIDDER'S OFFER
3.2.1.9.11	Fan	230V AC 90CFM fan at the top - 2 No	
3.2.1.9.12	Cable Manager	Horizontal cable manager - 6 Nos.	
3.2.1.9.13	Keys	All the racks shall have common key for all the doors	
3.2.1.10	Floor-Mount Rack - 24 U:	Vendor to Confirm & furnish details as applicable	
3.2.1.10.1	Make	APW President / Rittel / Netrack	
3.2.1.10.2	Size	19" width	
3.2.1.10.3	Height	24U	
3.2.1.10.4	Depth	600 mm	
3.2.1.10.5	Side Panels	Both Side panels shall be of removable type and access-protected with lock and key.	
3.2.1.10.6	Back Panel	Back panel shall be of hinged type and access-protected with lock and key.	
3.2.1.10.7	Front Panel	Full length Glass Front door of hinged type and access-protected with lock and key	
3.2.1.10.8	Mounting hardware	24 Nos.	
3.2.1.10.9	Power strip	Power strip with 8 Nos. of 5A, 3 pin socket	
3.2.1.10.10	Fan	230V AC 90CFM fan at the top - 1 No	
3.2.1.10.11	Cable Manager	Horizontal cable manager - 3 Nos.	
3.2.1.10.12	Provision for cable entry	Bottom & top	
3.2.1.10.13	Keys	All the racks shall have common key for all the doors	
3.2.1.11	Wall-Mount Rack - 12 U:	Vendor to Confirm & furnish details as applicable	
3.2.1.11.1	Make	APW President / Rittel/ Netrack	
3.2.1.11.2	Size	19" width	
3.2.1.11.3	Height	12 U	
3.2.1.11.4	Depth	600 mm	
3.2.1.11.5	Side Panels	Both Side panels shall be of removable type and access-protected with lock and key.	
3.2.1.11.6	Front	Full length Glass Front door, hinged type and access-protected with lock and key	
3.2.1.11.7	Mounting hardware	12 Nos.	

Sl. No.	DESCRIPTION / SPECIFICATION		BIDDER'S OFFER	
3.2.1.11.8	Power strip	Power strip with 6 Nos. of 5A, 3 pin socket		
3.2.1.11.9	Fan	230V AC 90CFM fan at the top - 2 No		
3.2.1.11.10	Cable Manager	Horizontal cable manager - 2 Nos.		
3.2.1.11.11	Provision for cable entry	Bottom & top		
3.2.1.11.12	Keys	All the racks shall have common key for all the doors		
3.2.1.12	Cable route marker:	Vendor to Confirm & furnish details as applicable		
1	Material	RCC slab		
2	Marking	HPVP OFC		
3	Height	700 mm		
4	Width	300 mm		
5	Thickness	60 mm		
6	Top	Semi-circular		
7	Painting	Orange		
3.3	Installation of passives:	Vendor to Confirm & furnish details as applicable		
	Description	Unit	Qty.	
A	Outdoor Fiber laying in soft soil	m	8000	
B	Outdoor Fiber laying in hard soil	m	8000	
C	Outdoor Fiber laying in road	m	2000	
D	Outdoor Fiber laying in existing trench	m	4000	
E	Splicing of pigtail	No	840	
F	Fixing of wall mount rack 12U	No	25	
G	I/O fixing and termination	No	500	
H	Patch panel termination	No	40	
I	UTP cable laying	m	23000	
J	UTP cable laying with wall/floor concealing	m	2000	
3.3.1	Specification for Installation of passives (to be done by Bidder)	Vendor to Confirm & furnish details as applicable		
3.3.1.1	<p>Outdoor Fiber optic cable laying in soft / hard soil: The cable shall be laid in HDPE pipe, underground by excavating the earth to a depth of 0.75 meter. Cable route markers shall be installed at intervals of 50 meters and at turning points. The excavated portion shall be refilled to about 60 cms. and warning tape shall be placed. The balance soil shall be refilled and compacted up to the ground level. Bidder shall supply and use the necessary HDPE pipe of ISI standard.</p>			

Sl. No.	DESCRIPTION / SPECIFICATION	BIDDER'S OFFER
3.3.1.2	<p>Outdoor Fiber optic cable laying in road: The cable shall be laid underground by excavating the earth to a depth of 0.5 meter. The cable shall be laid in a HDPE pipe within a GI pipe (Medium duty). The excavated portion shall be refilled fully with the excavated earth and shall be finished by cementing. Bidder shall supply and use the necessary HDPE pipe and GI Pipe of ISI standard.</p>	
3.3.1.3	<p>Outdoor Fiber optic cable laying in trench: In some places fiber cable shall be laid along existing trenches. This involves removal of cement slabs/ MS Sheets at few locations, laying of HDPE pipe, laying of fiber cable inside HDPE pipe and replacement of cement slabs / MS Sheets. Bidder shall supply and use the necessary HDPE pipe of ISI standard as per the requirement.</p>	
3.3.1.4	<p>Splicing: The pigtailed shall be spliced to the ends of fiber cables and neatly arranged using splice holders in the LIU and the LIU shall be fixed in the racks. Test the connectivity using fiber tester.</p>	
3.3.1.5	<p>Information Outlet installation: Installation of I/O involves mounting of surface mount box, punching UTP cable in the I/O jack, ferruling the cable, labeling the I/O and testing connectivity.</p>	
3.3.1.6	<p>UTP Patch panel installation: Installation of UTP patch panel in rack involves mounting of patch panel, punching UTP cable in the patch panel, ferruling the cable, dressing, labeling and testing connectivity.</p>	
3.3.1.7	<p>UTP cable laying: UTP cables are required to be laid on brick walls or along steel girders or in modular workstations. In case of brick walls, UTP cable shall be laid in PVC channel / PVC wire duct. In case of laying along steel girders, the cable shall be laid in PVC conduit. In modular work stations cable shall be routed through guides within the workstations securing with cable ties. The bidder shall supply and use the necessary PVC channel /conduit /cable duct of ISI standard as per the requirement.</p>	
3.3.1.8	<p>UTP cable laying with wall / floor concealing: In some places, concealing in wall / floor is required. In such cases, breaking the wall / floor, installing the conduit, laying the cable and plastering shall be done by the bidder. The bidder shall supply and use the necessary PVC conduits of ISI standard as per requirement.</p>	
3.3.1.9	Labeling of all fiber & UTP Cables shall be done by the bidder.	

Sl. No.	DESCRIPTION / SPECIFICATION	BIDDER'S OFFER
4	MAINTENANCE	
	<p>At least two ITI / Diploma Technicians shall be posted to maintain the network. Timings of resident technician will be as per HPVP Officials. The Technician should be available 24 X 7 on call. The technicians will adhere to HPVP's holiday calendar. Maintenance activities include the following:</p> <ol style="list-style-type: none"> 1. Labeling of all fiber and UTP cables 2. Attending to user complaints on network connectivity 3. Attending to minor changes and relocations in connectivity 4. Rectifying UTP problem 5. Testing for identifying fiber cable problems and failure locations (within 6 hours) 6. Cleaning and dressing of network racks 7. Maintenance of all the supplied items as per the scope given in this tender. 8. Any fiber cut during the maintenance period up to 300 core splicing is under maintenance of bidder. <p>The activities given above are only indicative. The technicians shall carry out relevant activities as per the instructions of the HPVP Network Manager.</p> <p>Spares for Bidder supplied components / Tools required for performing the above activities are under the scope of the bidder.</p> <p>If bidder fails to deploy the technicians, deduction of payment shall be as decided by HPVP.</p>	
5	SERVICE LEVEL AGREEMENT	
5.1	Bidder shall be responsible for continuous and smooth operation of the LAN for the entire lease period.	
5.2	Maintenance and services shall cover services, repairs and replacements necessary to keep the network in good working condition.	
5.3	Bidder shall maintain sufficient spares, in HPVP Visakhapatnam to ensure immediate attention in case of breakdown.	
5.4	Bidder to include in their scope for 2 years maintenance along with manpower.	
6	OTHER TERMS & CONDITIONS	
6.3	The bidder shall comply with all the welfare regulations (PF no. and ESI no./Medical policy) for the labor involved in executing the contract.	
6.4	Maintenance should not be sub-contracted. The maintenance technicians posted at site shall be direct employees of the bidder.	
6.5	In case a service technician leaves the bidder organization, a suitable substitute resource shall be provided, with the approval of BHEL, within a week.	

Sl. No.	DESCRIPTION / SPECIFICATION	BIDDER'S OFFER
6.6	Bidder to submit duly filled in and signed copy of No Deviation Certificate as per format enclosed at Annexure I	
6.7	Bidder shall submit duly filled in and signed copy of THIRD PARTY NON-DISCLOSURE AGREEMENT as per format enclosed at Annexure II	
6.8	Bidder shall submit duly filled in and signed copy of Past Experience of Similar Executed Projects as per format enclosed at Annexure III	
6.9	<i>The quantities indicated in the bill of material are tentative. The bidder will be paid on the basis of actual quantity installed and 10% of the spares handed over to BHEL HPVP</i>	
6.10	<i>The bidder should mention the Brand name and quantity for the <u>passives</u>.</i>	

COMMERCIAL TERMS AND CONDITIONS FOR SUBMISSION OF OFFER**1.0 QUOTATIONS**

Bidders shall submit the offer in TWO INNER ENVELOPES as indicated below which shall be sealed in one outer envelope.

Envelope I: This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked “**Part I – Technical and Un-priced commercial bid**” Indicating Tender No., Due Date and Address & Reference of the Bidder.

Envelope II: This sealed envelope should contain price details this envelope should be clearly marked “**Part II - Price bid**” indicating Tender No., Due Date and Address & Reference of the Bidder.

Both the envelopes (Part I & II) shall be put in one cover, duly sealed, super scribing as Part I and Part II of Tender No., due date of opening and the address and reference of the Bidder

The above offer should reach this office on or before the due date by 14.00 Hrs (IST)
Tender should not be addressed to any Individuals name but only designation to

Sr. Manager (MM)
BHARAT HEAVY ELECTRICALS LIMITED
HEAVY PLATES & VESSELS PLANT
VISAKHAPATNAM - 530 012 (A P), INDIA.

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

Offers should be in ENGLISH and accompanied by technical literature catalogue and detailed dimensional drawings in ENGLISH or otherwise the offers will not be considered.

2.0 PART I (TECHNICAL & UN-PRICED COMMERCIAL BID)**2.1 Technical**

This part shall include / indicate the following:

- 2.1.1. Offer should contain complete scope of supply with all technical details, specifications, delivery and other commercial terms and conditions.
- 2.1.2. Point by point confirmation for the Technical Specification enclosed is to be provided. If there are any deviations the same should be clearly specified. Offers received without conformation to our specification will be rejected.
- 2.1.3. List of customers to whom same or similar equipment have been supplied along with performance certificates to be enclosed.
- 2.1.4. Relevant catalogue to be attached.
- 2.1.5. List of spares parts (with part numbers) for two years operation and maintenance should be attached.

2.1.6. Information on shipping weight and cubage (length, width & height) to be provided

2.1.7. In case of foreign bidder offer, the Principal's technical offer only should be enclosed.

2.2 Un-Priced Commercial

This part shall include / indicate the following

2.2.1. Port of shipment / Station of dispatch

2.2.2. Terms of payment

2.2.3. FOB/FCA price along with freight charges up to Chennai port (for foreign bidders) Ex-works/FOR Dispatch Station price along with freight charges up to BHEL Visakhapatnam (for Indian bidders)

2.2.4. Taxes, Service tax & duties including Cess applicable.

2.2.5 Delivery Schedule

2.2.6. Filled-in check list to be enclosed

2.2.7. Offer validity

2.2.8. Country of origin

2.2.9. Percentage of agency commission if any along with a copy of Agency agreement The FOB/FCA/CFR Prices quoted shall include the agency commission.

2.2.10. A copy of "Un-Priced Part II 'i.e., a copy of the Price Bid without the price details to be enclosed.

2.2.11 BHEL Visakhapatnam is eligible for availing CENVAT / VAT credit on both inputs and capital inputs. The suppliers invoice should separately indicate the amount of duty / taxes and should invariably mention the following details:

1. The Central excise registration number, range division and commission rate of the supplier's jurisdiction.
2. The rate of duty and 8 digit central excise tariff heading of the item supplied.
3. The TIN, VAT, CST registration number of the supplier.

The duplicate copy of the invoice is required for availing CENVAT credit and original copy for availing VAT credit, if purchased within the state.

In case of foreign bidders the duplicate copy of the electronic Bill of Entry along with TR6 challan should be made available for availing CENVAT credit on CVD, Cess (S) and SAD.

3.0 **PART II (PRICE – BID)**

This part should contain the schedule of price particulars and to be co-related to the technical details provided in Part-I

4.0 **OPENING OF TENDERS**

The Part I – Technical & un-priced commercial bid alone would be opened on the Tender opening date.

The Part II – Price bid of technically suitable Bidders alone would be opened. The Technically suitable Bidders would be informed about the Price Bid opening date. Clarifications if any required by BHEL Visakhapatnam FOR Technical evaluation / commercial evaluation would be sought from Bidders before opening of Part II – price bid.

GENERAL

5.1 Incomplete offers will not be considered.

5.2 **Fixed priced:** Prices quoted by the bidder shall be fixed and not subject to any escalation whatsoever during the period of bid validity and execution of the Purchase Order A bid submitted with an adjustable price will be treated as non- responsive and rejected Prices shall be written in words and figures. In the event of difference, the price in words shall be valid and binding. Unit prices shall be considered correct in the event of any discrepancy with regards to total price.

5.3 **Bid currency:** Indian bidders should submit the prices only in Indian Rupees. Foreign bidders may submit their bid in their home currency, which should be clearly indicated in the un-priced commercial bid as well as in the price bid. Price bid opening date/ RA date will be considered as effective date for considering exchange rate to evaluate the offers.

- 5.4 **Terms of Delivery:** Bidders are required to quote their best delivery period. Foreign Bidders should submit their offer for net FOB/ FCA – Nearest Sea Port / Air Port as well as CFR / Chennai Seaport/ Airport. Freight charges up to Chennai port to be indicated separately. Indian Bidders should submit their offer for Dispatching station as well as FOR BHEL Visakhapatnam basis. Freight charges from works to BHEL Visakhapatnam to be indicated separately. Delivery from the date of Letter of Intent to be mentioned in the offer.
- 5.5 **Taxes and Duties:** All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & TIN No/ Tariff No. etc, failing which the purchaser will not be liable for payment of such Taxes and Duties (Our TIN No.28280189432, APGST No. VSP/04/1/1023 dated 24.08.1968. CST No.VSP/04/1/1012 dated 24.08.1968 & BHEL Visakhapatnam ECC No AAA CB 7076 N-XM001. Assessment circle Visakhapatnam.)
- 5.6 **Validity:** The offers for main equipment and spares shall be kept open for acceptance for a period of 120 days (one hundred and twenty days) from the dates of opening of the tender (part I)
- 5.7 **Terms of Payment:**
- 5.7.1 **Indian Bidders:**
80% payment (80% of basic price + 100% Taxes) will be made within 45 days of receipt of material and balance 20% will be made after acceptance of material/commissioning of the equipment at BHEL, Visakhapatnam and on submission of Performance Bank Guarantee for 10%.
- 5.7.2 **Foreign Bidders**
An Irrevocable letter of Credit shall be established for 80% of FOB/FCA/CFR/ (excluding Indian Agent's commission) 2 months prior to shipment and valid for 3 months for negotiation against shipment Letter of Credit shall be opened through a branch of State Bank of India in the country where order shall be placed. In case, in the country where order is placed, State Bank of India is not there, Letter of Credit will be confirmed by foreign banker. Balance 20% of FOB/FCA/CFR value shall be paid through sight draft on Commissioning & acceptance of the equipment at BHEL Visakhapatnam, against submission of 10% performance bank guarantee. All Bank charges outside India are to supplier's account. Lump sum erection and commissioning charges if any, shall be payable after satisfactory erection & commissioning of the equipment by sight draft against certificate issued by the competent authority.
- 5.7.3 **Common to both India & Foreign Bidders.**
Erection & Commissioning (E&C) charges will be released after deduction of Income Taxes as per the Govt. of India rules. The TDS certificate will be issued by BHEL. Applicable service tax on E&C charges will be payable extra. The liability of depositing the same to the Govt. will be of the supplier.
- 5.7.4 **Loading criteria common to both Indian and foreign bidders:** Vendor should accept the payment terms specified above. However for any deviation to the payment terms offered with reference to the above criterion will be loaded with prime lending rate of SBI prevailing on date of opening of price bid + 2%, which shall be computed for the differential period between BHEL Visakhapatnam terms of payment and the offered basic price.
- 5.8 DUNS number (allotted by M/s. DUN & Bradstreet) shall be mentioned in your offer.
- 5.9 **Guarantee:** The equipment shall be guaranteed for a period of 18 months from the date of supply or 12 months from the date of commissioning and acceptance whichever is earlier.
Offers from vendors not accepting to the requested guarantee period will be rejected.

- 5.10 **Contract Execution Bank Guarantee (CEBG):** The successful tenderer shall furnish a Bank Guarantee from any Nationalized Bank for 5% of Purchase Order value (FOR Dispatching station value – Excluding taxes, duties, freight & insurance – for Indian bidders) & (FOB/FCA value – excluding freight & insurance – for foreign bidders) confirming that the order will be executed as per the terms and conditions and this should be valid till final dispatch date (LR/GR/BL/AWB) with additional 2 months claim period. Letter of Credit will be processed only after receipt of CEBG. The CEBG is to be furnished within 3 weeks from the date of Purchase order.
Offers from vendors not accepting to submit CEBG will be rejected.
- 5.11 **Performance Bank Guarantee (PBG):** The supplier shall furnish a Bank guarantee from any Indian Nationalized Bank approved by BHEL Visakhapatnam in the format, given by BHEL Visakhapatnam along with purchase order for 10% of the Purchase Order value (FOR Dispatching station value – Excluding taxes, duties, freight & insurance – for Indian bidders) & (FOB/FCA value – excluding freight & insurance – for foreign bidders) valid for period of guarantee with additional claim period of 2 months.
Offers from vendors not accepting to submit PBG will be rejected.
- The CEBG & PBG shall be obtained from any Indian Nationalized Bank/ Scheduled Commercial Banks.
- 5.12 **Liquidated damages:** Delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in the time as per the delivery quoted in our Purchase Order would make the supplier liable to an un-conditional penalty at the rate of ½% of the value of goods for each week of delay subject to a maximum of 10% of the Purchase Order value.
- 5.12.1 **Loading Criteria for Liquidated Damages:** Any deviation from above LD Clause to the extent for which LD is not agreed by the vendor i.e., differential % value will be loaded on basic price, e.g. If some vendor agrees for say maximum of 6% LD then his price will be loaded by 4% (10 – 6) of his quoted basic price.
- 5.13 **Risk purchase:** If the supplier fails to deliver the goods within the delivery specified in the Purchase Order, BHEL Visakhapatnam will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the delivery period mentioned in the Purchase Order.
Offers from vendors not accepting the above Risk Purchase terms will be rejected.
- 5.14 **Indian Agent & Agency commission:** An Indian Agent can represent only one Foreign Manufacturer against a particular Tender. 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. This will be paid by BHEL Visakhapatnam in India Rupees, on satisfactory commissioning & acceptance of the equipment. Copies of current Agency Agreement / Authorization Letter in respect of Agency Commission shall be furnished along with offer. For calculation of Rupee equivalent of Agency Commission exchange rate as prevailing on the date of Purchase Order will be taken.
- 5.15 **Short shipment / Warranty replacement:** In case of any short shipment in the main equipment / spares, customs duty levied on such supplies, shall be borne by the supplier. Any warranty replacement during the warrantee period shall be on FOR, BHEL Visakhapatnam, basis.

- 5.16 **Inspection & Testing:** All goods shall be subject to inspection by BHEL Visakhapatnam or its authorized representatives at supplier's works or at BHEL Visakhapatnam stores. The supplier will not charge for the facilities provided for inspection of goods. In case of machine tools the machine would be inspected and proved at supplier's works prior to dispatch however, final inspection and acceptance of the machine will be carried after installation of the machine at BHEL, Visakhapatnam.
- 5.17 **Operating and Maintenance manuals:** The Bidders shall clearly mention in their offer that Operating Maintenance Manuals as called for in the Technical Specification in the required number of copies will be provided.
- 5.18 **Cenvat & VAT credit. (for Indian Bidders only):** The quotation must indicate Tariff item number and rate of Excise Duty applicable. The original Excise Duty Gate Pass will be required to be furnished in case charges to us. If the bidder is availing Cenvat credit for his input materials, the effect of proforma credit should be passed on to the purchaser.
- 5.19 **Packing:** The Supplier shall arrange for packing suitably in all respects considering the peculiarity of the material involves 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.
- 5.20 **Salient Points of HSE** (Health, Safety & Environment) that are to be considered while submissions of offer are:
- 5.20.1 Consumption benchmarks related to output shall be provided wherever applicable for key input resources (energy/fuels/chemicals)
- 5.20.2 Competency requirements for operation, maintenance and calibration, if any, shall be communicated
- 5.20.3 If any Hazardous chemicals as per MSIHC (Manufacturing, Storage and import of Hazardous Chemicals) Rules 1989/94/2000 are used, the MSDS shall be provided, along with on site & OFF site emergency plan (as applicable).
- 5.20.4 The noise level at operator level shall be within 90 DbA
- 5.20.5 OH&S (Occupational Health and Safety) control measures for safe working of machine as applicable shall be specified
- 5.20.6 The machine/equipment shall be fitted with guard for rolling and moving parts and shall comply with applicable OH&S legislations and Factories Act 1948
- 5.20.7 The supplier shall submit the layout drawing of operating controls, displays etc and operating instructions to enable ergonomics evaluation and approval
- 5.20.8 The recommended PPE (Personal Protective Equipment) for the equipment shall be furnished
- 5.20.9 Alarm System (both visual and audible) and Automatic switch off of the equipment shall be provided for any intrusion, overloading, short circuiting or any malfunctioning of the equipment.
- 5.20.10 Details of all hazardous / harmful substances discharges as by-products / wastes during operations of the machine / equipment, such as fumes, gases, dust particles, aerosols UV./IR (Ultra violet / Infra red) radiations, etc shall be furnished, along with their concentrations and their TLV, (Threshold Limit Value)

- 5.20.11 Appropriate pollution control measures shall be proposed to keep the emissions from the machinery / processes within the prescribed limit as stated in Environment Protection Rules 1986.
- 5.20.12 All furnaces, process units, DG sets, paint booths, shot blasting chambers, etc shall be provided with stack(s) of sufficient height as per guidelines laid down in the Environment Protection Rules 1986.
- 5.20.13 wherever industry specific standards are not available for control of pollutants, general emission standards shall be used
- 5.20.14 Chemicals banned due to their negative impact on the environment shall not be used on the process
- 5.20.15 Fuels with sulphur content less than 0.05% shall be proposed.
- 5.20.16 Details regarding nature of waste generated and appropriate disposal practices available shall be provided, along with the operation procedure of the plant / process.
- 5.20.17 Hazardous chemicals and flammable substances shall be transported only through authorized transporters and all safety practices as laid down in applicable legislative requirements such as Central Motor Vehicle Rules, Manufacture, Storage and Import of Hazardous Chemical 1989, etc. shall be followed.
- 5.20.18 Primary materials used in the equipment shall be specified and they shall be eco - friendly.
- 5.21 Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHEL Visakhapatnam).
- 5.22 BHEL Visakhapatnam also reserves its right to allow to the Public Sector Enterprises ordering and price preference facilities as admissible under the existing policy.
- 5.23 BHEL Visakhapatnam reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at another project / unit.
- 5.24 BHEL Visakhapatnam shall be at liberty to reject or accept any tender, part or in full, at their own discretion and any such action is not liable for any question or claim against BHEL Visakhapatnam.
- 5.25 BHEL Visakhapatnam reserves the right to go for a Reverse Auction (RA) instead of opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions governing RA are given below.

GENERAL TERMS AND CONDITIONS OF RA (REVERSE AUCTION)

Against this enquiry for the subject item/system with detailed scope of supply as per enquiry specifications. BHEL Visakhapatnam 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 Visakhapatnam 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. BHEL Visakhapatnam will inform the vendor in writing in case of reverse auction, the details of service provider to enable them to contact & get trained.

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 Visakhapatnam will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL Visakhapatnam like Packing & Forwarding charges, taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL Visakhapatnam standard 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 Visakhapatnam through Service provider within 24 hours of Auction 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 Visakhapatnam as per prevailing procedure.
 11. In case BHEL Visakhapatnam decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL Visakhapatnam shall be opened as per BHEL Visakhapatnam's standard practice.
- 5.26 **Force Majeure clause:** If at the time during the continuance 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 twenty one 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.

CHECK LIST

Bidder's acceptance to BHEL Visakhapatnam's Standard Commercial Terms & Conditions.

Applicable for Indian bidders

(To be submitted along with the offer – please do not change the format)

BHEL Visakhapatnam Tender No: & Date:	Bidders Confirmation / response
Prices have been quoted on "FIRM PRICE" basis only (Yes / No)	
Prices have been quoted on "F.O.R BHEL Visakhapatnam" basis only (Yes / No)	
P & F (Please confirm whether included or not)	
Freight (Please confirm whether included or not)	
Insurance (Please confirm whether included or not)	
Validity of offer (we require a minimum period of 120 days from the date of Tender Opening – please Specify)	
Sales Tax (please Specify)	
Excise Duty (please Specify)	
Delivery period from the date of Purchase Order (please Specify). A loading @ ½ % of the Purchase Order value per week will be done for the grace period requested. For evaluation 4 weeks will be considered as one month. Vendors quoting a delivery period beyond the 'the requested delivery plus the allowed grace period' is liable for rejection.	
Liquidated damages as per clause 5.12 (we require acceptance to @ ½% per week subject to a maximum of 10%) (Yes / No)	
Risk Purchase as per clause 5.13 (Yes / No) (Offers from vendors not accepting the Risk Purchase terms will be rejected)	
Payment terms (As per Clause No. 5.7.1) (Yes / No)	
Contract Execution Bank Guarantee (CEBG) as per Clause 5.10 (Yes / No) (Offers from vendors not accepting to submit CEBG will be rejected)	
Performance Bank Guarantee (PBG) as per Clause 5.11 (Yes / No) (Offers from vendors not accepting to submit PBG will be rejected)	
Guarantee as per clause 5.9 (The equipment shall be guaranteed for a period of 18 months from the date of supply or 12 months from the date of commissioning and acceptance whichever is earlier) (Yes / No) (Offers from vendors not accepting to the guarantee period will be rejected)	
Inspection (please Specify the Place of Inspection)	
Erection & Commissioning/ Installation/ Training (Please confirm whether charges are included in the total cost or not)	
Approximate Net Weight of the total Consignment	
Approximate Gross Weight of the total Consignment	

Signature & Office Seal of the bidder

CHECK LIST

Bidder's acceptance to BHEL Visakhapatnam 's Standard Commercial Terms & Conditions.

Applicable for foreign bidders (To be submitted along with the offer – please do not change the format)

BHEL Visakhapatnam Tender No: & Date:	Bidders Confirmation / response
Prices have been quoted on "FIRM PRICE" basis only (Yes / No)	
Prices basis (FOB/CFR/CIF – Please Specify)	
Insurance (Please confirm whether included or not)	
Validity of offer (we require a minimum period of 120 days from the date of Tender Opening – please Specify)	
Currency in which quoted (please Specify)	
Port of loading (please Specify)	
Country of Origin (please Specify)	
Delivery period from the date of Letter of Intent (please Specify) A loading @ ½ % of the Purchase Order value per week will be done for the grace period requested. For evaluation 4 weeks will be considered as one month. Vendors quoting a delivery period beyond the 'the requested delivery plus the allowed grace period' is liable for rejection.	
Liquidated damages as per clause 5.12 (we require acceptance to @ ½% per week subject to a maximum of 10%)	
Risk Purchase as per clause 5.13 (Offers from vendors not accepting the Risk Purchase terms will be rejected) (Yes / No)	
Payment terms (As per Clause No. 5.7.2)	
Agency commission (refer clause 5.14)	
Contract Execution Bank Guarantee (CEPG) as per Clause 5.10 (Yes / No) (Offers from vendors not accepting to submit CEBG will be rejected)	
Performance Bank Guarantee (PBG) as per Clause 5.11 (Yes / No) (Offers from vendors not accepting to submit PBG will be rejected)	
Guarantee as per clause 5.9 (The equipment shall be guaranteed for a period of 18 months from the date of supply or 12 months from the date of commissioning and acceptance whichever is earlier). (Offers from vendors not accepting to the requested guarantee period will be rejected) (Yes / No)	
Inspection (please Specify)	
Erection & Commissioning/ Installation/ Training (Please confirm whether charges are included in the total cost or not)	
Dimension of the Largest Part (please Specify)	
Packing Schedule (No of containers and their Sizes) (please Specify)	
Approximate Net Weight of the total Consignment (please Specify)	
Approximate Gross Weight of the total Consignment (please Specify)	

Signature & Office Seal of the bidder