		Page 1 of 7			
		PROCUREMENT PROCEDURE OF CPRI (NON WORKS)			
Revision No.	:03			Issue No	: 2
Dt of Revision	: 25.07.2017			Issue Dt.	: 30.06.2003
				Issued by	: P A
Section	: Formats			Documents	: PPM
Торіс	e-Tender Technical Specification D	ocument		FORMAT NO.:C	PRI/PUR/ etbid/gt i
		Section II - Technical Specification			
	CENTRAL POWER RESEARCH INST	ITUTE, BANGALORE Web: www.cpri.in, www.tenderwizard.	com/CPR	I, Telefax: 080-2207 2	<u>2010</u>
Tender Enquiry	VNo.: CPRIBLR19PS06S568				
		voltage and current amplifier system			
Note : 1) The Of	ffers should be submitted only in this	format otherwise the offer will be liable to be rejected.			
2) All blue field	s are mandatorily to be filled in.				
Inspection show	ald be communicated in writing by the of nominated CPRI officers.	Ill be borne by CPRI. Information regarding the readiness of he supplier at least 70 (Seventy) days in advance, to obtain			
Quotation Num					
Quotation Num				To be completed by	the Riddor
				Guaranteed	Specify deviations/
Sl.No.	Parameters	CPRI Specification / Requirements	Qty	Technical Particulars (GTP)	Remarks if any
1	Scope	The voltage and current amplifier system with following specifications	1		
2	Interface	It should have the capability to interface with Real Time Digital Simulation system supplied by RTDS Technologies which is present in CPRI, Bangalore campus			
3	Output Channels	6 current channels and provision for neutral and 3 volatge Channels			
4	Output Range	0 to 15A (RMS) phase current for current amplifier providing continuous output. Peak Current: 2 to 3 times of the continuous current 0 to 250V (RMS) phase voltage for voltage amplifier providing continuous output			

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Dt of Revision	a : 25.07.2017			Issue Dt.	: 30.06.2003
				Issued by	: P A
Section	: Formats			Documents	: PPM
Topic	: e-Tender Technical Specifica			FORMAT NO.:C	CPRI/PUR/@TBID/GTE
		Section II - Technical Specification			
		H INSTITUTE, BANGALORE Web: www.cpri.in, www.tenderwizard.	.com/CPF	<u> RI, Telefax: 080-2207</u>	<u>2010</u>
_	ry No.: CPRIBLR19PS06S568				
-		es: The voltage and current amplifier system			
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		ng by the supplier at least 70 (Seventy) days in advance, to obtain	clearenc	e from the Ministry,	Government of India
for deputation	n of nominated CPRI officers.				
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Quotation Nu	mber and Date				
				To be completed by	
				Guaranteed	Specify deviations/
Sl.No.	Parameters	CPRI Specification / Requirements	Qty	Technical	Remarks if any
				Particulars (GTP)	
5	Bandwidth	DC to 3kKz			
2	2				
6	Amplifier Gain	5 or more A/V for Current amplifier 40 or			
		more V/V for Voltage amplifier			
			_		
7	Magnitude Error	less than 0.5%			
8	Resolution for AC	0.001 A or less			
0	Resolution for AC	0.001 A 01 1255			
		0.1 V or less			
9	Input-Output Phase error	Less than or equal to 0.25 degrees			
10	Distortion	Less than 0.5%	+		
11	Protection	Protection for overloading, short circuit to be provided			

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Revision No. Dt of Revision				Issue No Issue Dt. Issued by	: 2 : 30.06.2003 : P A
Section Topic	: Formats : e-Tender Technical Specification	Document		Documents	:PPM PRI/PUR/@TBID/GTI
Topic	: e-render rechnical specification	Section II - Technical Specification		FORMAT NOC	
	CENTRAL POWER RESEARCH IN	ISTITUTE, BANGALORE Web: www.cpri.in, www.tenderwizard.c	com/CPF	RI, Telefax: 080-2207	2010
Tender Enquir	y No.: CPRIBLR19PS06S568				
Description of	the Equipment/Goods/Services: 1	'he voltage and current amplifier system			
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Quotation Num	iber and Date				
Sl.No.	Parameters	CPRI Specification / Requirements	Qty	To be completed by Guaranteed Technical Particulars (GTP)	the Bidder Specify deviations/ Remarks if any
12	Input Impedance	More than 20 kΩ			
13	Drift	Within 0.2% of the AC output of the Amplifier			
14	Environmental	Up to 50 ⁰ C, up to 95% relative humidity			
15	Nominal Frequency	50Hz			
16	Nominal Supply	200 to 240V Single Phase Voltage			
17	EMI/EMC	EMC Emission, EMC Immunity and Electrostatic Discharge Immunity to be provided			
18	Output Load Constraints	In the range of $0.3\Omega - 0.5\Omega$ for Current Amplifier. 24Ω or more for voltage amplifier			
19	Noise	Noise level to be specified by the manufacturer			

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				Issued by	: P A
Section	: Formats			Documents	: PPM
Topic	: e-Tender Technical Specification D			FORMAT NO.:C	PRI/PUR/@TBID/GTH
		Section II - Technical Specification			
		ITUTE, BANGALORE Web: www.cpri.in, www.tenderwizard.	com/CPR	I, Telefax: 080-2207 2	<u>2010</u>
Tender Enquiry	y No.: CPRIBLR19PS06S568				
Description of	the Equipment/Goods/Services: The	voltage and current amplifier system			
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Quotation Num				To be completed by	the Diddon
Sl.No.	Parameters	CPRI Specification / Requirements	Qty	Guaranteed Guaranteed Technical Particulars (GTP)	Specify deviations/ Remarks if any
20	References	Vendor needs to provide one reference/contact details where this amplifier has been successfully interfaced with RTDS system			
21	Place where equipment/service to be supplied/ provided	Power systems Division, CPRI, bangalore			
22	Pre-Dispatch Inspection at OEM	Not required			
23	Inspection in Stages	Not required			
24	Inspection of Goods on receipt at Consignee/ user site	Required			
25		Required			
26	Inspection on Installation & Commissioning	Required			

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a				Issued by	: P A
Section	: Formats				
Торіс	: e-Tender Technical Specification D	ocument Section II -Technical Specification		FORMAT NO.:C	PRI/PUR/etbid/gtp
	CENTRAL POWER RESEARCH INST	<u>Section II - Lechnical Specification</u> ITUTE, BANGALORE Web: www.cpri.in, www.tenderwizard.	com/CPR	L Tolofay: 080-2207 (2010
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Description of	the Equipment/Goods/Services: The	voltage and current amplifier system			
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3) Pre-despatc	n Inspection & Training expenses sha	all be borne by CPRI. Information regarding the readiness of	the equip	ment/machinery for	r the Pre-despatch
		he supplier at least 70 (Seventy) days in advance, to obtain			
for deputation	of nominated CPRI officers.				
Name of the Ve	ndor				
Quotation Num	ber and Date				
				To be completed by	
				Guaranteed	Specify deviations/
Sl.No.	Parameters	CPRI Specification / Requirements	Qty	Technical	Remarks if any
				Particulars (GTP)	
27	External Inspection Agency /	Not Required			
	Authority	1			
28	Factory Test Certificate as per relevant	Required			
	national/international standards				
29	warrantee	1 year Warranty			
30	Post warrantee comprenhensive AMC	Not Required.	-		
	including labour, travel, spare parts.	A			
31	user manual	Required			
32	Demonstration/training	Required			
52					

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Tender Enquir Description of Note : 1) The O 2) All blue field 3) Pre-despatc	: Formats : e-Tender Technical Specification E <u>CENTRAL POWER RESEARCH INST</u> y No.: CPRIBLR19PS06S568 the Equipment/Goods/Services: The ffers should be submitted only in thi ls are mandatorily to be filled in. h Inspection & Training expenses sh	PROCUREMENT PROCEDURE OF CPRI (NON WORKS) Document Section II -Technical Specification TITUTE, BANGALORE Web: www.cpri.in, www.tenderwizard.c e voltage and current amplifier system s format otherwise the offer will be liable to be rejected. all be borne by CPRI. Information regarding the readiness of the supplier at least 70 (Seventy) days in advance, to obtain of the supplier at least 70 (Seventy) days in advance, to obtain of the supplier at least 70 (Seventy) days in advance, to obtain of the supplier at least 70 (Seventy) days in advance, to obtain of the supplier at least 70 (Seventy) days in advance, to obtain of the supplier at least 70 (Seventy) days in advance, to obtain of the supplice of the superior of the supplice of the superior of the su	the equij	<mark>RI, Telefax: 080-2207 :</mark> pment/machinery fo	r the Pre-despatch
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<u>Quotation Num</u> Sl.No.	ber and Date Parameters	CPRI Specification / Requirements	Qty	To be completed by Guaranteed Technical Particulars (GTP)	the Bidder Specify deviations/ Remarks if any
33	Installation	The voltage and current amplifiers has to be interfaced with the Real time digital simulator (RTDS) available in CPRI. After interfacing, supplier has to demonstarte the dyamic realy testing of the realy available at CPRI and satisfactory performance has to be shown to CPRI Engineers. All the required hardware and software for interfacing will be supplied by supplier of voltage and current Amplifer system			
34	Calibration Certificate traceable to national /international standards from an ISO 10725 accredited laboratory	Required			
'complied' do n 2)A detailed tec to reach the follo	ot suffice the requirement. hnical/catalogue/literature/phamplet owing address within the due date and	and any other details shall be submitted in hard copy in a sealed time. firms shall submit the Letter of Authorization issued by their prin	cover sup	•	

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		PROCUREMENT PROCEDURE OF CPRI (NON WORKS)			
Revision No. : 03	3			Issue No	: 2
Dt of Revision : 25	5.07.2017			Issue Dt.	: 30.06.2003
				Issued by	: P A
Section : Fo	ormats			Documents	: PPM
Topic : e-1	Tender Technical Specification I	Document		FORMAT NO.:C	PRI/PUR/@TBID/GTH
		Section II - Technical Specification			
<u>C</u>	ENTRAL POWER RESEARCH INS	<u>TITUTE, BANGALORE Web: www.cpri.in, www.tenderwiza</u>	rd.com/CPF	RI, Telefax: 080-2207 2	<u>2010</u>
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3) Pre-despatch Ins Inspection should b for deputation of no <u>Name of the Vendor</u> <u>Quotation Number</u> <u>Sl.No.</u> 4)The bidder shall su Address : Joint Direct	spection & Training expenses sh be communicated in writing by ominated CPRI officers. r and Date Parameters ubmit the quotation / offer in the a	the supplier at least 70 (Seventy) days in advance, to obta CPRI Specification / Requirements above prescribed format of Section IA , IB and II only . Infor ty , Central Power Research Institute, Sadashiva Nagar P.O., P.	Qty Trmations any	e from the Ministry, To be completed by Guaranteed Technical Particulars (GTP) other forms shall shall	Government of India the Bidder Specify deviations/ Remarks if any