

	<u>BHARAT HEAVY ELECTRICAL LIMITED</u>					Enquiry No. :
	<u>UNIT'S ADDRESS:</u>					Due Date :
	<u>CONTACT PERSON'S NAME/DESIGN./PHONE NO./E-MAIL (FROM PURCHASE DEPTT.)</u>					Supplier Qtn. No.:
						Date :
<p align="center"><u>SPECIFICATION CUM COMPLIANCE CERTIFICATE OF LINE FILTERS</u></p>						
	NOTE:-					
	1. Vendor must submit complete information against clause no. 13 (Qualifying Condition). The offer meeting this clause would only be processed.					
	2. The "Offered" Column and where applicable, the "Deviations" & "Remarks" Column of this format shall be filled in by the Vendor and submitted along with the offer. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications/requirements shall be treated as non-compliance.					
	3. The offer and all documents enclosed with offer should be in English language only.					
	NAME & ADDRESS OF THE SUPPLIER :			NAME & ADDRESS OF THE INDIAN AGENT :		
	TELEPHONE NOS.:			TELEPHONE NOS.:		
	FAX NOS.:			FAX NOS.:		
	E-MAIL ADDRESS :			E-MAIL ADDRESS :		
SCOPE: SUPPLY, ERECTION & COMMISSIONING OF HIGH VOLTAGE LINE FILTERS COMPLYING WITH SPECIFICATIONS AS BELOW						

SNO	DESCRIPTION FOR BHEL REQUIREMENT		SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS	
1.0	PURPOSE & WORKPIECE MATERIAL						
1.1	Purpose:						
	The line filters are required for suppressing the interference noise generated by source during partial discharge measurement on power transformers and shunt reactors.		Indenter				
1.2	Job to be tested : Power transformers, Reactors etc.		Indenter				
	Quantity : LV Filter 415V/300A - 1 No.						
2.0	SPECIFICATION:						
2.1	LV Filter		Vendor to confirm				
2.1.1	Type: 3-Phase		Vendor to confirm				
2.1.2	Voltage rating: 415 V		Vendor to confirm				
2.1.3	Current rating: 300A		Vendor to confirm				
2.1.4	Attenuation: 20-30 dB		Vendor to confirm				
2.2	SAFETY ARRANGEMENTS:						
	Following safety features in addition to other standard safety features should be provided on the instrument:		Vendor to confirm				
	1.Instrument should have adequate and reliable safety interlocks / devices to avoid damage to the system, workpiece and the operator due to the malfunctioning or mistakes.		Vendor to confirm				
	2. All electronics parts are housed in shielded enclosures.		Vendor to confirm				

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2.3	ENVIRONMENTAL PERFORMANCE OF THE SYSTEM:				
	The Instrument shall conform to following factors related to environment :				
	(a) If any safety / environmental protection enclosure is required it should be built in the system by the vendor.	Vendor to confirm			
3.0	ACCESSORIES:				
3.1	Vendor to furnish list and details of accessories if any	Vendor to specify			
4.0	SPARES:				
	All necessary spares for two years trouble-free operation.	Vendor to Confirm			
5.0	DOCUMENTATION : 1 copy of each of the following shall be supplied along with the system	Vendor to Confirm			
5.1	Instruction manual	Vendor to Confirm			
5.2	Test & Guarantee Certificate.	Vendor to Confirm			
5.3	Calibration certificate	Vendor to Confirm			

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	6.0 SYSTEM INSPECTION:				
6.1	Inspection at suppliers works before dispatch	Vendor to Confirm			
6.2	All routine and type tests and system calibration to be performed at supplier's works on the system before dispatch in presence of BHEL representatives	Vendor to specify & confirm			
	7.0 TRAINING:				
7.1	BHEL testing engineer and maintenance person should be trained at supplier's Works for mutually agreed period in the area of (a) Use of all system Features, programming for Measuring Systems & supplied accessories etc. (b) Electrical, Electronic & maintenance for system & other supplied equipments	Vendor to confirm			
7.2	Air-fare, boarding & lodging for the trainees shall be borne by BHEL.	Vendor to confirm			
7.3	Competent, English speaking experts shall be arranged by the vendor during training for satisfactory & effective training of BHEL personnel.	Vendor to confirm			
7.4	Vendor to quote for training on man / week basis	Vendor to confirm			

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8.0	INSTALLATION & COMMISSIONING				
8.1	Supplier to take full responsibility for carrying out the start up and commissioning	Vendor to confirm			
8.2	Successful proving of BHEL components by the supplier shall be considered as part of commissioning. Following tests deemed necessary for system acceptance shall form part of the commissioning activity. i) Calibration Tests ii) Operational Tests	Vendor to confirm			
8.3	Demonstration of all features of the high voltage line filters to the satisfaction of BHEL for their efficient and effective use.	Vendor to confirm			
8.4	Demonstration by actual use of all supplied components and accessories to their full capacity.	Vendor to confirm			
8.5	Commissioning spares, required for commissioning of the system within stipulated time, shall be brought by the supplier on returnable basis.	Vendor to confirm			
8.6	Schedule of Commissioning shall be submitted with the offer.	Vendor to confirm			
8.7	Charges, duration, terms & conditions for E&C should be furnished in detail separately by vendor along with offer.	Vendor to confirm			

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9.0	AMBIENT CONDITIONS & THERMAL STABILITY :				
9.1	Total System and all supplied items should work trouble free and efficiently under following operating conditions and should give specified accuracies. Power Supply: Voltage: 230 V - 10%, +10% Frequency: 50 Hz \pm 1.5 Hz Operating Humidity : 10% to 90% Operating Temperature : 0°C to 40°C (Vendor to confirm that system is suitable for above and details of provisions on the system for the same are to be furnished by Vendor. The ambient conditions mentioned above for control system will be made available with suitable air-conditioning at works.)	Vendor to confirm			
9.2	Thermal Stability of the complete system keeping in view specified Ambient Conditions and accuracy requirements of BHEL components and trouble free operation of the system should be ensured by vendor. (Vendor to confirm that system is suitable for above and details of provisions on the system for the same should be furnished by Vendor)	Vendor to confirm			
10.0	PACKING:				
10.1	Air worthy/Sea worthy & rigid packing for all items of complete system, all Accessories and other supplied items to avoid any damage/loss in transit. When system is dispatched in containers, all small loose items shall be suitably packed in boxes	Vendor to confirm			

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11.0	GUARANTEE :				
11.1	12 months from the date of commissioning of the system.	Vendor to confirm			
12.0	GENERAL : The vendor should submit the following information:				
12.1	Equipment Model	Vendor to confirm			
12.2	Vendor to submit, along with offer, the reference list of customers where similar systems have been supplied mentioning the customer, Machine Model, major specifications of the supplied system, Year of Supply etc	Required			
12.3	Detailed catalogues , sketch/ photographs of the m/c and accessories/ attachments should be submitted with the offer.	Required			
13.0	QUALIFYING CONDITIONS :				
13.1	Only those vendors who have supplied and commissioned at least one line filter for similar applications in the past ten years with proven performance of supplied system for more than one year after commissioning , should quote. The following information is to be submitted by the vendor about the companies where similar instrument have been supplied. This is required from all the vendors for qualification of their offer.	Vendor to confirm			

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	1. Name of the customer / company where similar system is installed.	Vendor to confirm			
	2. Complete postal address of the customer.	Vendor to confirm			
	3. Year of commissioning. (Copy of commissioning report should be furnished)	Vendor to confirm			
	4. Application for which the system is supplied with details of accuracies achieved on the job.	Vendor to confirm			
	5. Name and designation of the contact person of the customer.	Vendor to confirm			
	6. Phone, FAX no. and email address of the contact person of the customer.	Vendor to confirm			
	7. Performance certificate from the customers regarding satisfactory performance of system supplied earlier.	Vendor to confirm			
	8. BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.	Vendor to confirm			
	9. Authorisation Letter from Original Equipment Manufacturer(in case of not directly quoted by OEM) for quoting of their system	Vendor to confirm			