

	<u>BHARAT HEAVY ELECTRICAL LIMITED</u>						Enquiry No. :
	<u>UNIT'S ADDRESS</u>						Due Date :
	<u>UNIT'S PHONE NOS.</u>						Supplier Qtn.
	<u>CONTACT PERSON'S NAME/DESIGN./PHONE NO./E-MAIL (FROM PURCHASE DEPTT.)</u>						Date :
<p align="center"><b><u>SPECIFICATION FOR FIRE SUPPRESSION SYSTEM FOR SERVER &amp; UPS ROOM</u></b>  <b><u>AT THE COMPUTER CENTRE, BHEL BHOPAL</u></b></p>							
<b>NOTES :-</b>							
1. The "Vendor's confirmation" 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.							
2. The offer and all documents enclosed with offer should be in English language only.							
3. Vendor must submit complete information against clause no. 4.0 The offer meeting this clause would only be processed.							
<b>ADDRESS OF THE SUPPLIER :</b>				<b>ADDRESS OF THE INDIAN AGENTS :</b>			
<b>TELEPHONE NOS.:</b>				<b>TELEPHONE NOS.:</b>			
<b>FAX NOS.:</b>				<b>FAX NOS.:</b>			
<b>E-MAIL ADDRESS :</b>				<b>E-MAIL ADDRESS :</b>			
<b>SCOPE: SUPPLY, INSTALLATION &amp; COMMISSIONING OF FIRE SUPPRESSION SYSTEM AT SERVER AND UPS ROOM AT THE COMPUTER</b>							
<b>PROJECT DETAIL</b>	The project requirement is to supply, install and commission a Fire Suppression System using Novec 1230/Inergen or equivalent media. The locations to be covered are the server room and adjacent UPS room. The Fire Suppression system should work with the existing Automatic Fire Alarm System which already has the fire detection with control panel and actuation circuit.						

SNO	DESCRIPTION FOR BHEL REQUIREMENT	Vendor's Confirmation (Yes/No)	Deviations if any	Remarks
<b>1.0</b>	<b>SCOPE OF EXTINGUISHING MEDIA</b>			
1.1	SCOPE : Fire suppression in Server and UPS room should work independently.			
1.2	Media : Novec 1230/Inergen or equivalent (See Annexure I (A))			
<b>2.0</b>	<b>ROOM DIMENSIONS AND EXISTING SYSTEM PARTICULARS :</b>			
2.1	Server Room : (50'L X 45'B X 10'H, Ceiling Void 5'H, Floor Void 1.5'D)			
2.2	UPS Room : (20.99'L X 18.47'B X 10'H, C.Void 5'H, Floor Void 1.5'D)			
2.3	Existing Fire Detection System : Conventional control panel which operates on 24V DC. Cross Zoning outputs for server and UPS Room are available for actuation of new Fire suppression system.			
<b>3.0</b>	<b>SCOPE OF SUPPLY:</b>			
3.1	Complete Bill of Material should be submitted as per design with detailed schematic diagram essentially supported with a Technical Write-up highlighting detection and operation logic, diagnostics, interlocks and controls etc. along with the offer. The design shall be as per NFPA standard NFPA 2001.			
3.2	Detailed calculation sheet for the required quantity of suppression media should be provided along with the offer.			
3.3	Battery backup should be provided along with the suppression system for actuation in case of power distribution outage. If this fails mechanical manual actuator can be actuated.			
3.4	Gas release panel should have the display for (a) Power outage (b) Diagnostic set up (c ) Battery low indication etc.			
3.5	Submission of Test Certificates from accredited and government recognized Test Houses in respect of "Make" and "Performance" of items that will be supplied such as Detectors, Gas Cylinders (For gas based pressurized system), Valves etc.			
3.6	The new fire suppression system should be integrated with the existing Fire Alarm System which facilitates detection of fire.			
3.7	The vendor is responsible for the supply of any material required for total installation, commissioning and successful operation of the Fire Suppression system and integration with existing Fire detection system.			
3.8	Performance testing of the total system showing the features offered.			
3.9	Hard Copies of Manuals for System operation and Maintenance should be supplied along with the consignment.			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	Vendor's Confirmation (Yes/No)	Deviations if any	Remarks
3.10	Indicate specifically, if offered system will require any special facility from BHEL in order for them to erect and commission the system. The details can be related with one or more of the following : i) Space requirements for major equipment. ii) Separate room or shed, if any. iii) Dimensions thereof. iv) Any special requirement of Utility Services etc			
<b>4.0</b>	<b>QUALIFYING CONDITIONS :</b>			
4.1	Only those vendors, who have supplied, installed and commissioned themselves at least one Fire Suppression system using Novec 1230/Inergen or equivalent media in the past 10 years (on the date of opening of Tender) can quote. The following information about the offered media and system should be submitted by the vendor about the companies where same systems have been supplied and in operation. Details of system/media other than offered shall be treated as irrelevant. This is required as prequalification of their offer. 1. Name of the customer / company where similar system is installed. 2. Complete postal address of the customer. 3. Month & Year of commissioning. 4. Location and purpose of installation 5. Name and designation of the contact person of the customer. 6. Phone, FAX no. and email address of the contact person of the customer. 7. Commissioning certificate from the customers regarding satisfactory installation/testing and commissioning of the suppression system. The particulars and performance can be verified by BHEL as required. 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.			
<b>5.0</b>	<b>PRE BID DISCUSSION AND SITE VISIT</b>			
	1. The vendor may discuss to clarify the requirement and design aspects. They can also visit the site before submitting their offer.			

SNO	DESCRIPTION FOR BHEL REQUIREMENT			Vendor's Confirmation (Yes/No)	Deviations if any	Remarks
	<b>Annexure-I</b>					
<b>A.</b>	<b>Environmental Parameters of the media for Fire Suppression</b>					
	<b>Parameter</b>	<b>Novec 1230</b>	<b>Inergen</b>	<b>Equivalent</b>		
1	Ozone depletiong Potential (ODP)	0	0	0		
2	Global Warming Potential (GWP)	1	0	< 5		
3	Atmospheric Life Time (ALT)	5 Days	0	<10 Days		
4	Human Safety (Deployable at manned location)	YES	YES	YES		
<b>B.</b>	<b>Check List of Tender Documents to be submitted.</b>					
	<b>Description</b>			<b>Submitted</b>		
1	Successfully executed Order details, PO No, Date, Client, System details, Medium etc			Yes/No		
2	Technical Sheet regarding the medium they are offering			Yes/No		
3	Detailed calculation sheet for required quantity of suppression media			Yes/No		
4	Details of their clients, email, cell/phone etc			Yes/No		
5	Commissioning Certificate authenticated copy from client.			Yes/No		
6	Bill of Material and Quantity			Yes/No		
7	Confirmation for submission of various Test Certificates from accredited bodies, Government Test house etc.			Yes/No		
8	Schematic Diagram, essentially supported with a Technical Write-up highlighting detection and operation logic, diagnostics, interlocks and controls etc.			Yes/No		
	<b>NOTE : The Specification sheet has to be signed with company seal on each page</b>					