

# WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED (A Govt. of West Bengal Enterprise) BARASAT DIVISIONAL OFFICE 4 JESSORE ROAD(E). CHAMPADALI MORE, BARASAT-700124

Phone No.:8900798058 e-mail:dm.barasat@wbsedcl.in

## NOTICE INVITING e-TENDER

NIT No.: DM/BSTD/Tender/54

Date: 02.01.2024

Tender is invited by the Divisional Manager, Barasat Division, North 24 Parganas, WBSEDCL, 4 Jessore Road(E), Champadali More, Barasat, Kolkata-700124 through electronic tendering (e-tendering) from manufacturers/Distributors for sample approval, supply, delivery and installation of the following item as per schedule detailed below.

SI no.	Description of Item	Unit	Qty	Estimated rate	Estimated Cost	Earnest Money	Delivery time
			4-4		High Ly		
	PROCUREMENT OF STATIC RELAYS						*
1	FOR BIRA S/STN. UNDER BARASAT DIVISION AS PER GIVEN SPECIFICATION (CHECK THE NIT	NOS	10	14500.00	145000.00	2900.00	30 days
	ATTACHEMENT ANNEXURE-II)						
V							i i i i i i i i i i i i i i i i i i i



Scope: - The materials are procured for Barasat Division, The supply of the materials will be directly at Barasat Divisional Store. Necessary Challan, E-Way Bills are to be provided at Barasat Divisional Store

Intending bidders desirous of participating in the tender are to log on to the website

	g bidders desirous of participating in the tender are to be	Date & Time	
Sl. No.		2 22 1	
01.	Date of uploading of N.I.T and Tender Documents (online).	10.01.2024 after 10:00 hrs	
	[Publishing date]	10.01.2024 after 10.00 hrs	
02.	Documents sell / download start date (online).	10.01.2024 after 10:00 hrs	
03.	Bid Submission upload start date (online)	29.01.2024 upto 10:00 hrs	
04.	Bid Submission upload end date (online)	On & from 29.01.2024 at 10:00 hrs	
05.	Date of submission of original copies of Earnest Money Deposit	to 31.01.2024 upto 10:00 hrs	
Francis II	1111 ( Line) for the Ridders	31.01.2024 after 10:00 hrs	
06.	Date for opening of Technical bid (online) for the Bidders	To be intimated later	
07.	Date for opening of Technical Sta (States)  Date of uploading the Final List of Technically Qualified Bidders after Technical Bid Evaluation (online).	[ [20] [ [2] [ [2] [ [2] [ [ [2] [ [ [ [ [ [	
08.	Date, for opening of Financial Bid (online).	To be intimated later	

https://wbtenders.gov.in for the tender. The tender can be searched by typing WBSEDCL in the search Engine provided in the website.

Bidders willing to take part in the process of e-tendering are required to obtain Digital Signature Certificate (DSC) in the name of person who will sign the tender, from any authorized Certifying Authority (CA) under CCA, Govt of India (viz. nCode Solution, Safescrypt, e-Mudhra). DSC is given as a USB e-Token. After obtaining the Class 2 or Class 3 Digital Signature Certificate (DSC) from the approved Certifying Authority they are required to register the fact of possessing the Digital Signature Certificates through the registration system available in the website.

Tenders are to be submitted online and intending bidders are to download the tender documents from the Website stated above. This is the only mode of collection of tender documents. Details of submission Procedure is given in "Instructions to Bidders".

## Terms & conditions of the Tender Notice:

- Earnest Money Deposit amounting to 2% (Two Percent) of the Estimated Cost. As mentioned above, shall be submitted individually along with the offer. Necessary earnest money may be remitted through online mode only.
- The bidder shall submit along with the offer necessary documents in support of their previous supply of
  the items of the tender to WBSEDCL in earlier. Occasions and financial capabilities to the extent of the
  estimated financial amount of their offer.
- No agent is allowed to participate in the Tender. Only Original Manufacturer or authorized dealers are allowed to participate in the process. In case of Authorized Dealers, dealership certificate is a must.
- 4. WBSEDCL reserves its right to take decision keeping its financial interest. The Purchase Policy of WBSEDCL along with the provisions of Vendor Rating & Holiday Listing, as effective from 01.09.2012 and the subsequent amendment effective from 18.03.2013 will be applicable.
- If the offer is submitted without or inadequate Earnest Money, the bid will not be opened. In case of Incomplete offer, the tender will be liable for rejection and Earnest Money Deposit will be forfeited.

Division Barasat Division W.B.S.E.D.C.L

- 6. The specifications of the materials are attached with this NIT. The specifications should be strictly adhered to. No Deviations will be allowed. In case the eligible bidder fails to provide the material with all necessary specifications his bid will stand cancelled.
- 7. The offer shall remain valid for a minimum period of 120 days from the next day of opening of the
- 8. Material must be supplied to the Barasat Divisional Store after testing at ABHIKSHAN DTD.
- 9. The quoted rates should be inclusive of all taxes & duties, freight and incidental charges. The quoted rate should be excluding GST charges. GST will be paid as applicable.
- 10. The ordered materials should be delivered within 30 days from the date of PO, otherwise, penalty may be imposed as per rule of WBSEDCL for delay of delivery of ordered materials.
- 11. The necessary documents along with bill are to be submitted at Barasat Divisional Office. The SRV will be issued from Barasat Divisional Store, WBSEDCL.
- 12. At the time of placing purchase order, the quantity mentioned in the Tender Document may vary up to +/- 25%.
- 13. Any evidence of unfair Trade Practices including over charging, price fixing, cartel etc. as defined in Various statutes will automatically disqualify the bidders.
- 14. The company reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.
- 15. Any bidder against whom FIR/Complaint is lodged with Police by WBSEDCL/Other Utility/Govt. Semi Govt. or Govt. undertaking Dept. shall not be eligible to participate in the bidding process.
- 16. Other information as well as terms and conditions, which are not covered above, will be available in Instructions to Bidders, General Conditions of Contract of this tender and the Revised Purchase Policy of WBSEDCL.
- 17. Annexure -II concerning Technical Specification & Quality assurance is mandatory for the tender process and without it the bidder will not be allowed to continue beyond technical evaluation. The Annexure-II has to be submitted during along technical eligibility.

### 16. TERMS OF PAYMENT:

- a) 90% payment of bill will be made within 45 (forty five) days from the date of submission of bill against: Original receipted Challan/Invoice signed by an officer in the rank Sr. SAE/Jr. Manager (Stores) attached to the respective stores. And
- b) Balance 10% payment will be made within 45 (forty five) days of submission of bills along with SRV After expiry of warranty period.
- 17. WARRANTY PERIOD: Warranty Period of supplied material will be one year from the date of delivery of the said materials. In case of any adverse report from store or defect found in site, materials have to be replaced or it would affect the vendor rating.

## 18. RATES NEGOTIATION:

Order placing authority reserves the right to negotiate the rate of any items with the L1 bidder.

DIVISIONAL DIVISION Barasas E.D.C.L

#### 19. PAYING AUTHORITY:

AM(F&A), Barasat Division, WBSEDCL, will be the Paying Authority, WBSEDCL.

#### 20. CONSIGNEE:

The name of the consignee will be The Store-In-Charge, Barasat Divisional Store.

## 21. LIQUIDATED DAMAGE FOR DELAY IN DELIVERY:

The time of delivery of the equipment/materials are to be treated as an essence of the contract and the WBSEDCL reserves the right to repudiate the contract, if the equipment / materials are not physically delivered within stipulated period as per physical delivery clause. But WBSEDCL may at his discretion waive this condition and accept the material with imposition of liquidated damage @ 1/2% of the Value of the materials beyond the schedule delivery period for or part thereof subject to maximum of 5% of the particular lot and accept the goods beyond the stipulated period.

22. Any further information along with WBSEDCL's Revised Purchase Policy may be had from the Website: www.wbsedcl.in and the following office:

Office of the Chief Engineer (Procurement & Contracts),
West Bengal State Electricity Distribution Company Limited,
Vidyut Bhavan, 4th Floor,
Bidhamagar, Kolkata - 700091.
Phone No. 033-2319-7563

- 22. Documents to be submitted in Technical bid- Please refer sl no. 6.2 of "Instruction to Bidders" in Page 8 of NIT
- 23. The specifications of the item.

As per specification mentioned in BOQ.

## Instructions to Bidders

### 1. Eligibility for participation:

- Original manufacturers/Distributors of the tendered items will be eligible in the tender
- The bidders shall have credential for supply of the tendered items to WBSEDCL other Govt. Departments in earlier occasions within last three financial years.

#### 2. General guidance for e-Tendering:

Instructions/Guidelines for electronic submission of the tenders have been mentioned below for assisting the bidders to participate in e-Tendering.

#### 3. Registration of bidder:

Any bidder willing to take part in the process of e-Tendering will have to be enrolled & registered With the e-Procurement system, through logging on to <a href="https://wbtenders.gov.in">https://wbtenders.gov.in</a>.

## 4. Digital Signature certificate (DSC):

Each bidder is required to obtain a class-III or Class-III Digital Signature Certificate (DSC) for Submission of tenders.

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5. The bidder can search and download NIT & Tender Documents electronically from the website Mentioned in Clause 3 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

#### 6. Submission of Tenders:

## 6.1 General process of submission

Tenders are to be submitted online through the website https://wbtenders.gov.in. All the Documents uploaded by the Tender Inviting Authority form an integral part of the contract. Tenderers are required to upload all the tender documents along with the other documents, as asked For, in the tender, through the above website within the stipulated date and time as given in the Tender. Tenders are to be submitted in two folders - one is Technical Proposal and the other is Financial Proposal. The tenderer shall carefully go through the documents and prepare the required documents and upload the scanned documents (credentials, certificates, EMD Draft/PO) in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid. The bidder needs to download the BOQ, fill up the rates of items in the BOQ in the designated Cell and upload the same in the designated location of Financial Bid.

The documents uploaded shall be virus scanned and digitally signed using the Digital Signature Certificate (DSC). Tenderers should take note of all the addendum/corrigendum related to the tender and upload the latest documents as part of the tender.

## 6.2. Document to be submitted

i. Company Details:

## ii. Certificates:

- 1) PAN Card details.
- 2) Current Professional Tax (PT) submission Chalan. Application for such Addressed to the competent authority may also be considered.
- 3) GST registration certificate.

#### iii. Financial Info:

Annual turnover for a period of the last three financial years.

#### iv. Credential:

- Documents in support of supply of the tendered items to WBSEDCL, in earlier occasions within last three financial years as mentioned below:
  - a. 1 No Purchase Order for completing delivery of the said materials/similar nature having financial involvement of not less than 50% of the estimated value of the said item(s). Or
  - b. 2 Nos Purchase Order for completing delivery of the said materials/similar nature having financial involvement of not less than 40% of the estimated value of the said item/item(s).
- 2) Self Declaration certificate as per Annexure 1. (mandatory format)
- 3) Technical Specification & Quality Assurance form as per Annex-II.
- 4) Others: Any other documents found necessary.

Divisional Division Barasa Division W.B.S.E.D.C.L 7. Conditional and incomplete tender:

Conditional and incomplete tenders are liable to summary rejection.

8. Validity of Tender and Offer:

The offer against tender should remain valid for a minimum period of 120 days from the next day Of opening of the tender. However, WBSEDCL may, on the merit of case, request for extension of validity of the offer for a further suitable period without any change in terms & conditions of the Offer.

## 9. Opening and evaluation of tender:

9.1 Opening of Technical Proposal

i. Technical proposals will be opened by the Tender Inviting Authority or his authorized Representative electronically from the website stated above, using their Digital Signature Certificate.

ii. Technical proposals for those tenders whose original copies of BG towards tender Fee or EMD have been received will only be opened. Proposals corresponding to which original copy of BG towards tender fee or EMD has not been received, will not be opened and will stand rejected.

iii. Intending tenderers may remain present if they so desire.

9.2 Techno-commercial Evaluation of Tender

i. While evaluation, the Tender Inviting Authority or his authorized representative may summon the tenderers and seek clarification / information or additional documents or original hard copy of any of the documents already submitted and if these cannot be produced within the stipulated timeframe, their proposals will be liable for rejection.

ii. The summary list of tenderers, whose bids will be found techno-commercially eligible, will be uploaded in the web portals. Date of opening of financial bid will be intimated to the Techno-commercially qualified tenderers.

9.3 Opening and evaluation of Financial Proposal

i. Financial proposals of the tenderers declared techno-commercially eligible, will be opened electronically by the Tender Inviting Authority from the web portal stated above on the prescribed date.

- ii. The encrypted copies will be decrypted and the rates will be read out to the bidders remaining present at that time.
- iii. After opening of the financial proposal the preliminary summary result containing interlaid, name of bidders and the rates quoted by them will be uploaded.
- iv. The Tender Accepting Authority may ask any of the tenderers to submit analysis to justify the rate quoted by that tenderer.
- 10. Revision/withdrawal of Financial Proposal by the bidder after opening of Technical Proposal of the tender will not be allowed if it is not sought by the Tender Inviting Authority.

11. Acceptance of Tender

Lowest valid rate should normally be accepted. However, the Tender Accepting Authority does not bind himself to do so and reserves the right to reject any or all the tenders, for valid reasons.

## 12. Purchase Order

WBSEDCL will communicate acceptance of tender to the successful bidder by a Purchase Order. The successful tenderer shall communicate the acceptance of the purchase order.

## 13. Concession

No price preference will be allowed to any tenderer based on the size of the industry or its geographic location. Co-operative Society, will not be considered with separate status.

## 14. Holiday Listing and Vendor Rating

Holiday Listing & Vendor Rating will be applicable according to the "Holiday Listing & Vendor Rating" policies of the Revised Purchase Policy, which is posted in website of WBSEDCL (www,wbsedcl.in). Performance of the bidders, who supplied materials/equipment to WBSEDCL previously, will be evaluated for their Vendor Rating according to the said Vendor Rating policy and their Vender Rating will be taken into consideration at the time of evaluation of Technical and Financial Proposals of the tender.

# 15. Return of Earnest Money of the unsuccessful tenderer(s)

The Earnest Money of all tenderers other than the successful tenderer(s) may be refunded automatically from tender portal after issuance of Purchase Order to the successful tenderer(s).

## **Annexure 1**

## **Self Declaration**

	I/We on behalf of				(Name of bidder agency) do here				
decl	are that I/We have quoted	rate for	supply	of the	mentioned	materials	for the	e-tender	id
		02.01.2024							

I/We also declare that I/We shall successfully complete the work in scheduled time maintaining the terms & conditions of Warranty of NIT Clause no. 17 if ranked as L1 bidder of the tender.

Yours faithfully,

Signature of authorized
Representative of the bidder agency
with official seal

# Technical Specification of 03 over current and 01 earth fault Non-directional Non-SCADA Protection Numerical Relay

• Scope: The Non-SCADA Numerical Non-Directional Protection Relay suitable for fixing in existing panel. It should be a fully digital relay mainly based on microprocessor technology with analog to digital conversion of the measured values and subsequent numerical processing. It should use specialized DSP as the computational hardware, along with associated software. The relay must have a feature of IDMT as well as instantaneous/ high stage protection for both non-directional over current and earth elements. It can be applied for short circuit, over current and earth fault protection of overhead lines as well as for HT cables feeders. Settings should be done by a readable Human Machine Interface which should also serve for fault indication.

## • Environmental:

- Operating temperature range: -25 °C to +55°C
- Service temperature range: -25 °C to +70°C
- Relative humidity: < 93%, non-condensing
- Transport and storage temperature range: -40 °C to +85°C
- Should confirm IEC 60068, IEC 60255

## Measuring Circuitry:

- CT Input Rating (In): 1A/5A
- Frequency: 50Hz
- Auxiliary supply: 24 to 240 V DC suitable for 30VDC / 110VDC system
- Auxiliary supply variation: 70% to 120% of 30V / 110V DC
- Thermal withstand Capacity: 2 x In Continuously and 40 x In for 3 sec

## Relay Settings:

- Phase fault I> 5% to 200% in steps of 1% or better.
- Earth fault Io> 5% to 200% in steps of 1% or better.
- Phase fault I>> 50% to 2000% insteps of 50% or better.
- Earth fault Io>> 50% to 2000% insteps of 50% or better.
- Current/Time Characteristics as per IEC 60255-3: SI 3S, SI 1.3S, VI 1.5S, EI 0.8S, LTI 13.33S and DT up to 99.9s.
- Time Multiplier: 0.02 to 1.0 in steps of 0.01 both for Phase and Earth fault or better.
- Operating delay Time: 0.04sec to 2.0sec in steps of 10ms or better
- Reset current: 90% of set value (Min)
- Reset Delay: 0.0 to 2.0s in steps of 10ms or better.
- Operation accuracy of all type of fault: ± 5.0% of set value or better; Operation time accuracy: 5% of set value or ± 30 ms or better.
- Broken Conductor / Single Phasing Protection (46BC), (I2/I1 >) 10% to 100% in steps of 1%
- Burden: < 0.2 VA/phase at CT input & < 12VA at Auxiliary Power Supply.</li>

Divisional Engineer (Tech-II)
Barasat Division
WBSEDCL

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## **Indications:**

- Minimum 4 nos. LED indications for Power On, Start, Trip and Relay Trouble.
- Should have LCD display for parameters and setting.
- Default Display: 3-phase current, Earth fault or Residual Current and Fault Record.

## Measurement:

- Three-phase Current
- Residual Current: It should be able to measure using external CT and also to be calculated internally.
- · Operation Counter.

## **Self-Supervision:**

It should continuously monitor the state and operation of relay. Any fault or malfunction due to internal failure should permanently block all relay operations with an indication of relay internal fault or error and should have a watchdog contact.

## Memory& RTC:

The relay should have a memory to record the fault minimum 5 No's in FIFO based. Fault record should indicate the fault current, type of fault, time of fault and tripping time. Also, preferably (not mandatory) to store minimum 5 nos of disturbance record (DR) at the rate of minimum 16 samples per cycle in FIFO basis.

Output Contact Rating: Relay should have minimum 4 Nos. Of Binary output or output relay contacts as per below mention specification.

Output Relay Contacts: 4 relay outputs:

RL1: O/C+E/F Trip

RL2: General Trip to Master Trip Relay.

RL3: O/C+E/F Annunciation

RL4: Spare

Rated Current (Minimum): Continues Current carry: 5A; Make & carry for 3.0s: 15A or better.

Contact material: Ag-alloy or better.

## **Other Specifications:**

- A) Instrument should be calibrated from any NABL accredited laboratory. Calibration results shall comply with specifications. Type test certificate must be produced.
- B) Guarantee period: 5 years from date of dispatch
- C) Bids will be accepted only after meeting the technical requirement as per specification on demonstration.

Divisional Engineer (Tech-II)
Barasat Division
WBSEDCL

# Annexure-II

Tech	nical S	pecifications	s and Qua	iity Assura	IIIC <del>e</del> -	
Com	pliance	· -		· ·		
(To be s	submitted a	as part of Technica	l bid)	٠.		
(on Con	npany Lette	er-nead) No. <b>DM/BSTD/Te</b> l	nder/54 Dated:	02.01.2024 Titl	e: GOODS	
Bidder's	Name					
[Addres	s and Con	tact Details]		Date		
Bidder's	Reference	e No hlight in this form de	aviations if any f			ations
Note to	Bidders: Hig -!:+:- Assumes	niight in this joini a nce, maintaining the	same numberina	and structure. Su	bmit copies of or	iginal test
ifica	toc for stand	dards/specification i	ests on the Good	s and other relevo	ant aocuments in	æ
technica	i data. literi	ature, drawings, etc.	Add additional d	etails not covered	l elsewhere in yo	ur bid in
this rego						
<b>J</b>		et format for techni	cal enecification (	and quality assure	ance compliance	
	Excel Sne	et Jormal Jor technic	car specification t			
	. * *	· .				
	Ref	of Technical		Confirmation/		
		ation and Quality		Deviation/Exc		
SI No.	Assurance Clause		Range/Values	eption/Reserv	Justification/R	eason
ļ		Clause/sub-	-	ation		**************************************
Ì	Section	clause				
	•			• •		
N.B. All	the particip	pating bidders are in	structed to fill up	the attached ex	cel sheet as per i	the forma
shown	above for t	echnical specification	on and quality as	surance complia	nce, Jailing Whic	n reads to
disqual	ification of	the bid of the conce	rned bidder.	4.		
		: : :	•			
	N	with, abide by, and	accept without	variation deviat	ion or reservat	ion all
Taabai	aal Chacific	cations. Quality As	surance and Wa	arranty reduirem	ents in the Ten	aei
Docum	ent excen	t those mentioned	above. It mention	oned elsewnere	in our bid, cont	rary term:
and co	nditions sh	all not be recognis	ed and shall be	null and void		
(0)	ر. رام حافاری سیای					
(Signa	ture with da	ale)		\$ 1	·	
(Name	and desig	nation)				
Duly a	uthorized t	o sign bid for and o	on behalf of			
[mana	2 addross	of Bidder and sea	l of companyl	e.		
DA: Rel	exaudress levant docu	ments like technical	data, literature, c	Irawings, and oth	er documents	
D. 1 10			•			

SL NO.	REF OF TECHNICAL SPECIFICATION AND QUALITY ASSURANCE CLAUSE		VALUES/RANGE	CONFIRMATION/DEVI ATION/EXCEPTION/R ESERVATION	JUSTIFICATION/REASON	
	SECTION	CLAUSE/SUB-CLAUSE				
4.		Operating temperature range	-25 ºC to +55ºC			
	X I	Service temperature range	-25 ºC to +70ºC	LA EPIGE TRACE		
		Relative humidity	< 93%, non-condensing			
	Environmental	Transport and storage temperature range	-40 ºC to +85ºC			
1		Should confirm IEC 60068, IEC 60255				
		CT Input Rating (In)	1A/5A			
		Frequency	50Hz			
	Measuring Circultry	Auxiliary supply	24 to 240 V DC suitable for 30VDC / 110VDC system			
		Auxiliary supply variation	70% to 120% of 30V / 110V DC	77.6		
2		Thermal withstand Capacity	2 x In Continuously and 40 x In for 3 sec			
- 2		THE THE PROPERTY	I> 5% to 200% in steps of 1%			
		Phase fault	or better			
		Earth fault	Io> 5% to 200% in steps of 1% or better			
	The second	Phase fault	I>> 50% to 2000% insteps of 50% or better			
		Earth fault	lo>> 50% to 2000% insteps of 50% or better			
		Current/Time Characteristics as per IEC 60255-3	SI 3S, SI 1.3S, VI 1.5S, EI 0.8S, LTI 13.33S and DT up to 99.9s			
			0.02 to 1.0 in steps of 0.01 both for Phase and Earth fault or better			
	Relay Settings	Time Multiplier	0.04sec to 2.0sec in steps of 10ms or better			
		Operating delay Time	90% of set value (Min)			
		Reset current Reset Delay	0.0 to 2.0s in steps of 10ms or better			
		Operation accuracy of all type of fault	± 5.0% of set value or better			
			5% of set value or ± 30 ms or better			
		Operation time accuracy  Broken Conductor / Single Phasing Protection (46BC), (12/11 >) 10% to 100% in steps of 1%				
		[405c], (12/11 ×/ 10/6 to 100/6 iii steps 0/ 1/6	< 0.2 VA/phase at CT input & < 12VA at Auxiliary Power	15 (6)		
3		Burden	Supply			
	Indications	Minimum 4 nos. LED indications for Power On, Start, Trip and Relay Trouble				
		Should have LCD display for parameters and				
		Setting  Default Display	3-phase current, Earth fault or Residual Current and Fault Record			

Divisional Engineer (Tech-II)
Barasat Division
WBSEDCL

Divisional Manager Barasat Division W.B.S.E.D.C.L

SL NO.	REF OF TECHNICAL SPECIFICATION AND QUALITY ASSURANCE CLAUSE		VALUES/RANGE	CONFIRMATION/DEVI ATION/EXCEPTION/R ESERVATION	JUSTIFICATION/REASON	
	SECTION	CLAUSE/SUB-CLAUSE				
		Three-phase Current				
5	Measurement	Control Correct	It should be able to measure using external CT and also to be calculated internally.			
		Residual Current  Operation Counter				
	<u>Self-Supervision</u>	It should continuously monitor the state and operation of relay. Any fault or malfunction due to internal failure should permanently block all relay operations with an indication of relay internal fault or error and should have a watchdog contact				
7	Memory& RTC	The relay should have a memory to record the fault minimum 5 No's in FIFO based. Faul record should indicate the fault current, type of fault, time of fault and tripping time. Also, preferably (not mandatory) to store minimum 5 nos of disturbance record (DR) at the rate of minimum 16 samples per cycle in FIFO basis. Output Contact Rating: Relay should have minimum 4 Nos. Of Binary output or output relay contacts as per below mention specification. Output Relay Contacts 4 relay outputs: RL1: O/C+E/F Trip RL2: General Trip to Master Trip Relay. RL3: O/C+E/F Annunciation RL4: Spare Rated Current (Minimum): Continues Current carry 5A; Make & carry for 3.0s: 15A or better. Contact material: Ag-alloy or better.	55			
	Other Specifications	instrument should be calibrated from any NABL accredited laboratory. Calibration results shall comply with specifications. Type test certificate must be produced	3			
8		Guarantee period: 5 years from date of dispatch				
j.		Bids will be accepted only after meeting the technical requirement as per specification of demonstration.	n			

Divisional Liginger (1241-II)
Barasat Division
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