

**M.P. PASCHIM KSHETRA VIDYUT VITARAN CO. LTD.  
INDORE**



TENDER SPECIFICATION NO. MD/WZ/06/PUR/1962 (E-Tender No.  
2026\_MPPKV\_512476\_1) DUE  
FOR OPENING ON: - 30.06.2026 AT 15:00 Hrs

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**FOR SUPPLY OF BIS Certified Energy Efficiency Level - 3 (Old)/Level –  
2 (New), Conventional 11/0.433 KV, 100 KVA, Distribution Transformer**

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**THE CHIEF ENGINEER (PURCHASE)**

O/o MD (West Zone),  
M. P. Paschim Kshetra Vidyut Vitaran Co. Ltd,  
G.P.H. Compound, Pologround,  
Indore (MP)

Phone No: - 0731-2426144, 2426204 & 2426205  
Website: - <http://www.mptenders.gov.in> & [www.mpwz.co.in](http://www.mpwz.co.in)  
Email: - [sepurchase06@gmail.com](mailto:sepurchase06@gmail.com)

<b>TENDER SPECIFICATION No. 1962</b>		
<b>FOR SUPPLY OF BIS CERTIFIED ENERGY EFFICIENCY LEVEL III (OLD)/ LEVEL II (NEW), CONVENTIONAL 11/0.433KV, 100 KVA, DISTRIBUTION TRANSFORMERS</b>		
<b>DUE FOR OPENING ON 30.06.2026</b>		
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**OFFICE OF THE MANAGING DIRECTOR (WZ)**  
**M. P. PASCHIM KSHETRA VIDYUT VITARAN CO. LTD.,**  
**GPH COMPOUND, POLOGROUND, INDORE**

(Phone No: 0731-2426144, 2426204/201/205/150/117/116 & 109)  
 CIN:U40109MP2002SGC015121& Email- [sepurchase06@gmail.com](mailto:sepurchase06@gmail.com)

No. MD/WZ/06/PUR/NIT-331/1904

Indore, dated: 15.05.2026

**NOTICE INVITING TENDERS**

Online tenders are invited for supply of following Items/Services/Material. The sealed bids will be received online on the e-portal <https://mptenders.gov.in> to date & time indicated below. The online tenders will be opened in the office of the undersigned as mentioned in tender time schedule (key date). If desired, the bidder or their duly authorized representatives may remain present at the time of opening of tender: -

TS No.	Particulars	Unit	NIT Qty	NIT Amount (Rs. Lakh)	EMD (In Rs.)	Tender Fee (In Rs.)	Due date* of opening tender from 15:00 Hrs.	Pre Bid meeting date
1957	33/11 KV, 5.00 MVA PTRs	No.	107	5753.06	100000/-	10000/-	16.06.2026	04.06.2026
1958	RCA for supply of PCC Poles							
(i)	9.1 Mtr Long 280 Kg.	No.	15662	988.32	100000/-	10000/-	19.06.2026	12.06.2026
(ii)	8 Mtr Long 140 Kg.	No.	9330					
	33 kV Polymer Pin Insulators	No.	67969	405.92	100000/-	5000/-	19.06.2026	NA
1959	33 kV Polymer Disc Insulators	No.	22982					
	11 kV Polymer Disc Insulators	No.	31897					
	9 kV Lightning Arrestor Gapless type (10kA) for 33/11 kV S/s	No.	12057	263.41	100000/-	5000/-	25.06.2026	NA
1960	27 kV Lightning Arrestor Gapless type (10kA) for 33/11 kV S/s	No.	1610					
1961	11 kV DO Fuse Unit	No.	9175	95.14	100000/-	2000/-	30.06.2026	NA
1962	11/0.433 KV, 100 KVA BIS Certified EEL-3 (old)/EEL-2 (New) DTRs	No.	1006	2058.73	100000/-	10000/-	30.06.2026	04.06.2026
1963	11/0.433 KV, 200 KVA BIS Certified EEL-3 (old)/EEL-2 (New) DTRs	No.	1166	4673.47	100000/-	10000/-	25.06.2026	
1964	11/0.433 KV, 315 KVA BIS Certified EEL-3 (old)/EEL-2 (New) DTRs	No.	592	5438.32	100000/-	10000/-	19.06.2026	
1965	AAA Conductor							
(i)	ISI Marked AAAC Dog Conductor (100 Sq.mm)	Km	2500	2498.10	100000/-	10000/-	10.06.2026	03.06.2026
(ii)	ISI Marked AAAC Raccoon Conductor (80 Sq.mm.)	Km	84					
1966	ISI Marked ACSR Rabbit conductor (50 sq.mm.)	Km	631	374.23	100000/-	5000/-	11.06.2026	04.06.2026
1967	ISI Marked ACSR Dog conductor (100 sq.mm.)	Km	1607	1855.51	100000/-	10000/-	11.06.2026	04.06.2026
1968	33 KV AL59 ACS (Dog Equivalent) Covered Conductor along with Accessories	Km	368.51	934.82	100000/-	10000/-	16.06.2026	10.06.2026
1969	11 KV AL59 ACS (Raccoon Equivalent) Covered Conductor along with Accessories	Km	378	716.69	100000/-	10000/-	16.06.2026	10.06.2026
1970	Stay set 20 mm. Painted	Set	10990	133.09	100000/-	5000/-	10.06.2026	03.06.2026
1971	Stay wire (Size 7/8 SWG) 7/4 mm	MT	90	65.85	65850/-	2000/-	16.06.2026	28.05.2026
1972	HT Cable							
(i)	33 KV 300 Sqmm 3 core XLPE Cable	Km	17	579.63	100000/-	10000/-	07.07.2026	08.06.2026
(ii)	11 KV 300 Sqmm 3 core XLPE Cable	Km	14					
1973	LT AB Cable							

For supply of BIS Certified Energy Efficiency Level - 3 (Old)/Level - 2 (New), Conventional 11/0.433 KV, 100 KVA, Distribution Transformer

TS No.	Particulars	Unit	NIT Qty	NIT Amount (Rs. Lakh)	EMD (In Rs.)	Tender Fee (In Rs.)	Due date* of opening tender from 15:00 Hrs.	Pre Bid meeting date
(i)	3X50+1X16+ 1x35 Sq.mm	km	50	6052.48	100000/-	10000/-	23.06.2026	08.06.2026
(ii)	3X70+1X16+ 1x50 Sq.mm	km	50					
(iii)	3X95+1X16+ 1x70 Sq.mm	km	679					
(iv)	3X120+1X70+ 1x16 Sq.mm	km	20					
(v)	3X150+1X35+ 1x95Sq.mm	km	500					
1974	L.T. Distribution Box suitable for 500 KVA DTR	No.	257	191.23	100000/-	5000/-	25.06.2026	18.06.2026
1975	Type-II Transformer Oil	KL	665	598.50	100000/-	10000/-	16.06.2026	04.06.2026
1976	"Providing support services for Data Centre, IT Components, Non IT Components & WAN Environment of MPPKVVCL, Indore for Period of three (03) years."	LS	1	519.17	100000/-	10000/-	30.06.2026	11.06.2026
1977	For Supply of Three-Phase Multifunction Transducers (MFT) (Make: DFE, Model No. DF433) and Contact Multiplier Relays (CMR) (Make – Paramount or PLA ) with suitable Socket (Base) for DIN Rail, Compatible with DFE Make RTUs Installed at 33/11 kV Substations	No.	83(MF T)	6.65	6650/-	1000/-	02.07.2026	16.06.2026
		No.	249(C MR)					
1978	Supply Of Oracle Annual Technical Support (ATS) Services At MPPKVVCL, Indore	LS	1	429.17	100000/-	5000/-	01.07.2026	15.06.2026
EoI	EoI for Empanelment of Manufacturer for supply of best quality joint kits for 11 KV & 33 KV HT Cable of assorted size	-	-	-	-	-	10.06.2026	03.06.2026

**Note :- Link for Pre-bid meeting of individual TS will be shared, separately.**

- For updated / extended due dates for opening of tender (EMD in Envelope-A & Techno-commercial bid in Envelope-B) please refer to the online key dates.

**Note:- All the participating firms outside of Madhya Pradesh are required to mandatorily pay the tender fee as well as EMD. Please refer the tender / NIT clauses for details in this regard.**

- Other details can be seen in the complete tender documents available on e-portal <https://mptenders.gov.in> & our web site <http://www.mpwz.co.in>.
- Tender documents can be purchased only online and downloaded from <https://mptenders.gov.in> by making online payment for the prescribed **non-refundable** tender fees. Only in the case if the tender is dropped without opening, the tender fees shall be refunded after deduction of necessary portal charges. Manual purchase of tender is not allowed. The tender fee is inclusive of all applicable taxes.
- The Bid Data should be filled in and the Bid Seals of all the Envelopes and the documents which are to be uploaded by the Bidders should be submitted online as per time schedule (Key Dates).
- The relevant portion of tender which tenderers have to fill online would be available on above website on date mentioned against each tender. The Bidders shall have to submit their Bids online and upload the relevant documents / forms as per time schedule (Key Dates).
- Since the online bidders are required to sign their bids online using Class III-Digital Certificates only, hence they are advised to obtain the same at the earliest. For further information, Contractors are requested to contact Madhya Pradesh State Electronic Development Corporation Ltd, State IT Centre, 2nd Floor, 47-A, Arera Hills, Bhopal-462011, Telephone No. 0755-2518500 / 269, E-mail: [mptenders@mpsdc.com](mailto:mptenders@mpsdc.com).
- Bidders intending to participate in the Tenders are required to get themselves trained on the e-Procurement System. They are required to contact Madhya Pradesh State Electronic Development Corporation Ltd, to confirm their session in advance.

7. The required amount of EMD shall be accepted through online payment only as per the clause of the "Instructions for online bid submission".  
The Bidders are required to invariably upload the valid documentary evidence of submission of online EMD (or EMD Exemption Certificate if applicable) in envelope-A without which online offer i.e., Envelopes-B & C shall not be opened.
8. No offer will be accepted without valid Earnest Money Deposit, unless exempted by the Company. If on opening of tender, it is revealed that EMD amount is inadequate / any other discrepancy is noticed, the tender shall be rejected.
9. The corrigendum or addendum to the bidding documents, if any, as well as any change in due date(s) of opening of tender will be published on the websites. Company's website <http://www.mpwz.co.in> & the portal <https://mptenders.gov.in> but will not be published in newspaper. Hence participant bidders are *advised to regularly visit the websites* until the bid opening. The Company shall not be responsible in any way for any ignorance of the bidders about the corrigendum or addendum or change in the due date(s).
10. The company reserves the right to reject any or all the tenders or accept any tender in full or part as considered advantageous to the company, whether it is lowest or not, without assigning any reason whatsoever it may be.
11. The tender document will be uploaded on the portal normally 7 days prior to the date of pre-bid meeting (if applicable) or 15 (Fifteen) days prior to the date of respective tender opening, whichever is earlier. The interested bidders are advised to regularly visit the portal for the purpose.
12. **No submission in physical form shall be accepted at any stage during the online tender process.** Apart from online submission made till the due date of tender submission, no any further submission will be allowed. As such, bidder should ensure proper & full submission as required as per the tender terms to qualify in the tender.
13. **The Micro & Small Enterprises (MSEs) of Madhya Pradesh** registered with District Industries Centre (DIC)/Khadi & Village Industries Commission (KVIC)/ Khadi & Village Industries Board (KVIB)/Cair Board/NSIC/Directorate of Handicraft and Handlooms / Udhyan or any other body specified by Ministry of Micro, Small & Medium Enterprises on the date of opening of tender for **the tendered item(s)** shall be exempted **from payment of tender fee**. In support of above the bidders shall be required to upload the requisite documents on the portal of MP Tender, failing which their techno commercial bid shall not be considered for opening.

-Sd-  
**Chief Engineer (Purchase)**  
**O/o MD, MPPKVCL,**  
**Indore**

-//SAVE ELECTRICITY//-

**CRITICAL DATES & BASIC TENDER INFORMATION**

Particulars	Details
Name of Work	<b>For Supply of 100 KVA, BIS Certified EEL- 3 (Old)/Level - 2 (New), Distribution Transformer</b>
Tender Specification Number	<b>MD/WZ/06/PUR/1962 Due on dated 30.06.2026</b>
Due date of submission of Tender (EMD + Techno-Commercial Bid Online)	29.06.2026 up to 15.00 Hrs.

**Key Dates:-**

S.No.	Tender Stage	Date & Time
1.	Publishing Date	03.06.2026 at 09.00 Hrs
2.	Document Download/Sale Start Date	03.06.2026 at 09.00 Hrs
3.	Pre-Bid Meeting Date	04.06.2026 at 3:00 – 4:00 pm through Google Meet/ Physical
4.	Bid Submission Start Date	08.06.2026 at 15.00 Hrs
5.	Bid Submission End Date	29.06.2026 at 15.00 Hrs
6.	Bid Opening Date	30.06.2026 at 15.00 Hrs

**Basic tender information:-**

- Part-I (Envelop-1)-The bidder shall be required to deposit EMD online as specified in clause-5, section-1 of the tender specification and to upload a scan copy of the same in envelop-1. In case of exemption from payment of EMD as allowed in clause-5 (b), section-1 of the tender, bidder shall upload the scan copy of duly notarized documents as required in the above clause.
- Part-II ( Envelop-2)- The bidders shall be required to upload following documents digitally signed in the envelop-2 which shall form Techno commercial bid.

<b>Schedule II</b> Undertaking
<b>Schedule III</b> CA Certificate
<b>Schedule IV</b> Guaranteed Technical Particulars
<b>Schedule V</b> “Check List”
Legible copy of Type Test Reports for the tendered item(s).
BIS License for the tendered item(s)
Power of Attorney / resolution of the Company authorizing a person to sign the document, in case of Company registered under Company Act.

**In case of error-ness/ non-submission/ missing of any of the above documents, the purchaser will have full right to reject the bid or evaluate the bid with the documents submitted by the bidder, as the case may be. The purchaser may however ask the bidder for a clarification of its bid.**

- Part-III (Envelop- 3) the bidder shall quote their rates online only in the BOQ and shall be kept in envelop-III schedule-I.
- The date of opening of financial/ price bid shall be informed separately. The bidders may please keep themselves updated of price bid opening from the e-portal.
- Pre-bid conference (Not Applicable).

-Sd-

**Chief Engineer (Purchase)**  
**O/o MD (WZ), MPPKVCL,**  
**Indore**

## **INSTRUCTIONS FOR ONLINE BID SUBMISSION:**

The bidders are required to submit soft copies of their bids electronically on the MP TENDERS Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the MP TENDERS Portal, prepare their bids in accordance with the requirements and submitting their bids online on the MP TENDERS Portal.

More information useful for submitting online bids on the MP TENDERS Portal may be obtained at: <https://mptenders.gov.in/nicgep/app>

### **REGISTRATION**

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://mptenders.gov.in/nicgep/app>) by clicking on the link “**Online bidder Enrollment**” on the MP TENDERS Portal **which is free of charge**.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the MP TENDERS Portal.
- 4) Upon enrolment, the bidders will be required to register **their valid Digital Signature Certificate** (Class II or **Class III Certificates with signing key usage**) issued by any Certifying Authority recognized by CCA India (e.g. Sify/ nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC’s to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

### **SEARCHING FOR TENDER DOCUMENTS**

- 1) There are various search options built in the MP TENDERS Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the MP TENDERS Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the MP TENDERS Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

### **PREPARATION OF BIDS**

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### **SUBMISSION OF BIDS**

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder should prepare the EMD as per the instructions specified in the tender document. The bidder has to submit EMD by making Online payment on mptenders portal until unless not exempted from EMD.
- 4) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 5) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6) All the Documents submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any Bid Document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7) The uploaded Tender Documents become readable only after the tender opening by the authorized bid openers.
- 8) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### **ASSISTANCE TO BIDDERS**

- 1) Any queries relating to the Tender Document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to MP TENDERS Portal in general may be directed to the 24x7 MP TENDERS Portal Helpdesk.



Contractors / Vendors / Bidders / Suppliers are requested to visit e-procurement portal of Govt. of Madhya Pradesh (<https://www.mptenders.gov.in>). The details and relevant links are available in the Bidders Manual Kit on the right pane of website which is furnished here-

S.No	Particulars	Downloads
1	Notice to Bidders	<a href="#">Notice to bidders v906.pdf</a>
2	Registration of Bidders	<a href="#">Bidder Registration Manual Updated v906.pdf</a>
3	Uploading of My Documents	<a href="#">MyDocument Updated v906.pdf</a>
4	Online e-Bid Submission	<a href="#">Three Cover Bid Submission New v906.pdf</a> <a href="#">Two cover bid submission new v906.pdf</a> <a href="#">Four cover bid submission new v906.pdf</a> <a href="#">Single Cover bid submission New v906.pdf</a>
5	Online Bid Withdrawal	<a href="#">bid withdrawal updated v906.pdf</a>
6	Online Bid Re-submission	<a href="#">Bid Resubmission Updated v906.pdf</a>
7	Clarifications (Tender Status, My Archive...)	<a href="#">Enquiry Updated v906.pdf</a>
8	Trouble Shooting	<a href="#">troubleshoot document v906.pdf</a>
9	BoQ Preparation Guidelines	<a href="#">ItemWise BOQ New v906.pdf</a> <a href="#">Percentage BOQ Updated v906.pdf</a> <a href="#">ItemRate BOQ Updated v906.pdf</a>

-Sd-  
Chief Engineer (Purchase)  
O/o MD, MPPKVCL,  
Indore

# PART-1

## **SECTION-I**

### **GENERAL INSTRUCTIONS TO THE BIDDERS**

1. The Chief Engineer (Purchase) on behalf of the Madhya Pradesh Paschim Kshetra Vidyut Vitran Co. Ltd. hereinafter referred to as “MPPKVVCL” invites tender for supply of material/equipment as per specifications attached for supply to Area Stores Indore, Barwaha, Dhar, Ujjain, Ratlam&Mandsaur in Madhya Pradesh.
2. The bidders are requested to go through the General instructions to the bidders Section-I, General terms & conditions of purchase contained in Section-III and Special terms & conditions of purchase contained in Section-IV except as modified/laid-down hereunder. It may be noted that no conditions or stipulations to the contrary or which are inconsistent will be accepted. Bidders are requested to ensure that all such schedules along with questionnaire (duly filled-in), are submitted online. ***The bidders should note that in absence of any of the schedules, as required in the tender, their offer shall be liable for rejection.***
3. Here are some of very important instructions which every bidder should read carefully for compliance before submitting the bid.

#### **4. VALIDITY OF BIDS**

Offers should be kept open for acceptance for at least 180 days from the date of opening. Those who do not agree for a validity of 180 days will do so at their own risk and no request for extending the validity is likely to be made from this office. However, if due to any circumstances, beyond control, bidders are advised to extend the validity, they shall not be permitted to revise their rates, offer any rebate or concession while extending the validity which may materially result in any reduction or increase in the computed prices of their original offer.

#### **5. EARNEST MONEY**

The bidder shall deposit the Earnest Money vis-à-vis the value of the tender offered as per the table given below:-

NIT Value	Earnest Money
Upto INR 50,000.	Nil
Above INR 50,000.	@ 1% of Tender Value, subject to minimum INR 1,000 and maximum INR 1 lakh.

- (a) **No offer will be accepted without Earnest Money Deposit, unless exempted by the Purchaser.** If on opening of tender any discrepancy in EMD amount is noticed, the offer shall be rejected.
- (b) The required amount of EMD shall be accepted through online payment only. The Bidders are required to invariably upload the valid documentary evidence of submission of online EMD (or EMD Exemption Certificate if applicable) in Cover-1 without which online offer i.e., Covers-2 & 3 shall not be opened.

#### **The following are exempted from payment of EMD:**

The Micro & Small Enterprises (MSEs) of Madhya Pradesh registered with District Industries Centre (DIC)/Khadi & Village Industries Commission (KVIC)/ Khadi & Village Industries Board (KVIB)/Cair Board/NSIC/Directorate of Handicraft and Handlooms / Udyog Aadhar Memorandum(UAM)/Udyam or with any other body specified by Ministry of Micro, Small & Medium Enterprises on the date of opening of tender for the tendered item(s). The SSI units of MP registered with DIC shall be exempted from payment of EMD on production of valid competency certificate. In support of above the bidders shall be required to upload the

requisite documents on the portal of MP Tender, failing which their techno commercial bid shall not be considered for opening.

**(c) Forfeiture of Earnest Money Deposit:**

The EMD may be forfeited:-

- a) If a bidder withdraws or revokes its bid during the period of bid validity specified by the bidder.
- b) If a bidder modifies its bid in any manner before the validity of the bid expires.
- c) In the case of a successful bidder, if the bidder fails to furnish the Performance Security within the prescribed time.
- d) In the event the bidder withdraws its bid after opening of price bid, the firm may be debarred along with forfeiture of EMD.

**(d) Return of earnest money to bidders.**

- a) EMD shall be returned to the unsuccessful bidders, as soon as possible, after the tender is decided.
- b) EMD of bidders on whom the orders have been placed, shall be returned on acceptance of security deposit.

**6. SUBMISSION OF BID**

A. Bidders shall submit tender only online in following three parts. No physical submission of document/bid is required.

- i. Part-I (Cover-1) – The bidders shall require to deposit EMD online as specified in clause -5 Section-I of the tender specification and to upload a scan copy of the same in Cover (1). In case of exemption from payment of EMD as allowed in Clause-5 (b) Section-I of the tender, bidders shall upload a scan copy of the duly notarized documents as required in above clause.
- ii. Part-2 (Cover-2) the bidders shall require to upload following documents digitally signed in Cover-(2) which shall form Commercial and Technical bid.

<b>Schedule II Undertaking</b>
<b>Schedule III CA Certificate</b>
<b>Schedule IV Guaranteed Technical Particulars</b>
<b>Schedule V“Check List”</b>
Legible copy of Type Test Reports for the tendered item(s).
BIS License for the tendered item(s)
Power of Attorney / resolution of the Company authorizing a person to sign the document, in case of Company registered under Company Act.

**In case of erroneous/ non-submission/ missing of any of the document required as per the provision of the bidding document, the purchaser will have full right to reject the bid or evaluate the bid with the documents submitted as the case may be. The purchaser may however ask the bidder for a clarification of its bid.**

- iii. Part-3 (Cover-3)- The bidders shall quote their rates online only in schedule-I and shall be kept in Cover-(3).
- B. The bidders are expected to be fully conversant with all the clauses of the bid document before submitting the bid. However, prospective bidder(s) regarding any clarification on bidding document may notify the purchaser in writing. Post award of contract any interpretation to any clause of the bid document shall not be entertained.

**7. DATE AND TIME OF OPENING OF BIDS - CHANGES**

Tender shall be opened on the due date and time as notified in the presence of the bidders or their authorized representatives who may be present. If the due date of opening/ submission of tender

documents are declared a holiday by the Central/ State Government or Local Administration, it will automatically get shifted to the next working day, for which no prior intimation shall be given. The tender opening shall be continued on subsequent days, in case the opening of all the tenders is not completed on the day of opening.

It may please be noted that the due date/ time of opening can be altered, extended, if felt necessary by the purchaser, without assigning any reason thereof. However, due intimation shall be communicated in such a case.

#### **8. OPENING OF E.M.D. & COMMERCIAL AND TECHNICAL BID**

The first envelope of Earnest Money Deposit shall be opened on the due date and time, as notified in the Notice Inviting Tenders. The requirement for EMD shall be verified and thereafter, the second part, i.e. the Commercial & Technical Bid, shall be opened on the same date in respect of eligible bidders.

#### **9. REQUIREMENT FOR OPENING OF PRICE BIDS:**

The price bids of such offers shall be opened who have:-

- i. **Accepted all Commercial terms & Conditions and Technical Specifications.**
- ii. **The bidders should submit necessary valid BIS certificate of the BIS energy efficiency level as per requirement or higher level.**
- iii. **All required Type Test Reports on proto type design of DTR of tendered item at the time of bid which not more than 5 years old. Submitted Type Test Reports and valid certificate from Bureau of Indian Standard, New Delhi to display ISI mark on DTRs. Price Bids may not be considered for opening in absence of any of the report/Certificate/BG etc.**
- iv. **Qualified the basic qualification of the bidder, conflicting interest clause, financial, supply capacity & minimum quantity to be quoted, unsatisfactory Performance criteria.**

#### **10. UNSATISFACTORY PERFORMANCE**

Even on fulfillment of all the criteria it may please be noted that:-

- i. Offers of those bidders whose work have been terminated or who have been debarred for future business with our company/ MPSEB/ other Discoms of MP, may be summarily rejected.
- ii. In case of those bidders whose past performance has not been found to be satisfactory against previous tenders of MPSEB/Companies formed on restructuring of MPSEB, they shall not be considered for opening of price bid. Some of the attributes to the poor performance of a bidder are as follows:-
  - **Non-execution of previous order(s).**
  - **Failures of material in testing & non-replacement of the same by the supplier.**
  - **Failures of material in mass as reported by the field officers.**
  - **Non replacement of WGP failed DTRs timely.**

#### **11. Pre-Bid Conference**

- (i) The Purchaser shall hold a pre-bid conference of bidders on 04.06.2026 at 3:00 – 4:00 pm PM though Google Meet joining info Video call link: <https://meet.google.com/hqc-guve-xoz/> / Physical at the Purchase Section of Corporate Office, to clarify various clauses of the bid documents to ensure uniformity in understanding the bid documents.
- (ii) Bidders are advised to attend the Pre Bid Conference so as to clear all ambiguities and doubts and point to any mistake or shortcomings which might be visible in the Tender.

(iii) The Purchaser reserves the right to change the clauses as emerging after pre-bid conference or as per its discretion. Details of any doubt(s) about instant Tender Specification and/or required clarification/ suggestion/ modification in any of the terms & conditions and/ or the specifications etc. must be sent sufficiently in advance to the Purchaser through post or (preferably) through e-mail so as to reach at least two days before the scheduled date of pre-bid meeting to enable this office to provide necessary clarification/ modification during pre-bid meeting.

(iv) The Purchaser also reserves the right to insert new clauses or post amendments to Tender Specification etc. The changes shall be notified through addendum/corrigendum posted on Purchaser's website and e-procurement Govt. website to get all concerned informed. Bidders may therefore regularly visit the websites stated. The Purchaser shall not be responsible if some prospective bidder misses any Amendment/Addendum/Corrigendum/Due date extension related to the Tender.

#### **12. AMENDMENT IN SPECIFICATIONS**

The Purchaser may revise or amend the specification and drawing, prior to the date notified for opening of Technical Bid of tender. Such revision/ amendment, if any, will be communicated to all those who have bought the tender documents as Amendment/ Addendum to the invitation of tender.

#### **13. MISTAKES IN BIDS**

Rates should be quoted in both; figures and words. In case of ambiguity between rates in figures and words, lower of the two/beneficial to the Purchaser shall be considered. Such offers can also be rejected.

#### **14. LUMPSUM BASED BIDS**

In case prices for some items or all items are given as a lump sum, instead of unit prices as required in the tender specifications, Purchaser can summarily reject such incomplete tender.

#### **15. ALTERATIONS/CORRECTIONS IN BIDS**

Any alteration/correction in the tender document should be counter-signed. Further, no post tender alteration/correction shall be entertained.

#### **16. INCOMPLETE BIDS**

Tender which is incomplete or obscure is liable for rejection.

#### **17. AMBIGUITIES IN CONDITIONS OF BIDS:-**

In case of ambiguous or self-contradictory terms/conditions mentioned in the bid, interpretation as may be advantageous to the Purchaser shall be taken without any reference to the tender.

#### **18. DISQUALIFICATION OF BIDS:**

A Bid which gets opened before the due date as a result of improper or no indication having been given on the cover to indicate that it is a tender, will be disqualified.

Bidders will not be permitted to change the substance of his tender on post interpretation/improper understanding grounds. This includes post tender price changes/modifications etc. after opening of Price Bid. In such events, otherwise, that is, when a bidder does not comply, tender will be rejected.

#### **19. LANGUAGE OF BIDS**

All tenders should be made in English only.

#### **20. CANVASSING OF BIDS**

Tenders shall be deemed to be under consideration, after opening of tender/ bid, till placement of order. During this period, the bidders or their authorized representatives or other interested parties are advised strongly, in their own interest, to refrain from contacting by any means any of the Purchaser's personnel or Representative, on matters relating to tender under process.

#### **21. ACCEPTANCE OF PART/WHOLE BIDS-RIGHTS THEREOF**

Purchaser reserves the right to accept/ reject wholly or partly any tender without assigning any reason whatsoever. The Purchaser in this regard shall not entertain any correspondence.

## **22. DEVIATIONS FROM TERMS & CONDITIONS**

Offers with deviations in the terms of payment, liquidated damages, security deposit and performance guarantee are liable to be rejected out rightly.

## **23. AUTHORIZATION/LOCAL REPRESENTATIVE**

Only authorized representative, possessing necessary authority letter (on Rs. 50/- non judicial stamp paper) from the bidder/supplier who have participated in the tender shall be allowed to attend the tender opening and further submission/collection of documents in the event of order.

## **24. CHANGE OF QUANTITY**

The quantity indicated in the Schedule-I (Price & Quantity) is tentative and purchaser reserves the right to change the quantities of any or all items to the any extent for award of order/Purchase Order, as may be necessary, based on Purchaser's judgment/requirement. No correspondence shall be entertained into, neither discussed regarding change in quantity, nor any reason will be assigned thereof.

## **25. POOL RATES**

The bidders are advised to quote their own individual rates. It may please be noted that if more than one bidder quotes the same rate, suggestive of a cartel, then such offers may not be considered by the Purchaser. It may also please be noted that the competitive rate quoted by each bidder may be one of the main criteria for quantity to be ordered on each successful bidder.

## **26. ACCEPTANCE OF TENDER**

- i. The Purchaser may reject any or all tenders or to accept any tender considering advantageous to Purchaser whether it is the lowest offer or not.
- ii. The Purchaser may split the quantities against the tender on more than one firm for the same item. No reasons shall be assigned by the Purchaser for this and the same will be binding on the bidders.

**-Sd-**  
**Chief Engineer (Purchase)**  
**O/o MD (WZ), MPPKVVCL,**  
**Indore**

## **SECTION-II**

### **QUALIFICATION CRITERIA AND EVALUATION METHODOLOGY**

#### **QUALIFICATION CRITERIA AND EVALUATION METHODOLOGY**

##### **1. Qualification Criteria**

##### **1.1. BASIC QUALIFICATION OF BIDDERS:**

- i. This bidding is open for **manufacturers** only (Joint Venture in any form shall not be allowed to participate) who provide satisfactory evidence that:-
- ii. That they are qualified manufacturers who regularly manufacture the materials/ equipment of the type specified and have adequate technical knowledge and practical experience.
- iii. That they do not anticipate change in the ownership during the proposed period of Purchase Order (if such a change is anticipated, the scope and effect thereof shall be defined).
- iv. That they have adequate financial stability and status to meet the financial obligations pursuant to the scope of the assignments.
- v. That they have adequate plant and manufacturing capacity available to perform the assignment properly and expeditiously within the time period specified.
- vi. The Bidder must be registered under GST Act and should produce copy of the GST registration certificate, failing which offer shall be rejected. However, if it is under taken by the bidder that GST registration is under process, in such case the price bid shall be considered for opening but the award will not be issued till registration under GST not submitted.

##### **1.2. Technical criteria**

- i. **This bidding is open only for Manufacturers who possesses the ISI marking rights for DTR of sizes under tender and valid on the date of opening of Tender.**
- ii. The bidder should have a minimum experience of 2 (two) years of design, manufacturing of Distribution Transformer and have supplied at least 50% of offered quantities (assorted rating) in case if Tender Quantity is less than or equal to 3000 and at-least 20% of offered quantities (assorted rating) in case if Tender Quantity is more than 3000 nos directly to the Discoms/SEBs/Power Utilities or their Turnkey Contractors in any state of country in last Sixty Months (60) from the date of tender opening.

**In support of above bidders shall require to submit undertaking, towards supply of quoted items in last Sixty Months (60) from the date of opening of tender, as per schedule-II : Self Undertaking duly notarized in a non-judicial stamp paper worth Rs. 500/-.**

**The bidders who qualify the above criteria shall participate as Regular Bidders and the bidders who do not fulfill the above criteria shall participate as New Bidders and the same shall be clearly specified/ declared in the respective schedule failing which their offer shall be liable for rejection.**

- iii. The bidder's failure rate for WGP DTRs for the capacity under the tender against any of the purchase orders placed on them by the purchaser in the last 5years should not be more than 12%. The percentage failure will be determined out of the total transformers issued to the field.

#### **REQUIREMENT FOR TYPE TEST AND BIS CERTIFICATE:-**

- a) The bidder should submit notarized **valid BIS certificate for required BIS efficiency level and capacity along with the offer.**
- b) The bidder must have Notarized type test certificates for the tendered energy efficiency level and rated capacity of transformer with loss values defined in the technical specifications of the



tender, from any third party NABL accredited Labs for the following tests and certificates should not be more than 5 years old from the date of tender opening:-

- o Short circuit test
  - o Lightning impulse test
  - o Temperature rise test
  - o Pressure test
- c) All the TTC must be conducted on the one prototype designed and same alphanumeric serial number transformer.
- d) The type test reports issued by the bidder's own NABL Accredited Testing Lab or their sister concern's Lab having commercial relations with the bidder, or any Manufacturer lab of tendered item shall not be acceptable.

v. **Quoted/ Offer Quantity:**

- The Regular bidder shall quote / offer atleast 20% of the tendered quantity and atleast 5% by the New Bidder failing which the offer shall be liable for rejection.  
The above criteria shall be applicable for the tendered quantity exceeding 3000 Nos.
- In case when the tendered quantity shall be equal or less than 3000 Nos, the regular bidder shall require quote/offering atleast 50% of the tendered quantity and atleast quantity and atleast 5% by the new bidder, failing which the offer shall be liable for rejection.

However the offered quantity should not be more than the Spare Manufacturing Capacity of bidder. The purchase shall however reserve the right to offer the eligible bidder (Regular/New bidder) for the quantity beyond their quoted quantity at their own/ counter offer rate.

**Offered Quantity:** Offered quantity means, the Spare manufacturing Capacity {i.e. Total Manufacturing Capacity – (minus) Orders quantity under execution}, which is actually available with the firm to supply material against the instant tender within scheduled delivery period.

- vi. Clause no. 1.2 (ii) applicable for regular bidders only, and clause no. 1.2 (i), 1.2 (iii), 1.2 (iv) & 1.2 (v) applicable for both regular and new bidders.

**1.3. Financial Criteria**

The purchaser will take account of the following financial criteria to verify the qualification of the bidder. These criteria shall be evaluated on a **Pass-Fail** basis only:-

- i. The bidder should have sound financial capability. Bidder's annual turnover for the last financial year should be 10% of the value of the quantity offered by them in tender OR its aggregate turnover for the last five financial year should not be less than 100% of the value of the quantity offered by them in the tender.

If tender is issued in the month of September or prior to the September, then last 5 FY shall include the financial year ended in March of last year and in case tender is issued after the month of September then last year should be financial year ended in March of current year.

The above criteria shall be applicable only for regular bidders. New bidder shall be exempted from the above criteria.

- ii. The minimum working capital of the bidders as at the end of last financial year/ Bank Utilization Certificate-Fund Based (not more than 30 days from the date of opening of tender) should be **5% of the value of the quantity offered** by them in the tender.

Here offered value = (Tender value/Tender quantity) X offered quantity by bidder as per relevant schedule.

- iii. The above criteria of working capital shall be applicable for the both Regular & new bidders.
- iv. The approximate value of tender is Rs **2058.73 Lakhs**.

**In support of above bidders shall require to submit a Certificate issued by a CA as prescribed in Schedule-III of the tender as against financial criteria of the tender specification.**

**Note:- If any legitimate complaint through any source is received that the information, Affidavit and CA Certificate is false/fake and same is confirmed at any stage of tender/order the bid/ order, will be liable for rejection/cancellation and necessary legal action will also be taken as per tender document against CA and bidder both.**

## **2. CONFLICT OF INTEREST**

Bidder shall not have a conflict of interest with one or more parties. Participation by bidder(s) with a conflict of interest situation will result in the disqualification of all bids in which it is involved. Purchaser considers a conflict of interest to be a situation in which a party has interest that would improperly influence that party's performance of official duties or responsibilities, contractual obligations or compliance with applicable laws and regulations and that such conflict of interest may contribute to or constitute a prohibited corrupt practice. A bidder may be considered to be in conflict of interest with one or more parties if including but not limited to:

- i. Have controlling shareholders as his/her family members viz. spouse, son, daughter, father, mother or brother in common or.
- ii. Have a relationship with each other, directly or through common third parties that puts them in a position to have access to information about or influence on the bid of another bidder.
- iii. Has a close business or family relationship (spouse, son, daughter, father, mother or brother) with a professional staff of the Employer (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the tender documents or specifications of the contract, and/or the tender evaluation process; or (ii) would be involved in the implementation or supervision of such contract.

The bidders shall be requested to furnish following documents/undertaking in this regard:-

- a) Copy to latest Income Tax return/Permanent Account Number (PAN) of all the partners/directors (in case of company) along with names, addresses and telephone Nos./Mobile Nos. of each Partner/Director.
- b) Latest Partnership/Ownership deed of the firm quoting the tender.
- c) Copy of list of directors (in case of company) with names, addresses and telephone Nos./Mobile Nos. of each director.
- d) Power of Attorney to sign the tender documents and all correspondence before and after placement of order.
- e) "Regarding Serving Officer(s) or Employee(s) of the MPDiscom "

The Bidder shall confirm that no Serving Officer(s) or Employee(s) of the MP Discom is/are Partner(s) of the Bidder's firm or having shares or has any interest in his/her firm. The Bidder shall further confirm that no Partner of his/her firm has any close relationship (spouse, son, daughter, father mother or brother) with any serving Officer (s) or Employee (s) of the MP Discoms.

## **3. EVALUATION OF OFFERS AND ACCEPTANCE OF TENDER**

- i. The Purchaser may reject any or all tenders or to accept any tender considering advantageous to Purchaser whether it is the lowest offer or not without assigning any reason.

- ii. If any taxes are not quoted, the Purchaser reserves the rights to load the quoted prices as per the applicable rate of taxes prevalent at the time of bid evaluation for price comparison purposes. However, responsibility in this regard shall solely rest with bidder.

#### **COMPUTATION OF LOWEST ACCEPTABLE RATE (L1)**

Price bids of technically and financially qualified Regular Bidders shall be opened and evaluated to find lowest rate. The bidder, who quotes lowest computed FOR rate (i.e. landed unit cost) including all applicable taxes, shall be declared as L1 bidder. This L1 rate will be declared as the lowest acceptable rate for both Regular & New Bidders.

**New bidder shall not require to quote their prices in the price bid/BoQ under the column meant for Ex-works. They shall mention Rs. "00.00" in their price bid/BoQ against Ex-works. If new bidder quotes any price other than "00.00" in the price bid/BoQ against Ex-works then their bid will be rejected, and the Ex-works prices quoted by them will be considered as null and void in this bid. However, they shall require to quote Freight & insurance charges, offered quantity, HSN code and % of GST in the respective column of price bid/BoQ.**

#### **5. PRICE CONSIDERATION ZONE (10% above Lowest Acceptable Rate)**

Subject to fulfilling all the criteria/tender conditions, the counter offer shall be limited to the bidders whose computed FOR rate including taxes, freight and other levies is within the price band of 1.10 times of the lowest acceptable offer on merit basis. The bidders whose offers are within price consideration zone shall only be eligible for issue of counter offers and LOI.

#### **6. DISTRIBUTION OF QUANTITY AMONGST ELIGIBLE BIDDERS**

##### **I. Quantity Distribution among Eligible Bidders:**

The total quantity distribution among the various eligible bidders shall be as below:-

- (a) **Regular Bidders:-** Minimum 85% of tendered quantity and may go up to 100% in case of no eligible New Bidder.
- (b) **New Bidders:-** Maximum up to 15% of tendered quantity.

##### **II. Distribution of quantity among Regular and New Bidders:-**

##### **Option-1 :- In case tender quantity equal & less than 3000.**

Ranking list of the eligible bidders shall be prepared for all **Regular Bidders** in ascending order of their quoted prices. The firms which are coming under the **Price Consideration Zone** in the ranking lists may be eligible for placing of orders/counter offers on Lowest Acceptable Rate.

##### **(i) Distribution of quantity amongst New Bidders**

Such New bidders who are eligible for orders and accept counter offer at Lowest Acceptable Rate will be awarded order as below:

- (a) Up to 15% of the tendered quantity among all New Bidders equally or limited to their quoted quantity, whichever is minimum.
- (b) In case any quantity remains left from New Bidder, the same shall be allocated to regular bidders.
- (c) In case, there are no eligible New Bidders in the bid, then full 100% quantity will be considered for regular bidders.

##### **(ii) Distribution of quantity amongst Regular Bidders**

The balance quantity after allocation to New Bidders shall be distributed among the Regular Bidders. The Purchaser reserve the right to distribute this quantity amongst the bidders other than the lowest also in Regular Bidder category on counter offer at L-1 price.

The distribution of the quantity among the all eligible Regular Bidders, who have accepted LoI on counter offer, will be done as under limited to their offered quantity:

**Table:1 quantity distribution among regular bidders /old bidder (% of balance quantity after allocation to the New Bidders)**

Sr. No.	Quantity Distribution	Bidders who has quoted their rates under Price Consideration Zone in ascending order w.r.t. bidder R-1 and given consent of supply at L-1 Rate.		
1	When 2 or more Bidders agree on L1 rate	R1	R2	R3
	Quantity distribution (%)	55%	25%	20%
2	When only 1 Bidder agree on L1 rate	R1	R2	
	Quantity distribution (%)	65%	35%	
3	If no bidder agrees on L1 rate	R1		
	Quantity distribution (%)	Minimum offered quantity by bidder and maximum up to 100% of tendered quantity		

- (a) It may be very carefully noted that the bidders, while accepting the Lowest Acceptable Rate (L-1) on counter offer against LoI issued to them have to compulsorily accept the quantity offered by the Purchaser in full provided it is within 75% of the quantity offered by them in the bid. In the event, they do not accept this, the Purchaser may not place order on them on counter offer.
- (b) The aforesaid nomenclature for assigning ranking to bidders in Regular Bidder Category as R-1, R-2, R-3 etc. will be for those bidders who have accepted the LoI on counter offer at L-1 rate and ranking will be in ascending order from lowest bidder R-1 who by default will be L-1 firm.
- (c) In the first instance, the LoI/Counter offer shall be issued to the bidders with relative ranking of R-1 to R-3 as per Sr. No. 1 of table-1, in the ascending orders of their quoted price. In case of non- acceptance of LoI/Counter offer by any bidder, the next bidder(s) beyond L-3 falling within aforesaid price consideration zone will become eligible for LoI/counter offer and so on. (Bidders are advised to clearly understand this and do not get confused by R-2 & R-3, with L-2 & L-3).
- (d) In Sr. No. 1 of above table, the 55% quantity allocation to R-1 shall be with the consent of R-1 bidder, if his offered quantity is less than 55%. In case of non/partial acceptance, the quantity shall be restricted up to accepted/offered quantity against this tender. In this situation, the remaining unaccepted additional quantity by R-1 bidders, shall be offered to R-2 bidder subject to his original offered quantity against the tender, in case of partial acceptance of such additional quantity by R-2 bidder, the remaining quantity shall be offered to R-3 firm subject to his original offered quantity against the tender. If any non-distributed quantity still left, then same shall be allotted to R-4 bidder falling in Price Consideration Zone and accepted counted offer at L-1 rate.
- (e) In Sr. No. 2 of above table, the 65% quantity allocation of R-1 and 35% quantity to R-2 bidder shall be with their consent, if their offered quantity is less then allocated quantity. The minimum quantity allocation to any bidder shall be restricted up to their offered quantity against this tender. In case on non/partial acceptance of additional quantity by any bidder, the remaining unaccepted additional quantity shall be offered to other bidder. In case, any quantity remains undistributed due to non-acceptance or partial acceptance of quantity by other bidder, then same shall be procured through retendering.
- (f) If there are no regular bidders except R-1 bidder (Sr. No. 3) in Price Consideration Zone or no regular bidder accept the counter offer at L1 rate, then 100% quantity (balance quantity allocation to New Bidder) may be offered to L1 bidder. On his refusal or partial acceptance of

additional quantity above his offered, then re-bidding shall be done for such unaccepted remaining quantity.

**Option-2:- In case tender quantity more than 3000 Nos.**

**Distribution of quantity among Regular and New Bidders:-**

Ranking list of the eligible bidders shall be prepared for all **Regular Bidders** in ascending order of their quoted prices. The firms which are coming under the **Price Consideration Zone** in the ranking lists may be eligible for placing of orders/counter offers on Lowest Acceptable Rate.

**(i) Distribution of quantity amongst New Bidders**

Such New bidders who are eligible for orders and accept counter offer at Lowest Acceptable Rate will be awarded order as below:

- Up to 15% of the tendered quantity among all New Bidders equally or limited to their quoted quantity, whichever is minimum.
- In case any quantity remains left from New Bidder, the same shall be allocated to regular bidders.
- In case, there are no eligible New Bidders in the bid, then full 100% quantity will be considered for regular bidders.

**(ii) Distribution of quantity amongst Regular Bidders**

The balance quantity after allocation to New Bidders shall be distributed among the Regular Bidders. The Purchaser reserve the right to distribute this quantity amongst the bidders other than the lowest also in Regular Bidder category on counter offer at L-1 price. The distribution of the quantity among the all eligible Regular Bidders, who have accepted LoI on counter offer, will be done as under limited to their offered quantity:

**Table:1 quantity distribution among regular bidders where L-1 bidder is a regular/old bidder (% of balance quantity after allocation to the new entrants)**

Sr. No.	Quantity Distribution	Bidders who has quoted their rates under Price Consideration Zone in ascending order w.r.t. bidder R-1 and given consent of supply at L-1 Rate.				
1	5 or more Bidders agree on L1 rate	R1	R2	R3	R4	R5
	Quantity distribution (%)	30%	25%	20%	15%	10%
2	4 or more Bidders agree on L1 rate	R1	R2	R3	R4	
	Quantity distribution (%)	40%	25%	20%	15%	
3	3 or more Bidders agree on L1 rate	R1	R2	R3		
	Quantity distribution (%)	55%	25%	20%		
4	2 Bidders agree on L1 rate	R1	R2			
	Quantity distribution (%)	65%	35%			
5	When only 1 bidder agree on L1 rate	R1				
	Quantity distribution (%)	Minimum offered quantity by bidder and maximum up to 100% of tendered quantity				

- (a) It may be very carefully noted that the bidders, while accepting the Lowest Acceptable Rate (L-1) on counter offer against LoI issued to them have to compulsorily accept the quantity offered by the Purchaser in full provided it is within 75% of the quantity offered by them in

- the bid. In the event, they do not accept this, the Purchaser may not place order on them on counter offer.
- (b) The aforesaid nomenclature for assigning ranking to bidders in Regular Bidder Category as R-1, R-2, R-3, R-4, R-5 etc. will be for those bidders who have accepted the LoI on counter offer at L-1 rate and ranking will be in ascending order from lowest bidder R-1 who by default will be L-1 firm.
- (c) In the first instance, the LoI/Counter offer shall be issued to the bidders with relative ranking of R-1 to R-5 as per Sr. No. 1 of table-1, in the ascending orders of their quoted price. In case of non- acceptance of LoI/Counter offer by any bidder, the next bidder(s) beyond R-5 falling within aforesaid price consideration zone will become eligible for LoI/counter offer and so on. (Bidders are advised to clearly understand this and do not get confused by R-2, R-3, R-4, R-5 with L-2, L-3, L-4 & L-5).
- (d) In Sr. No. 2 of above table, the 40% quantity allocation to R-1 shall be with the consent of R-1 bidder, if his offered quantity is less than 40%. In case of non/partial acceptance, the quantity shall be restricted up to accepted/offered quantity against this tender. In this situation, the remaining unaccepted additional quantity by R-1 bidders, shall be offered to R-2 bidder subject to his original offered quantity against the tender, in case of partial acceptance of such additional quantity by R-2 bidder, the remaining quantity shall be offered to R-3 firm subject to his original offered quantity against the tender and so on. If any non-distributed quantity still left, then same shall be allotted to R-5 bidder falling in Price Consideration Zone and accepted counted offer at L-1 rate.
- (e) In Sr. No. 3 of above table, the 55% quantity allocation to R-1 shall be with the consent of R-1 bidder, if his offered quantity is less than 55%. In case of non/partial acceptance, the quantity shall be restricted up to accepted/offered quantity against this tender. In this situation, the remaining unaccepted additional quantity by R-1 bidders, shall be offered to R-2 bidder subject to his original offered quantity against the tender, in case of partial acceptance of such additional quantity by R-2 bidder, the remaining quantity shall be offered to R-3 firm subject to his original offered quantity against the tender. If any non-distributed quantity still left, then same shall be allotted to R-4 bidder falling in Price Consideration Zone and accepted counted offer at L-1 rate.
- (f) In Sr. No. 4 of above table, the 65% quantity allocation of R-1 and 35% quantity to R-2 bidder shall be with their consent, if their offered quantity is less than allocated quantity. The minimum quantity allocation to any bidder shall be restricted up to their offered quantity against this tender. In case on non/partial acceptance of additional quantity by any bidder, the remaining unaccepted additional quantity shall be offered to other bidder. In case, any quantity remains undistributed due to non-acceptance or partial acceptance of quantity by other bidder, then same shall be procured through retendering .
- (g) If there are no regular bidders except R-1 bidder (Sr. No. 5) in Price Consideration Zone or no regular bidder accept the counter offer at L1 rate, then 100% quantity (balance quantity allocation to New Entrant Bidder) will be offered to L1 bidder. On his refusal or partial acceptance of additional quantity above his offered, then re-bidding shall be done for such unaccepted remaining quantity.
- (iii) **In the above manner if none of the MP based unit gets any order then the tendered quantity required to be procured shall be allocated as under:**
- a. **Distribution of quantity amongst MP based units:-**Upto 10% of the tendered quantity required to be procured among all MP based units equally provided, they fall within price consideration

zone and accept counter offer rate at L1. In case, there is no eligible MP based unit then the quantity meant for MP based units shall be allocated to the other eligible regular bidders.

- b. **Distribution of quantity amongst New bidders:- Up to 15% of the tendered quantity required to be procured amongst all new bidders equally or limited to their quoted quantity whichever is lower.** In case, any quantity remains left from new bidders then the same shall be allocated to the other eligible regular bidders.
- c. Distribution of quantity amongst regular bidders:- Minimum 75% of tendered quantity required to be procured which may go upto 100% in a manner as specified in clause-6 (II)(ii) above.
- (iv) **In case, where the tender quantities is meagre, the Discom may allocate 100% of the tendered quantity only to the L1 bidder.**
- (v) The quantity distribution as above shall be made amongst the eligible bidders provided there is no order is pending on them for the tendered items for which delivery period has passed. In case, bidder will have pending orders and its delivery period has passed, the purchaser at its discretion may reduce such pending ordered quantity from their share as per above quantity distribution and this quantity shall be distributed among the other eligible bidders. The quantity already stage inspected shall not be considered in pending order quantity.
- (vi) **Distribution of quantity in case 2 bidders quoted same price**  
In case two (2) bidders quotes same L1 rate, then both bidders will be considered as L1 bidder and their rate will declared as L1 rate. In such case, share of L1 and L2 bidders as per quantity distribution shall be equally distributed amongst these two L1 bidders. Similarly, in case of two L2 bidders, share of L2 and L3 bidders as per quantity distribution shall be equally distributed amongst such two L2 bidders and so on.

### **III. Re-distribution of quantity due to non-performance of any supplier:**

In case performance of any supplier is found unsatisfactory during the delivery process, the award will be liable to be cancelled and in such event the Purchaser reserves the right to distribute the balance quantity of cancelled award amongst remaining existing suppliers (Both Regular & New) on their acceptance, started from the regular supplier, the quantity shall be offered first to the highest ranking supplier, on his refusal or partial acceptance, the remaining quantity shall then be offered to supplier of next ranking. If any non-distributed quantity still left, then same shall be allotted to next ranking bidders falling in Price Consideration Zone and accepted counter offer at L-1 rate, in case the quantity still left same shall be offered to new bidders in similar manner as mention in this para as above. However, this action shall be fully at the discretion of the Discom only.

## **7. REVERSE AUCTION**

After opening of Price Bid, the Purchaser will conduct a Reverse Auction (RA) among the technically and commercially qualified bidders, through mptenders portal for determination of the lowest bidder (L1).

The bidders shall confirm their acceptance to participate in the Reverse Auction at the time of submission of their bids. Bidders who do not accept Reverse Auction shall not be considered for further evaluation.

### **i. Process of Reverse Auction**

- a) Only the bidders who qualify in the technical and commercial evaluation and whose price bids are opened shall be eligible to participate in the Reverse Auction.

- b) The Reverse Auction will be conducted on a specified date and time, which will be communicated to the eligible bidders electronically through system generated email and SMS by mptenders portal.
- c) The date and time of commencement of Reverse Auction and duration of Reverse Auction time shall be communicated at least 4 days prior to such auction date. Any force majeure or other condition necessitating postponement of auction shall entitle MPPKVVCL to postponement of auction even after communication, but, MPPKVVCL shall be obliged to communicate to all participating vendors the postponement prior to commencement of such Reverse Auction.
- d) Name of bidders/ vendors are anonymously masked.
- e) All qualified bidders can quote and lower their price offers.
- f) The lowest bidder can be displaced by an even lower bid, within the given time frame.
- g) Bid can be only at multiples of specified decrement value.
- h) All bidders are able to view the current lowest price during the auction time.
- i) On completion, a report is generated with all details of bid and the original names of the bidders.

**ii. Start Price & Decrement**

- a) The Purchaser shall start the Reverse Auction based on the lowest price discovered through the initial price bids.
- b) The minimum decrement shall be notified. Bidders shall be able to reduce their price only by a minimum decrement or its multiples.
- c) The initial auction period will be 60 minutes (Sixty minutes) with a provision of auto extension by 10 minutes (Ten minutes) from the scheduled / extended closing time if any fresh bid is received in last 10 minutes (Ten minutes) of auction period or extended auction period. Such auto extensions shall be effective only if, reduction in rate by a Bidder.

**iii. Determination of L1**

- a) At the end of the Reverse Auction, the bidder quoted the lowest price shall be considered as L1, subject to verification of arithmetical errors and compliance to tender terms.
- b) After completion of Reverse Auction process, Price Breakup of L-1 bidder shall be derived (keeping their own quoted Freight & Insurance charges same) from initially submitted Price Bid.

**iv. Other Conditions**

- a) The Purchaser/Employer reserves the right to accept or reject the Reverse Auction result, or to annul the Reverse Auction process, without assigning any reason thereof.
- b) In case of failure of the Reverse Auction due to no participation or technical failure, the Purchaser/Employer may decide to proceed with the original price bids submitted.
- c) The price quoted in the Reverse Auction shall be inclusive of all applicable taxes, duties, levies, freight, insurance, etc., unless otherwise specified in the Tender.
- d) Bidders are advised to ensure that they are fully trained and aware of the manner in which the E-bidding Portal operates and also clarify all their doubts regarding issues such as refreshing of screen, auction rules etc.
- e) Discom will not entertain or accept any request for extension of time during the Reverse Auction Process. Bidders are, therefore, requested to make all the necessary arrangements/ alternatives as may be required to ensure their successful participation in the Reverse Auction Process. Failure of power or loss of internet connectivity at the premises of Bidders during the Reverse Auction Process cannot be the cause for failure to participate in the Reverse Auction Process. Discom shall not be responsible or liable for such eventualities.

**Sd-  
Chief Engineer (Purchase)  
O/o MD (WZ), MPPKVVCL,  
Indore**



## **SECTION-III**

### **GENERAL TERMS AND CONDITIONS OF PURCHASE**

#### **1. DEFINITIONS**

In this bid document (including all the Sections & Schedules), unless the context otherwise requires, the terms given below shall have the following meanings assigned to them:

- (i) "Addendum" shall mean any other document issued to the bidders in addition to the bid document by the Purchaser in the context of this bidding process.
- (ii) "Agency" shall mean the successful bidder who has received the Letter of Award from the Purchaser to execute the Purchase Order.
- (iii) "Bid/Tender" shall mean the proposal/document that the bidder submits in the requested and specified form as mentioned in bid/tender documents.
- (iv) "Bidder" shall mean the firm/manufacturer who quotes the offer against a tender or enquiry.
- (v) "BG" shall mean Bank Guarantee.
- (vi) "Companies Act" shall mean The Companies Act, 1956 (as amended or replaced from time to time).
- (vii) "Competent Authority" shall mean the authorised person of the Purchaser.
- (viii) "EMD" shall mean Earnest Money Deposit.
- (ix) "Instruction" shall mean any drawings and/or instruction in writing, details, directions and explanations issued by the Purchaser from time to time to Agency.
- (x) "Purchaser" shall mean Madhya Pradesh Paschim Kshetra Vidyut Vitran Company Limited, Indore.
- (xi) "MPPKVVCL" shall mean Madhya Pradesh Paschim Kshetra Vidyut Vitran Company Limited, Indore.

#### **2. PRICES AND STATUTORY LEVIES**

- (i) It is obligatory that FOR destination FIRM or VARIABLE price as specified in Section-IV: Special Terms and Conditions of Purchase is quoted, clearly giving break-up in the following elements: -
  - (a) Unit Ex-works / Ex-godown rate including packing.
  - (b) Goods and Service Tax GST as applicable: -
    - (i) CGST and SGST; or
    - (ii) IGST
  - (c) Forwarding & Freight-Insurance Charges.
  - (d) Any other levy / taxes. The details and rate to be specified.
  - (e) In case of exemption from Tax, documentary evidence shall be furnished with the offer.
  - (f) The prices shall be quoted exactly as per the price schedule enclosed with the tender specification, including all elements. In absence of this, the offer shall be liable for rejection.
  - (g) No revision on any account shall be allowed during execution of the order.
  - (h) The price should be quoted after taking into account the Input Tax credit of GST. In case of an order, the bidder shall be required to submit „Anti Profiteering Certificate“ in specified format to be furnished before placement of order.
- (ii) Any charge as may be applicable as per law in force, must be clearly specified otherwise any of such silent charges, shall not be payable in the event of an order.
- (iii) The basic order shall be placed on Ex-factory price inclusive of packing and forwarding charges. GST shall be paid on elements of Ex-factory price and Freight charges.

- (iv) The payment of statutory levies such as CGST & SGST or IGST against the Purchase Order shall be made on the basis of rates prevailing during the contractual delivery period only and on applicable quantity due, to be actually delivered as per delivery schedule of Purchase Order. In case concessional rate of statutory levies are quoted by the bidder, then the same shall be paid limited to the quoted rate. In that case the payment of statutory levies against the Purchase Order to all concerned government departments or any other organization will be the sole responsibility of supplier on the basis of rates prevailing during the contractual delivery period as per schedule of Purchase Order, as well as for any supplies made after the contractual period. Any liability raised by the government authorities due to any difference in the amount payable and consequences thereof the purchaser will not be responsible for any sustained damages by the supplier.
- (v) In case, supplies against the Purchase Order are affected late i.e. beyond contractual delivery period and rate of GST undergoes upward revision, the payment will continue to be made only on the basis of rates prevailing during the contractual delivery period. However, in case the rate of statutory levy (ies) undergoes, downwards revision then the delayed supplies beyond contractual delivery period will attract the reduced rate of statutory levy (ies).
- (vi) In case of delay in supply, if the supplier is able to prove that the delay involved is due to force majeure conditions, as detailed in the "Force Majeure" clause, supported with suitable documentary proofs and in case the delay is condoned with specific approval for payment of statutory levies during extended period, supplementary claim for GST shall be accepted and payment shall be released, accordingly.
- (vii) Pending decision on the request of the supplier, for condition of the delay in delivery, the supplier will claim GST as per the rates prevailing during the contractual delivery period. In case, this is not done, all financial losses will be to supplier's account.
- (viii) **GST registration number of MPPKVVCL is 23AADCM7397N1ZU.**
- (ix) If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Purchase order, which directly impacts tax liability of Agency in performance of this Purchase order, an equitable adjustment of the Purchase order value shall be made to take into account any such change by addition to the Purchase order value or deduction therefrom, as the case may be. **However, decision of the Purchaser would be final in this regard**".
- (x) In case of difference in the quoted HSN Code/Service Accounting Code and quoted rate of GST, final decision of the MPPKVVCL, Indore shall prevail.

### 3. TRANSIT RISK

- (i) Responsibility regarding covering of risks during transit of material shall entirely be on the supplier. The Purchaser shall, in any case, not bear the transit risks/ transit insurance charges.
- (ii) Transit damages/ shortages/ losses shall be reported by the consignees within 30 days from the receipt of the consignments. Such damages/shortages/losses shall be repaired/ replaced by the suppliers, free of cost within one month from the date of intimation by the consignee without awaiting for his settlement from carrier or Insurance Purchaser etc. If the supplier fails to do so the consignee(s) shall be free to get the repair work done from other sources and they shall be free to recover the cost of such material/ expenses of repairs either from the supplier's balance bills or from the security deposit as deemed fit.
- (iii) While the necessary assistance shall be rendered by the consignee in lodging and processing the claims with carriers and the supplier's insurance underwriters, the responsibility shall rest with the supplier to immediately make good the shortages/ losses/ damages, without any extra cost and without waiting for the settlement of the claim.

#### **(iv) Replacement of goods lost/ broken or damaged including loss due to fire:-**

Notwithstanding anything here-in contained, the supplier shall undertake responsibility for the safe arrival of the material in good condition and without any loss or damage at the final

destination and until the same is actually delivered to/ received by the Purchaser at its stores or other places of final destination. For this purpose, material carried by Railway or Road transport or other carriers shall be deemed to be so carried at the risk of the suppliers. In the case of transport damages/shortages, the payment shall be made only for the quantity received in good and working condition and consignee shall lodge claim with the suppliers/ carrier with all necessary documents for settlements of the same with the carriers at supplier's end.

**4. PACKING AND FORWARDING**

- (i) The supplier shall be responsible for the Stores being sufficiently and properly packed at his expense for transport by rail, road or sea, so as to ensure them being free from loss/damage due to handling and transport to the destination.
- (ii) Each package shall be prominently and distinctly marked on at least two faces, indicating the full address of the consignee, destination station, name of material, purchaser's order number, weight and volume of the package etc.
- (iii) Each package shall contain in a water proof cover, detailed description indicating the order reference and date and list of the contents. Each item contained in the package or box shall be described sufficiently to enable easy identification. The quantity, weight etc. shall also be given.
- (iv) The packing shall conform to the specification, rules and regulations prescribed by the underwriters, railways, Transport Agencies. In case of any loss/damage to the consignment due to non-standard packing, the same shall be made good free of all charges to Purchaser by the supplier. All provisions of this clause shall apply whether the disrupting cause is total or partial in its effects upon the ability of supplier to perform.

**5. MODE OF DISPATCH**

The bidder should clearly indicate mode of dispatch for the material. In case of dispatch through rail, the material is to be booked for respective destination railway station. In case of dispatch through road transport, the material should be dispatched through bank approved road transporter on door delivery basis only.

**6. SUBMISSION OF DRAWING AND LITERATURE**

All the relevant drawings shall be submitted immediately after placement of order for approval. One set of drawing, Descriptive Literature and instructions Manual for Erection, Commissioning and maintenance of the equipments ordered, shall be supplied to each consignee.

**7. MATERIAL TEST CERTIFICATE**

Each lot shall be tested by the supplier as per relevant IS/Technical Specification of the tender and routine test certificates shall be submitted to the office of the Order placing Authority along with the letter/ offer for inspection of the material.

**8. DISPATCH**

The supplier shall not dispatch the material unless specific dispatch instructions are issued by the Purchase Section of Purchaser or any other authorized officer of the Purchaser.

**9. RESPONSIBILITY FOR LOADING/UNLOADING AT AREA STORE**

It shall be the responsibility of purchaser to arrange necessary facility for loading/ unloading of material at Area Stores.

**10. FORCE MAJEURE**

Force majeure condition is herein defined as:-

- (i) Natural phenomena, such as floods, draughts, earth-quakes and epidemics.
- (ii) Act of any Government Authority, domestic or foreign, such as war, quarantines, embargoes, licensing control or production or distribution restrictions.

- (iii) Accident and disruptions such as fires, explosions, increase in power cut with respect to date of tender opening, break-down of essential machinery or equipments etc.
- (iv) Strikes, slow down, lockouts continuing for more than three (3) weeks.
- (v) Failure or delay in the supplier's source of supply due to force majeure causes enumerated at (a) to (d) above, provided the supplier produces documentary evidence to show that there were no other alternative sources of supply available to him or if available, the lead time required was likely to be longer than the duration of the Force Majeure at the normal source of supply.
- (vi) Any cause which is beyond the reasonable control of the supplier or purchaser as the case may be.

All the provisions of this clause shall apply whether the disrupting cause is total or partial in its effect upon the ability of the supplier to perform.

**NOTE:-** The cause of force majeure condition will be taken into consideration only if the supplier within 15 days from the occurrence of such delay notifies. The Purchaser shall verify the facts and grant such extension as the facts justify. For extension of delivery period on account of force majeure conditions, the supplier shall submit his representation with documentary evidence for scrutiny by the purchaser and decision of the Purchaser shall be binding on the firm.

**11. RECOVERIES FOR LIABILITIES AGAINST OTHER CONTRACTS/ORDERS**

All amount recoverable from the successful bidders against any earlier or subsequent contracts/orders including contracts/orders placed on sister concern by the Purchaser will be adjusted/ recovered from any type of payment due against the contracts/orders that may be awarded under this specification OR any other contract(s)/order(s) including the contracts/order placed on sister concern firms placed by Purchaser against other tender specification for the same or the other items.

The Purchaser shall have the option to recover the outstanding dues / liability, if any, against the firm against any contracts / orders from the firm's bills / payments due against the orders / contract placed by other successor Companies formed on restructuring of MPSEB, which shall be binding on the bidders.

**12. COMPLETENESS OF EQUIPMENTS**

The equipment/material shall be completed in every respect with all minor fittings and accessories, even though these may not be specifically mentioned in the purchaser's specifications or the tender's offer. The supplier shall not be eligible for any extra price in respect of such minor fitting and accessories which can be considered as an essential part of the basic equipment even though not specifically mentioned in the specification or in the offer.

**13. EXTENSION ORDER**

The Purchaser reserves the right to place an extension order for any additional quantity to the extent of 50% quantity of the original order on the same rates, terms and conditions within Nine Months from the date of order.

Other Discoms of MP may also place extension order for the quantity not exceeding to 50% quantity of original order on the same rates, terms and conditions within Nine Months from the date of order with the consent of order placing authority.

**14. DESIGN AND INTER-CHANGEABILITY**

All similar material and removable parts of similar equipments shall be uniform and interchangeable with each other.

**15. ROYALTIES AND PATENTS**

All royalties for patents or any charges for usage or infringement thereof that may be involved in the supply shall be included in the offered price and the supplier shall protect Purchaser against

any claim thereof. Supplier is fully responsible for such contractual dealing and purchaser shall not be called upon to bear any such charges.

**16. COMPLIANCE OF REGULATIONS**

The supplier shall warranty that all Goods covered under procurement, shall have been produced, sold, dispatched, delivered, tested, in strict compliance with all applicable Rules, Regulations including Industries (Development and Regulations) Act 1951 and any amendment there under, labour agreements, working conditions and technical codes and requirements, as applicable from time to time.

The supplier should execute and deliver such documents, as may be needed, by the purchaser in evidence of compliance. All laws, Rules and Regulations are required to be incorporated in this reference. Any liability arising out of contravention of any of the laws shall be the sole responsibility of the vendor and the purchaser shall not be responsible in any manner whatsoever.

**17. CANCELLATION/TERMINATION OF ORDER**

The Purchaser may upon written notice of default, terminate/cancel the purchase order in whole or for a part quantity with recovery of liquidate damages at the rate of 10% of ex-works price(s) of stores not delivered by them or liability on account of risk and cost, whichever is higher in the circumstances detailed hereunder:-

- 17.1. If in the opinion of the Purchaser, the supplier fails to deliver the material within the time specified or during the period for which extension has been granted by the Purchaser.
- 17.2. If in the opinion of the Purchaser, the supplier fails to comply with any of the other provisions of this order or material is found not in accordance with prescribed specifications and or the approved samples.
- 17.3. If in the opinion of the Purchaser, the supplier fails to take urgent steps towards corrective measures as indicated/intimated to them as a result of stage inspection.
- 17.4. In pursuance to clause no. 17.1, 17.2 & 17.3 Above, Purchaser may debar the supplier for further business with Purchaser for a declared period on breach of the Purchase Order.
- 17.5. Notwithstanding that the powers under clause 17.4 referred to above, are in addition to the rights and remedy available to the Purchaser under the general law of India relating to Contract.
- 17.6. In the event, Purchaser does not terminate the order, the supplier shall continue execution of this order, in which case he shall be liable to the Purchaser for liquidated damages for the delay as per applicable clause until supplies are accepted.

**18. CANCELLATION/ TERMINATION OF ORDER FOR CONVENIENCE**

The purchaser shall be entitled to terminate/cancel the purchase order at any time for the balance order quantity which is within the delivery schedule with no liability on either side and without assigning any reason thereof. However, the purchase order for the quantity which has already been intimated ready for dispatch shall not be canceled and supply of the same shall be availed in due course of time.

**19. REDUCTION OF RATE DUE TO SUBSEQUENT TENDER**

As a result of opening of the subsequent tender of the purchaser, if the rates received for the same item(s) are found to be lower, then the balance ordered quantity as on date of opening of price bid excluding the quantity which has already been intimated ready for dispatch, may be accepted at the lower rates only. If the supplier does not agree to supply the balance quantity at the lower rate, the order for the balance quantity shall be cancelled by the purchaser without liability on either side provided the balance ordered quantity falls within the delivery schedule of the purchase order otherwise the provision of the clause named "Cancellation/Termination of Order" shall be applicable

**20. FACTORY INSPECTION**

The factory inspection of all the firms shall be carried out by the purchaser representative after opening of tender or prior to placement of order to the firms, with a view to ascertain whether they are a qualified manufacturer and are having adequate facilities, technical know-how and practical experience for manufacturing of the quoted items. The satisfactory report of factory

inspection of such new firms shall be an essential requirement for them for execution of order against the instant tender. The representative of purchaser may see the raw material and its record, testing lab and testing facilities, may question workers/Staff, see the machineries, safety standards floor layout of factory and verify past experience record claimed in the instant bid. The firm shall deposit amount of Rs. 10,000/- + GST as applicable to the purchaser towards factory inspection as above.

**21. ROUTINE AND ACCEPTANCE TEST :-**

The manufacture shall carryout the all routine and acceptance test as stipulated in the relevant Indian standard at their works and result of these test will be submitted to this office for approval alongwith letter / offer for inspection. The above test results may be witnessed by our representative at the manufacturer's work if so desired by the purchaser, prior to the despatch of the material.

**22. QUALITY ASSURANCE PLAN**

The bidder must establish that they are following a proper quality assurance program for manufacture of tendered item and shall submit various checks, tests , since receipt of raw material upto the dispatch of finished product the bidder shall invariable furnish with his bid statement given list of important raw material, name of sub supplier for the raw material , list of standards according to which the raw material are to be tested , list of test normally carried on raw material, list of manufacturing facility available , list of testing equipments available with the bidder for final testing of equipment and test plant limitation , level of automation and list of areas where manual processing exists.

**23. JURISDICTION**

Any dispute or difference, arising under, out of, or in connection with this tender/ Purchase order shall be subject to exclusive jurisdiction of competent court at Indore only.

**24. SETTLEMENT OF DISPUTES AND ARBITRATION**

If any dispute of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Purchase Order, the parties shall seek to resolve any such dispute or difference in opinion , to the extent possible, amicably by mutual consultation. If the parties have failed to resolve their dispute or difference by such mutual consultation, then the dispute shall be referred in writing by either party to and settle by Arbitral Tribunal comprising of three Arbitrators, one to be appointed by each party and third Presiding arbitrator to be appointed by both the arbitrator as per provision of Indian Arbitration and Conciliation Act 1996 as amended from time to time.

The arbitration shall be conducted as per provision of Arbitration and Conciliation Act 1996 and as amended from time to time and of the rules made there under. The Arbitrators or the Presiding as the case may be, are bound to give a detailed speaking award assigning reasons for the findings. The decision of Arbitral Tribunal shall be final and binding up on the both parties.

Supplies under the Purchase Order shall be continued by the Supplier during the arbitration proceedings, unless otherwise, directed in writing by the purchaser or unless the matter is such that the work cannot possibly be continued until the decision of the Arbitrator or of the Presiding, as the case may be, is issued.

The arbitration proceeding if any shall be strictly held at the head quarter of Purchaser at Indore.

-Sd-  
**Chief Engineer (Purchase)**  
**O/o MD, MPPKVCL,**  
**Indore**

## **SECTION-IV**

### **SPECIAL TERMS AND CONDITIONS OF PURCHASE**

#### **1. PRICES:**

The ex-works prices of **CRGO Core Distribution Transformers** shall be **Variable** as per relevant IEEMA Price Variation formula, both on plus & minus side without any ceiling. The basic price of the material and indices used shall be as published by IEEMA prevailing as on first working day of the month, one month prior to the date of opening of tender. The ex-works price for **Amorphous Core Distribution Transformer** shall be **firm**, price variation will not be applicable of Amorphous Core DTRs.

The price quoted by bidder shall be on FOR destination basis at area stores (Indore/Barwaha/Dhar/Ujjain/Ratlam/Mandsaur) including of packing, forwarding, and freight charges.

It is to be noted that, the New bidder shall not require to quote their prices in the price bid/BoQ under the column meant for Ex-works. They shall mention Rs. "00.00" in their price bid/BoQ against Ex-works. If new bidder quotes any price other than "00.00" in the price bid/BoQ against Ex-works then their bid will be rejected, and the Ex-works prices quoted by them will be considered as null and void in this bid. However, they shall require to quote Freight & insurance charges, offered quantity, HSN code and % of GST in the respective column of price bid/BoQ.

#### **2. PRICE VARIATION**

Where ever required price variation shall be payable as under:-

- i. Price Variation shall be payable when the supply is made within contractual delivery period.
- ii. Price Variation shall be payable on the basis of date of delivery of material, the date of delivery shall be the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.
- iii. No upward price variation shall be payable beyond the contractual delivery period where the supplier is responsible for the delay and the payment shall be restricted to the original ordered price only. However any downward variation in the prices on the actual date of delivery shall be recoverable from the firm.
- iv. For calculation of Price Variation, Indices as applicable on the first day of the month prior to the month of delivery shall be considered.
- v. The price variation shall be payable, as per price variation formula of CRGO for CRGO Core only.

#### **3. PAYMENT**

- (i) Subject to completion of all contractual formalities 100% payment along with Taxes Corresponding to the consignment would generally be made within 45 days from the date of DRR on acceptance of material by the Area stores after successful testing at NABL Lab.
- (ii) The supplier shall forward the original RR / MTR directly to consignee along with copies of following documents: -
  - a) A copy of bill
  - b) Delivery Challan
  - c) The inspection and or T.C. approval
  - d) Detailed packing list, if required.

- (iii) The original bills should be forwarded to the paying authority through Deputy Director (CBP Cell)-WZ, MPPKVVCL, Indore and should be marked “**ORIGINAL**”. The bill should indicate GSTN Registration Number and date allotted to him under GST Act.
- (iv) The following documents will have to be forwarded to the paying authority along with bills in triplicate: -
  - a) Bill / Invoice.
  - b) Xerox copy of despatch documents i.e. RR / MTR etc.
  - c) Dispatch clearance / instructions.
  - d) In case of MSME Firm, the copy of valid MSME registration certificate duly notarized.
- (v) The material Receipt Certificate will be forwarded by the consignee to the paying authority for payment, as well as to the suppliers towards acknowledgement of receipt of material including part consignment to the extent it is received in good condition and is serviceable.
- (vi) The invoice in triplicate with relevant documents such as Material Receipt Certificates in good condition etc. should be submitted to the Deputy Director (CBP Cell)-WZ, MPPKVVCL, Indore for the quantities supplied in Discom Area stores for claiming the payment or any other related issues.
- (vii) The Purchaser shall make above payment directly in the supplier’s Bank account, for which the following details are required to be invariably submitted with the offer in the prescribed schedule / template:-
  - (a) Name of Bank and Branch address
  - (b) Their Bank Account Number
  - (c) IFS Code of the Branch for RTGS transfer
- (viii) Charges required by Bank in this regard will be debited to supplier’s / contractor’s Account. Net payment after deduction of charges required by the Bank shall be released in favour of suppliers.

**4. TIMELINES FOR DIFFERENT PROCUREMENT ACTIVITIES:-**

- i. Dispatch Instructions shall be issued by the purchaser within 3 working days from the date of receipt of letter intimating readiness of offered quantity of DTRs for despatch.
- ii. The consignee Store shall take the consignment in DRR on the same day on which material is consigned to Area Stores.
- iii. The testing of sample randomly drawn from the supplied lot shall be arranged within 8 working days from the date of DRR of last consignment under a particular DI.
- iv. If required, the testing of sample randomly drawn from the lot supplied, may also be arranged in part, in any of the Area Store under a particular Dispatch Instruction.
- v. Material at Area Store shall be accepted /Rejected by the consignee within 1 working day from the date on which test results received.

**5. DELIVERY**

- i. The bidder shall require to complete the delivery in 4 installments. The first Lot/ Installation shall be supplied within 60 days from the date of issue of order (including the date of issue of purchase order send through mail) and subsequent Lot (s) within next 45 days thereafter as under.

Sl. No.	Lot No.	Qty. To be delivered in percentage	Delivery Schedule
1.	1 <sup>st</sup>	25%	To be supplied within 60 days from the date of issue of order
2.	2 <sup>nd</sup>	25%	To be supplied within next 45 days thereafter
3.	3 <sup>rd</sup>	25%	To be supplied within next 45 days thereafter
4.	4 <sup>th</sup>	25%	To be supplied within next 45 days thereafter



- ii. The period allowed for delivery of first lot shall include the 5 days' time for submission of GTP & drawings by the bidders and 10 working days time for approval of the same by the purchaser.
- iii. In case material under a lot is delivered beyond terminal date specified for the respective lot (s) penalty as per penalty clause of the purchase order shall be recoverable from the supplier. The penalty shall be reckoned from the next day of the terminal date of restive lot(s) to the date of actual delivery.
- iv. In case terminal date for a lot falls on a holiday it will be shifted to the next working day.
- v. The purchaser shall reserve the right to defer the supplies or re-schedule the delivery of the order if required. The intimation shall be given in writing the Price Variation shall be given for quantities deferred alongwith any change in applicable Taxes.
- vi. In case of delay in the part of purchaser in issuing dispatch Instructions beyond the time line prescribed in clause '4' (para of timelines) above, the same shall be specified by the purchaser in the dispatch Instructions and this period shall not be counted for calculation of penalty on account of delay in delivery.
- vii. Early delivery of the material shall be preferred, if required.
- viii. **Deferment of deliveries:-** MPPKVVCL reserves the right to defer the supplies or reschedule the delivery of the orders, if required. The intimation shall be given in writing.

#### 6. ACCEPTANCE OF MATERIAL (RANDOM TESTING)

Testing of the transformer selected at random from the supplies made to the Area Stores shall be done in the following manner for verification of technical details, design, acceptance test and losses as per approved G.T.P., drawings and technical specification of the order.

- i. In case lot comprises of more than 100 DTRs the same shall be divided in sub lot of 100 DTRs or part thereof for issue of Dispatch Instructions (DI).
- ii. 20% (Twenty Percent) transformers rounded to next higher number shall be selected randomly from the supplies made under each DI for the acceptance tests at purchaser's in-house lab as per relevant IS.
- iii. In case more than 20% of sample DTRs are failed in testing as above the entire DI quantity shall be rejected, and testing charges shall be recoverable from the supplier.
- iv. In case 20% or less than 20% sample DTRs are failed in testing as above, another 20% sample DTRs shall be selected randomly from the balance quantity supplied under the same DI for retesting on the cost and request of the supplier.
- v. In case of failure of any of the sample DTR on retesting the entire DI quantity shall be rejected.
- vi. The Heat run test shall be performed on any one unit selected randomly from the supplies made under very first DI only. In case, sample DTR fails on Heat run test the entire DI quantity shall be rejected and testing charges shall be recoverable from the supplier.

The purchaser may however allow retesting for Heat run test on another sample DTR selected randomly from the same lot on the cost and request of the supplier. In case, sample DTR again fails on Heat run test the entire DI quantity shall be rejected and no request in this regard shall be entertained and supplies against any of the subsequent lot (s) shall not be accepted till DTRs supplied by the firm conform in Heat run test.

- vii. In case of rejection of supplies made under any two DIs under the same purchase order the purchaser may cancel the balance order quantity and the firm may be debarred for the future business for a period of three (3) years.

- viii. In case of emergency, the Purchaser may use/issue material/equipment prior to satisfactory testing at In-house lab. In the event of failure of material/equipment in testing at In-house lab later on following action shall be taken for that particular lot / order only:-
- 5% payment of the bill for the supplies already made will be recovered by Purchaser.
  - For the material/equipment already used/issued, the guarantee period shall stand twice the normal guarantee period and the period of performance security deposit shall be suitably extended to cover the extended guarantee period.
  - The supplier shall be intimated about the results of such test to make suitable improvement in his manufacturing process and to ensure quality control.
  - If any quantity is available in the area stores, the same shall not be issued and have to be taken back by the manufacturer at his own cost.
- ix. The Purchaser has all the rights to conduct the test including type tests, at his own cost by an independent agency during execution of order. In the event of failure in such tests, the expenses incurred in testing shall be to the supplier's account as already mentioned above in case of random testing.
- x. **Ground Rent**  
In case of rejection of supplied quantity, the supplier has to lift the entire rejected quantity within period specified in rejection intimation letter, failing which ground rent @ 0.5% per week of ordered FOR rates (Ex-works + Freight) subject to maximum 10% of ordered FOR rate to be levied on supplier.

## **7. SECURITY DEPOSIT**

Security deposit equal to 10% of value of the order placed against the tender shall be furnished by the bidder in the form of DD/B.G. only drawn on any scheduled Bank. The Bank Guarantee towards Security Deposit should be from a scheduled bank on stamps paper equal to 0.25% of the amount of BG subject to maximum of Rs. 25,000/- as per Gazette Notification of GoMP dtd 07.01.2015 with validity of minimum 42 months, so as to cover the guarantee period of the material and also due and faithful execution in accordance with terms and conditions of the order. No relaxations in submission of Security Deposit against the tender/order shall be granted. The Security Deposit shall be deposited by the bidder within 30 days from the date of receipt of the order. However on request of the firm, purchaser may allow for deduction of security deposit from their first supply bills. In case amount of security deposit is higher than the first supply bill then remaining amount of security deposit shall be adjusted from the subsequent supply bill. Payment against supply bill shall not be release without deposition of security deposit by the firm are allowed by the purchaser on request of firm for deduction of security deposit from their supply bills.

The facility of Permanent Security Deposit (PSD) shall not be considered against this tender and the bidders shall have to furnish the requisite Security Deposit as above.

- Demand drafts should be in favour of senior account officer MPPKVVCL, Indore drawn on any Nationalized/scheduled bank at Indore.
- The Bank Guarantee shall require to executed on a non-judicial stamps equal to 0.25% of the amount of BG subject to maximum rupees 25,000/-
- SSI units registered with industries department of Madhya Pradesh (MP) shall require to pay security deposit for only 5% value of the order subject to maximum of Rs 20,000 in cash or DD. This concession is for such SSI units of MP who are doing business up to Rupees 50 Lakhs annually.
- The Purchaser shall adjust/forfeit the SD against liquidate damages on account of non execution or part execution of the orders/poor performances of the supplier.
- Security Deposit shall be returned to the supplier only after due and faithful performance of the order and on expiry of guarantee period provided there is no liability to be recovered against the purchase order placed on them.

- (vi) The purchaser at its discretion may reduce the amount of Security Deposit on prorata basis to the extent for the quantity for which performance guarantee is left.
- (vii) No interest shall be payable by the Purchaser on security deposit submitted by supplier.
- (viii) *As per SFMS platform the bank account details of purchaser needed for preparation of BG are detailed as below*

*Bank Branch Name : State Bank of India, SME Branch, Udyog Bhawan, 96, Pologround, Industrial Estate, Indore (MP)-452015*

*Bank IFSC Code : SBIN0004037*

*Accordingly it has to be ensured carefully that details of the bank guarantee are transmitted through SFMS from issuing bank to the branch mentioned above to authenticate confirmation/genuineness of the same.*

#### **8. PENALTY**

In case of delay in execution of the order or non-execution of the order, the purchaser shall recover from the supplier, a sum equal to 0.5 % of the Ex-works price for the quantity not delivered to Stores for every week of delay. For the purpose of this clause part of a week shall be considered as full week. However, maximum penalty under this clause shall be restricted to 10% of the Ex-works value. This will be without prejudice to other remedies available to the purchaser as per the laws of India, or terms of this Tender.

#### **9. PENALTY FOR BREACH OF PURCHASE ORDER**

Breach of any Terms & Conditions which are included in the any section of the tender documents, or various schedules, annexure, enclosures, appendix etc. which are referred in these sections, shall be deemed as breach of this Purchase Order. In case of breach of this Purchase Order by the bidder / vendor, the Purchaser shall be entitled to forfeit the available security deposit and to realize & retain the same as damages and compensation for the said breach. This will be without prejudice to the right of the Purchaser to recover any further sums as damages, from any sums which are due or which may become due to the contractor by the Purchaser; or otherwise howsoever.

#### **10. PERFORMANCE GUARANTEE OF DISTRIBUTION TRANSFORMERS**

- i. If during the course of 36 months, subsequent to the date of receipt of consignment, at our stores, any of the goods found to be defective in materials or workmanship or develops defects during service, they will have to be replaced / repaired by the suppliers free of all charges. All necessary arrangements on this account will be made by the suppliers.
- ii. The said material if required to be replaced / repaired, shall be collected by the supplier/firm from Area Stores at their own cost and at their own responsibility. These material will like-wise be returned duly repaired / replaced and tested subsequently by the supplier to the destination indicated on freight paid basis at their cost in a reasonable time of **60 days (2 months)** from the date of first intimation made by the concerned Area Stores.
- iii. Unit once failed within guarantee period and returned to Area Stores duly repaired free of charges, shall be guaranteed for a minimum of 12 months or un-expired guarantee period left as on the date of failure of the unit, whichever is later.
- iv. In case unit is subsequently failed within 12 months and the total period of service given by the unit is more than 24 months but less than 36 months, then unit shall have to be repaired again free of charges, by the supplier. In case the unit further fails within 12 months of its last return duly repaired, then the unit shall be repaired again free of charges by the supplier but the guarantee for the repaired unit, in this case, shall be for the un-expired period out of 12 months.

- v. The outage period i.e. period from the date of failure till unit is repaired, shall not be counted for arriving at the guarantee period of 36 months. The period of failure and repairs, thus, shall be excluded from the guaranteed service of 36 months.
- vi. Further, it is clarified that all the charges towards carrying out repairs including packing / forwarding, loading / unloading shall be borne by the supplier. The amount deposited under security deposit clause shall also cover the performance guarantee of repaired / replaced units.
- vii. The actual cost of dismantling and replacement of the failed equipment's with new one may be charged to the supplier's account.
- viii. To &fro transportation cost of such failed equipment's shall be borne by the supplier.
- ix. In the event of the supplier's inability to adhere to the aforesaid provisions, suitable penal action will be taken against them which may inter-alia include debarring of the firm for future business with the Company for a certain period.

#### 11. DEFECTIVE SUPPLIES

- i. The intimation of failure of transformer shall be given by the concerned field offices. Further, on receipt of failed transformer in the Area Stores, the Area Stores shall intimate to the firm about the availability of the WGP defective/failed transformer in Area Stores. The failed Transformers is to be replaced/ repaired by you free of all charges at the earliest but in any case within **two months** from the date of intimation by the concerned Area Stores. In case defective / failed transformers are not replaced / repaired and returned to the area stores within the prescribed period as above, the Purchaser shall recover the cost of the Transformer towards liquidated damages/repairing charges as detailed below:-
- ii. In case the replacement is not made within a period of **two months** from the date of issue of first intimation letter by the concerned Area Store, penalty shall be recovered as agreed towards liquidated damages @ **0.5% of Ex-works price** of any DTR not delivered duly repaired per week or part thereof subject to maximum of **5% of Ex-Works price**. If the supplier fails to supply the duly repaired WGP defective / repaired DTRs within **Four & Half** months from the date of issue of first intimation Letter then the Area Stores at its option will take action as detailed below:-
  - a) **If the WGP failed DTRs are lying with the firm:-** To recover from the supplier the cost of the transformers inclusive of all taxes, freight and price variation paid etc for the DTRs which are lying at the firm's works.
  - b) **If the WGP failed DTRs lying at Area Stores:-**
    - i. If the DTR is got repaired from the other firms then the repairing and other charges paid to the other firm shall be recovered.
    - ii. If the DTR is declared un-repairable by the other repairing unit, then the cost of the transformers inclusive of all taxes, freight and price variation paid etc for the DTR shall be recovered from the supplier.

#### 12. For setting up repairing unit for repairing of BGP failed amorphous core type distribution transformers :-

Offers for Amorphous Core transformer in the tender shall be accepted only subject to the condition that bidders shall have to undertake to repairing- unit in MP state and to repair BGP failed Amorphous Core transformer of bidder available, at the repairing rates prevailing under Rate Contract Award in our company for repair of Amorphous/CRGO-Distribution transformer.

In case transformer offered by firm is with amorphous core then it will be mandatory for firm to furnish an Undertaking as per 'Schedule-V' of the tender specification.

**13. VARIATION IN THE ORDERED QUANTITY**

A tolerance in the ordered quantity will be allowed to the extent of  $\pm 2\%$  (plus minus two percent) and not for each consignment. MRCs shall be issued for actual receipt of quantity only.

**14. LABELLING OF TRANSFORMERS REQUIRED**

On every distribution transformers the following particulars shall be displayed on its label, namely:-

- a) The Logo of the Bureau of Indian Standard.
- b) That the equipment is a distribution transformer.
- c) That it is a oil filled, naturally cooled type.
- d) Name of the manufacturer and brand.
- e) Capacity in KVA as tested.
- f) Voltage is upto 11KV.
- g) Total losses at 50% loading in watts.
- h) Total losses at 100% loading in watts.
- i) Energy Efficiency Level - III.
- j) Model and year of manufacturing.
- k) Bureau's authorization number.

All other details of labeling shall be applicable as per the Bureau of Indian Standard.

**15. SUSPENSION /BANNING OF BUSINESS DEALINGS:-**

Suspension / Banning of Business Dealings with supplier/ contractor/vendor may be resorted to for serious lapses in performance/ misdemeanors, such as abandoning the work without completion, repeated failures in timely execution of the contracts, resorting to unfair means (including false certification), adoption of unethical business practices, furnishing manipulated documents, etc.

**16. INFORMATION OF SUPPLIER OF MAJOR RAW MATERIAL**

The DTR manufacturer has provide information of supplier of all Major Raw material like Core, Transformer Oil, Winding, Tank material after placement of Order on Company's Online Portal for the information of the purchaser.

**17. CONTRACT MANAGEMENT**

Management contract should be strictly done through Online Portal developed by purchaser. The supplier should follow the process of Vendor Registration, eMRC, online offer of material, dispatch of material etc as per provision of Quality Manual and online process developed by Purchaser. Hyperlink of quality manual & online portal is : <https://qcportal.mpcz.in>

-Sd-  
**Chief Engineer (Purchase)**  
**O/o MD, MPPKVCL,**  
**Indore**

## SECTION-V

### PRICE VARIATION (Applicable for CRGO core DTR only)

**PRICE VARIATION CLAUSE FOR ALUMINIUM WOUND DISTRIBUTION TRANSFORMERS COMPLETE WITH ALL ACCESSORIES AND COMPONENTS (For Single & Three phase ratings up to and including 2,500KVA and voltage class up to 33KV) supplied against domestic contracts**

**APPLICABLE W.E.F. 01.09.2021**

This price variation clause is applicable for 'Aluminium Wound Distribution Transformers', with rating up to and including 2,500 KVA and voltage class up to 33 KV supplied against domestic contracts. A separate price variation clause IEEMA/PVC/DIST\_AL\_upto 2.5 MVA/DE/2021 has been evolved for above types of Transformers supplied against export/deemed export contracts under special imprest licensing scheme.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula :-

$$P = \frac{P_0}{100} \left[ 8 + 22 \frac{AL}{AL_0} + 36 \frac{ES}{ES_0} + 12 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 10 \frac{TO}{TO_0} + 7 \frac{W}{W_0} \right]$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P<sub>0</sub> = Price quoted /confirmed.
- AL<sub>0</sub> = LME CSP Average of Aluminium (refer notes). This price is as applicable for the month, ONE month prior to the date of tendering.
- ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes). This price is as applicable for the month, ONE month prior to the date of tendering.
- IS<sub>0</sub> = Price of HR Coil of 3.15mm thickness (refer notes). This price is as applicable for the month, ONE month prior to the date of tendering.
- IM<sub>0</sub> = Price of Insulating Materials (refer notes). This price is as applicable for the month, ONE month prior to the date of tendering.
- TO<sub>0</sub> = Price of Transformer Oil (refer notes). This price is as applicable for the month, ONE month prior to the date of tendering.
- W<sub>0</sub> = All India average consumer price index number for Industrial workers, as published by Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016=100). This index number is as applicable for the month, THREE months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Aluminium (AL<sub>0</sub>), Transformer Oil (TO<sub>0</sub>), CRGO Steel Sheets (ES<sub>0</sub>), HR Coil (IS<sub>0</sub>) and Insulating Material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index number (W<sub>0</sub>) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA (PVC)/PWR\_DIST\_TRF(R-1)/\_\_\_/\_\_\_ ONE month prior to the date of tendering.

- AL = LME CSP Average of Aluminium (refer notes). This price is as applicable for the month, ONE month prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer notes). This price is as applicable for the month, ONE month prior to the date of delivery.
- IS = Price of HR Coil of 3.15mm thickness (refer notes). This price is as applicable for the month, ONE month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes). This price is as applicable for the month, ONE month prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes). This price is as applicable for the month, ONE month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016=100). This index number is as applicable for the month, THREE months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Aluminium (AL), Transformer Oil (TO), CRGO Steel Sheets (ES), HR Coil (IS) and Insulating Material (IM) should be as on 1<sup>st</sup> November 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA (PVC)/PWR\_DIST\_TRF(R-1)/\_\_\_/\_\_\_ ONE month prior to the date of delivery.

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

**NOTES:**

- (a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- (b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier.
- (c) The details of prices are as under:-
1. Price of LME average Cash SELLER Settlement price of primary Aluminium in US\$ per MT as published by London Metal Bulletin (LME) including premium for Aluminium Ingot in US\$ per MT is converted in Indian Rs./MT using exchange rate and adding appropriate customs duty.
  2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage upto 33 KV is the average price as quoted by processing centres of mills and lamination suppliers.
  3. Price of Steel is the average retail price of HR Coil of 3.15mm thickness as published by Joint Plant Committee (JPC) is Rs./MT.
  4. The average price of Insulating Material (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the

month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- (d) Some purchasers are purchasing oil immersed transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:-

$$P = \frac{P_0}{90} \left[ 8 + \frac{22}{AL_0} + 36 \frac{ES}{ES_0} + 12 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 7 \frac{W}{W_0} \right]$$

Where description of P, P<sub>0</sub>, AL, ES, IS, IM, W etc. remains same as mentioned earlier.

-Sd-  
Chief Engineer (Purchase)  
O/o MD, MPPKVCL,  
Indore



## SECTION-VI (A)

### Detailed Specification and Technical Particulars for BIS Certified, Conventional 11/0.433 KV, 100 KVA, Distribution Transformers

- 1. SCOPE:-** The specification covers the design, manufacture, testing and delivery at any of the Area Stores of Discom-WZ in Madhya Pradesh.

The specification covers Oil immersed, Naturally Air cooled (type ONAN), outdoor type, three phase, 50 Hz, 11/0.433-0.250 KV, CORE/SHELL TYPE, step down **BIS Certified Energy Efficiency Level 3 (old) as per IS: 1180 (Part-1): 2014/Level 2 (New) as per amendment-4 March'2021** distribution transformers of capacity 100 KVA. Transformers should be suitable for service under frequency fluctuation of  $\pm 5\%$  and voltage fluctuation  $+ 12.5\% / -12.5\%$  on HV side. The full load rated current on HV & LV side at normal voltage ratio of each rating of transformers shall be as under:-

S. No.	RATING IN KVA	RATED FULL LOAD CURRENT (IN AMPS)	
		HV Side	LV Side
1	100	5.25	133.33

**2. APPLICABLE STANDARDS:-**

- (A) (i) Unless otherwise modified in the specification, the transformers shall comply with the requirement of **IS 1180 (Part 1):2014 [Amalgating IS 1180 (Part 2) :1989, 2026 (latest issue), REC Specification 2/1978 and ISS:2099 (latest issue)] read with amendment number 4- March'2021 with the loss values as prescribed in Clause No.- 9 hereunder.** The bushings used shall conform to ISS: 2099 & 3347 (latest issue) except as modified herein.

**(B) Type:-**

- i) The transformers shall be double wound, three phase oil immersed, oil Natural Air Natural cooled (type 'ONAN'), **CORE/SHELL TYPE** suitable for outdoor installation in tropical climate and shall be insulated with DPC insulation on HV & LV windings. Insulation should be of temperature class as per the temperature rise stipulated in this specification.
- ii) The neutral point of the secondary (LV winding) is intended for solidly earthed system and should be brought out to a separate insulated terminal, enabling external insertion of a current transformer in the earth lead to be connected wherever required.
- iii) The transformers should be manufactured in such away, so that they may be installed at 8 feet center Double pole structure smoothly with maintaining proper electrical clearances.

**(C) Climatic Conditions:**

(i)	Peak outdoor temperature	50°C (minimum)
(ii)	Maximum Oil temperature	95°C (50°C + 45°C) Under Max. temperature, Max. load conditions.
(iii)	Maximum relative humidity	95% (sometime approaches saturation point).
(iv)	Minimum relative humidity	10%
(v)	Average No. of thunder storm days per annum	40 days

(vi)	Average number of rainy days per annum	90 days
(vii)	Number of months of tropical monsoon conditions.	3 Months
(viii)	Average annual rainfall	125 Cms
(ix)	Wind pressure	100 Kg/m <sup>2</sup>
(x)	Altitudes not exceeding	1000 Meters

The transformer shall generally be for use in moderately hot and humid tropical climate, conducive to rust and fungus growth.

### 3. RATINGS:

Primary voltage - 11 KV  
Secondary voltage - 0.433 KV-0.250 KV

The windings of the transformers shall be connected in delta on primary side and star on the secondary side. The neutral of the LT winding shall be brought out to a separate terminal. The vector group shall be Dyn-11.

### 4. OVER LOAD CAPACITY:

The transformers shall be suitable for over-load capacity as per IS: 6600 (latest amendment).

### 5. (a) TEMPERATURE RISE:-

Temperature rise for top oil over an ambient of 50°C should be 35°C max. (Measured by thermometer as per IS-2026). Temperature rise for windings over an ambient of 50°C should be 40°C max. (Measured by resistance in accordance with IS: 2026)

#### (b) Hot Spot Temperature:-

The Hot Spot Temperature at annual weighted average ambient temperature of 35°C shall be 98.2°C (Maximum).

### 6. (a) NO LOAD VOLTAGE RATING:

The No Load Voltage ratio shall be 11000/433-250 Volts.

#### (b) AUDIBLE SOUND LEVELS:-

The maximum Audible sound levels (decibels) at rated voltage and frequency for Distribution transformers shall be below (NEMA Standards):-

S.No.	KVA rating	Audible Sound level (decibels)
1	0-50 KVA	48
2	51-100 KVA	51
3	101-300 KVA	55
4	301-500 KVA	56

### 7. TAPS:

No tapping shall be provided for transformers.

### 8. DESIGN AND CONSTRUCTION:

#### CORE:

- Material:-** High grade Prime CRGO Sheet/Amorphous shall be acceptable.
- For CRGO -**The core shall be stack type (circular) of high grade cold rolled grain oriented annealed steel laminations having low loss and good grain properties, coated with hot oil proof insulation, bolted together and to the frames firmly to prevent vibration or noise. The core shall be stress relieved by annealing under inert atmosphere if required. All core clamping bolts shall be effectively insulated by Hot Oil paint/Varnish and paper. The complete design of core must ensure permanency of the core losses with continuous working of the transformers. The

value of the flux density allowed in the design and grade of lamination used shall be clearly stated.

**For Amorphous:** The core shall be high quality Amorphous ribbons having very low loss formed into wound cores of rectangular shape, bolted together to the frames firmly to prevent vibration or noise. The complete design of core must ensure permanency of the core loss with continuous working of the transformers. The value of the flux density allowed in the design shall be clearly stated in the offer. Curve showing the properties of the metal shall be attached with the offer.

- (c) The transformer core shall not be saturated for any value of V/f ratio to the extent of 112.5% of the rated value of V/f ratio (i.e. 11 KV/50 Hz due to combined effect of voltage and frequency) upto 12.5% on any tapping without injuries heating at full load condition and should not get saturated. The supplier shall furnish necessary design data in support of this situation.
- (d) **Flux Density:-** Flux density in any part of the core and yoke at rated voltage and frequency shall not exceed **1.9 Webbers** per sq. meter with +12.5% combined voltage and frequency variation from rated voltage and frequency.
- (e) **No-Load Current:-**  
No- load current shall not exceed 3% of full load current and will be measured by energizing the transformer at 433 volts, 50Hz on the secondary. Increase of voltage of 433 volts by 12.5% shall not increase the no-load current by 6% (maximum) of full load current.

#### 9. WINDINGS:

- (a) **Materials:** - Double paper cover E.C. Grade Aluminium Conductor shall be used for ratings 100 KVA. and thickness of paper covering must be minimum 0.25 mm for H.V. Windings and minimum 0.36 mm. for L.V. Windings.
- (b) Current Density for HV & LV winding conductor (with reference to the effective cross sectional area of the conductor as per IS) should not be more than 1.6 Ampere per sq. mm. for Aluminium Conductor in any part of the winding.
- (c) LV Winding shall be in even layers with neutral formation at top.
- (d) The HV and LV winding cakes must be Circular in shape for CRGO Core and rectangular for Amorphous Core. Other shape of HV and LV winding i.e. oval, etc. shall not be acceptable.
- (e) **INSULATION LEVELS:**

S. No.	Voltage (KV)	Impulse Voltage (KV Peak)	Power Frequency Voltage (KV)
1	0.433	-	3
2	11	75	28

#### 10. LOSSES AND IMPEDENCE:

The total losses (no load + load losses at 75°C) at 50% & 100% loading for three phase, level 3 (Old)/ Level 2 (New), 100 KVA, 11/0.433 KV distribution transformers at rated voltage, frequency and % impedance at 75°C shall not exceed the values indicated as below:-

*Maximum Guaranteed Total Losses and % Impedance:-*

S.No.	Rating in KVA	Max. Total losses AT 50% loading (Watts)	Max. Total losses AT 100% loading (Watts)	Impedance (%) AT 75°C
1	100	435	1500	4.5

- (i) **Tolerances:-** No positive tolerance shall be allowed on the maximum losses given in the table for both 50% & 100% loading values. In case the actual loss values exceed the above guaranteed values, the transformers shall be rejected out rightly at the risk, cost and responsibility of the supplier.
- (ii) The impedance for 100 KVA Transformers should be as shown above subject to tolerance as per I.S.1180(Part 1):2014 & 2026 (with latest amendments) and shall be calculated at 75°C as per limits specified.

#### 11. INSULATION MATERIAL AND CLEARANCES:

- (i) **Materials:-** Electrical grade insulating craft paper of Triveni/Ballarpur or equivalent make subject to approval of the purchaser. Press board of Senapaty, white lay or Raman make or equivalent subject to approval of purchaser. Perma wood or Haldi wood blocks shall be used for top and bottom yoke insulation.
- (ii) Minimum external clearances after mounting the bimetallic terminal connector on HV and LV side in position on Bushing terminals:

	Phase to Phase	Phase to Earth
HV	255 mm	140 mm
LV	75 mm	40 mm

*Note:-The external and internal clearances should be as per ISS.*

#### 12. TANK:

The transformers tank shall be of robust construction and shall be built of **MIG** welded M.S. Plates. The corners of the tank shall be fully welded at the corners from both inside and outside of the tank to with stand a pressure of 0.8 kg/cm<sup>2</sup> for 30 minutes, to impart proper mechanical strength and to prevent leakage of oil. All joints of tank and fittings shall be oil tight and no bulging shall occur during service. The tank design shall be such that the core and windings can be lifted freely without dismantling L.V. bushing/studs. The tank plate shall be of such strength that the complete transformer when filled with oil may be lifted easily by means of the lifting lugs provided. **Tank inside shall be painted by hot oil resistant yellow paint.** Top cover shall be slightly sloping (difference of heights should be 20 mm + 10%) towards H.V. bushing and edge of top cover plate should be bent downwards and over lapped on the base gasket plate of the tank, so as to avoid entry of water through the cover plate gasket. The width of bend plate shall be 25 mm min. The top cover shall have no cut at point of lifting lug. Shape of the tank shall be rectangular only. No other shape will be accepted.

All the welding operations to be carried out by MIG process. No Horizontal or vertical joint in tank side wall, bottom or top cover plate shall be allowed.

- (i) The tank shall be fabricated by welding at corners. No Horizontal or vertical joints in tank side and its bottom or top cover will be allowed.
  - a) Side wall plate thickness : 3.15 mm
  - b) Top and bottom plate thickness : 5.00 mm
- (ii) For CRGO Core type Transformers Reinforcement of tank sides by providing angle of size 50x50x6mm at one place for rating upto 100 KVA and at two places for transformers above 100 KVA rating. For AMORPHOUS Core type Transformers Reinforcement of tank sides by providing angle of size 50x50x6mm at one place only for rating upto 200 KVA and at two places for transformers above 200 KVA rating. One face of reinforcement angle should be continuous welded with the tank surface such that other side of the angle forms inverted "L". The permanent deflection is not more than 5 mm up to 750 mm. length & **6.5 mm.** for 751 to 1250 mm. length. when transformers tank without oil is subjected to a vacuum of **250 mm. of mercury for 30**

**minutes for transformers up to 200 KVA and 500 mm of mercury for 30 minutes for transformers above 200 KVA and up to including 2500 KVA.**

- (iii) **Lifting lugs:** 2 Nos. welded heavy duty lifting lugs of M.S. Plate 8 mm. thick suitably reinforced by vertical supporting flat welded edgewise below the lug on the side wall, upto the reinforcing angle.
- (iv) **Pulling Lugs :** 4 Nos. of welded heavy duty pulling lugs of M.S. Plates of 8 mm. thick shall be provided on width side to pull the transformers horizontally.
- (v) **Top covers Gasket & Bolts:**
  - a) The Gasket shall be provided in between Top Cover Plate and Tank shall be of 6 mm thick oil resistant Neoprene Rubberized Cork sheets of best quality confirming to IS: 4352, Part -II.
  - b) The gasket in one piece (without any joints) shall be preferable, However in any case there should not be more than 2 dove tail joints on the gasket provided. Gasket with more than 2 dovetail joints or any type of joints in the gasket shall not be acceptable.
- (vi) **Nut Bolt**
  - a) Nut Bolts shall be of size of 1/2" dia with one plain washer and one spring washer shall be used for top cover fixing spaced at 4" apart.
  - b) 2 nos. Nuts & Bolts of 1/2" dia suitable for sealing purpose must be provided at diagonally opposite corner of the tank.
  - c) All bolts/nuts/washers exposed to atmosphere shall be as follows:
    - *Size 12 mm or below – Stainless steel.*
    - *Above 12 mm – Steel with suitable finish like electro galvanized with passivation or hot dip galvanized.*

(vii) The height of the tank shall be such that the minimum clear height upto the Top Cover Plate of 125 mm (with gasket) is achieved from the Yoke.

(viii) The top cover of the main tank shall be provided with an air release plug to enable air trapped within to be released.

13.
  - (a) Heat dissipation by tank walls excluding top and bottom should be  $500\text{W/m}^2$ .
  - (b) Heat Dissipation by fin type radiator made of 1.25 mm thick MS sheet, will be worked out on the basis of manufacturers data sheet. Supplier should submit the calculation sheet.
  - (c) For 100 KVA transformer, 2 Nos. Radiators shall be preferably provided on LV side. If required, the additional radiators may also be provided on HV bushing side with proper electrical clearances to provide better cooling to the transformer. They should be fixed at right angle to the sides and not diagonally.
  - (d) Arrangement for studs provided for fixing of HV bushings should be in diamond shape so that the arcing horns are positioned vertically.

#### 14. CONSERVATOR:

- (i) The total volume of conservator shall be such as to contain 10% quantity of the total oil. Normally 3% quantity of the total oil will be contained in the conservator. Dimension of the conservator shall be indicated in General arrangement drawing.
- (ii) Metal Die cast Oil level indicator shall be provided on the side which is fully covered with fixed flange and will be fixed on the side of rating plate and drain valve.
- (iii) The pipe from the conservator tank connecting to main tank shall be of 30 mm internal dia and shall have a slopping plate so that the oil falling from the pipe shall not fall directly on the active job and shall fall on the side walls only. The pipe should project in the conservator so that its end is approximately 20 mm above the bottom of the conservator. Thus slopping plate should be fitted such that clearance from the yoke is maintained as prescribed i.e. 125 mm.

The conservator tank shall be provided with the drain plug and a filling hole, In addition, the cover plate of the main tank shall be provided with an air release plug.

**15. BREATHER:**

Breather joints will be screwed type. It shall have die-cast Aluminum body with tin container. Volume of breather shall be suitable for 500 gm. of silica gel. After fitting breather, the thread must be sealed with paint/compound to avoid air entry. The Breathers must be as per the technical specifications, Guaranteed Technical Particulars and drawing enclosed.

**16. TERMINALS:**

- (i) Brass rods 12 mm dia for H.T. and L.T. with necessary caps, Nuts, check nuts and plain thick washers of Brass for ratings upto 100 KVA.
- (ii) H.T. and L.T. bimetallic connectors shall be provided with Transformer. The technical specifications, Guaranteed Technical Particulars and drawings of these connectors are as per specification and drawings enclosed. The type test certificates of the connectors being used shall be produced at the time of inspection.

**17. BUSHINGS:**

- (i) For H.V.- 12 KV Bushing will be used and for L.V.- 1.0 KV terminal bushing will be used. Bushings of the same voltage class shall be interchangeable. Bushings with plain sheds as per IS - 3347 shall be mounted on side wall of the tank and not on the top cover. Only continuous sheet metal pocket shall be provided for mounting of all H.V. bushings and the same shall not be fixed on pipes. Sheet metal pocket shall be designed in such a way that all HT bushings shall remain parallel and equidistance all through and inside connections of windings to bushings shall remain within the pocket. The L.V. bushings must be provided on sheet metal pocket and if the same are provided directly on Main tank of the DTR without sheet metal pocket shall not be acceptable. Bushings having type test as per IS-3347 shall only be acceptable.
- (ii) **Internal Connections:** In case of HV winding, all jumpers from windings to bushing shall have cross section larger than the winding conductor (normally, 1.5 times). For copper winding, joints will be made by using silver brazing alloy. For Aluminium winding, L & T Alkapee Aluminium brazing rods with suitable flux will be used or alternatively joints will be made by using tubular connectors properly crimped at three spots. Aluminium brazing rods to be used, ring formed on other end and nut bolting on HV bushing stud. LT star connection shall be made by using 6mm thick Aluminium/Copper Flat and properly brazed or bolted with the crimped lugs on windings by means of plain and spring washers and lock nuts to the flat. Other end of the conductor is brazed on "L" shape 6mm thick Aluminium flat and flat nut bolted with neutral bushing stud. ALTERNATIVELY, for 100 KVA ratings all the three terminals of LV windings together with terminals for neutral bushing shall be properly brazed and then covered with Aluminium tubular sleeve of suitable length and cross sectional area duly crimped in order to provide sufficient strength to the joint. The star connection should be wrapped with cotton/paper tape. The connection for LV winding to bushings shall be made 6mm thick "L" shape Aluminium flats nut bolted with LV Bushing stud. For delta formation on HV side, copper wire having bare dia 1.5 times dia of the HV winding wire should be used. SRBP tube/insulation paper should be used on delta connection and on the portion of HV winding joining to HV bushing.

**18. TANK BASE CHANNEL:**

To be fitted across the length of the transformer - Two channels of 75 mm x 40 mm.

**19. TERMINAL MARKING PLATES AND RATING PLATES:**

The transformers shall be provided with a plate showing the relative physical position of the terminal and their markings engraved on it. The transformers shall be provided with non-detachable rating plate of Aluminium anodized material fitted in a visible position, furnishing the information as specified in IS: 2026. The rating plate shall be embossed /engraved type but not such printing.

Further, MS plate of size 125x125 mm be got welded on width side of the transformer on length of the stiffener angle. On this plate, Name of firm, Order No. & Date, Rating, Serial Number of transformer and date of dispatch should be engraved.

**20. FITTINGS:**

The fittings on the transformers shall be in accordance to the list enclosed with the TS.

**21. TRANSFORMER OIL:**

The transformer shall be supplied complete with first filling of oil and the same shall comply with ISS-335-2018 (5<sup>th</sup> revision) with latest version thereof and ageing characteristics specified. These characteristics are shown in Section-VI (C). Type tests certificate of transformer oil being used shall be produced at the time of inspection.

**22. SURFACE PREPARATION, PAINTING AND FINISHING:**

**A. GENERAL**

- i. All paints, when applied in a normal full coat, shall be free from runs, sags, wrinkles, patchiness, brush marks or other defects.
- ii. All primers shall be well marked into the surface, particularly in areas where painting is evident and the first priming coat shall be applied as soon as possible after cleaning. The paint shall be applied by airless spray according to manufacturer's recommendations. However, wherever airless spray is not possible, conventional spray be used with prior approval of purchaser.

**B. CLEANING AND SURFACE PREPARATION:**

- i. After all machining, forming and welding has been completed; all steel work surfaces shall be thoroughly cleaned of rust, scale, welding slag or spatter and other contamination prior to any painting.
- ii. Steel surfaces shall be prepared by shot blast cleaning (IS9954) to grade Sq. 2.5 of ISO-8501-1 or chemical cleaning including phosphating of the appropriate quality (IS 3618).
- iii. Chipping, scarping and steel wire brushing using manual or power driven tools can not remove firmly adherent mill-scale. These methods shall only be used where blast cleaning is impractical. Manufacturer to clearly explain such areas in his technical offer.

**C. PROTECTIVE COATING:**

1. As soon as all items have been cleaned and within four hours of the subsequent drying, they shall be given suitable anti-corrosion protection.

**D. PAINT MATERIAL:**

- i. Following are the types of paint which may be suitably used for the items to be painted at shop and supply of matching paint to site. Heat resistant paint (Hot oil proof) for inside surface.

- ii. For external surfaces one coat of thermo setting powder paint or one coat of epoxy primer followed by two finish coats of polyurethane base (PU) paint. These paints can be either air drying or stoving.

**E. PAINTING PROCEDURE:**

- i. All prepared steel surfaces should be primed before visible re-rusting occurs or within 4 hours, whichever is sooner. Chemical treated steel surfaces shall be primed as soon as the surface is dry and while the surface is still warm.
- ii. Where the quality of film is impaired by excess film thickness (wrinkling, mud cracking or general softness) the supplier shall remove the unsatisfactory paint coating and apply another coating. As a general rule, dry film thickness should not exceed the specified minimum dry film thickness by more than 25%.

**F. DAMAGE PAINT WORK:**

- i. Any damage occurring to any part of a painting scheme shall be made good to the same standard or corrosion protection and appearance as that was originally applied.
- ii. Any damaged paint work shall be made good as follows:-
  - (a) The damaged area, together with an area extending 25 mm around its boundary, shall be cleaned down to bare metal.
  - (b) A priming coat shall be immediately applied, followed by a full paint finish equal to that originally applied and extending 50 mm around the perimeter of the original damage.
  - (c) The repainted surface shall present a smooth surface. This shall be obtained by carefully chamfering the paint edges before and after priming.

**G. DRY FILM THICKNESS:**

- i. To the maximum extent practicable the coats shall be applied as a continuous film of uniform thickness and free of pores. Overspray, skips, runs, sags and drips should be avoided. The different coats may or may not be of the same colour.
- ii. Each coat of paint shall be allowed to harden before the next is applied as per manufacturer's recommendation.
- iii. Particular attention must be paid to full film thickness at the edges.
- iv. The requirements for the dry film thickness (DFT) of paint and the materials to be used shall be as given below:-

Sl. No.	Paint type	Area to be painted	No. of coats	Total dry film thickness (min.) (microns)
1.	Thermo setting powder paint	Inside	01	30
		Outside	01	60

2.	<b>Liquid paint</b>			
	a) Epoxy (primer)	Outside	01	30
	b) P.U. Paint (Finish coat)	Outside	02	25 each
	c) Hot oil paint/Varnish	Inside	01	35/10

**H. TESTS FOR PAINTED SURFACE:**

- (i) The painted surface shall be tested for paint thickness.
- (ii) The painted surface shall pass the cross hatch adhesion test and impact test as per the relevant acceptance tests and Salt spray test and Hardness test as type test as per the relevant



ASTM standards.

**Note:-** Supplier shall guarantee the painting performance requirement for a period of not less than 5 years.

# **I. COLOUR:-**

The colour of the finishing coats of the transformer with conservator tank shall be:

Type of Transformer	Colour
CRGO Transformer	Traffic GREEN colour conforming to <b>Shade No.267 of IS: 5 of 2007</b> (colours for ready mixed paints).
Amorphous Transformer	Aircraft BLUE colour conforming to <b>Shade No. 108 of IS: 5 of 2007</b> (colours for ready mixed paints)

- Colour of conservator tank shall be white.

## **23. TEST & TEST CERTIFICATES:**

The following routine tests are required to be carried out on the transformers:-

### **A. Test**

- (i) **Routine Tests:-** Before dispatch each of completely assembled transformer shall be subjected at the manufacturers works to the following routine tests in accordance with the details specified in IS:2026.
  - (a) Measurement of winding resistance.
  - (b) Ratio, polarity and phase relationships.
  - (c) Impedance voltage.
  - (d) No load losses and no load current.
  - (e) 50% Load losses & 100% Load loss.
  - (f) Insulation resistance.
  - (g) Separate source voltage withstand.
  - (h) Induced over voltage with stand.
  - (i) Pressure Test.
  - (j) Oil Leakage Test.
- (ii) **Unbalanced current test:** The value of zero sequence current in the star winding shall not be more than 2% of the full Load current in accordance with 26(d).
- (iii) **Pressure and vacuum test:** The tank shall be fixed with a Dummy cover with all fittings including bushing in position and be subjected to following pressure/vacuum created inside the tank:-
  - a. 80 kpa for 30 minutes
  - b. A vacuum corresponding to **250 mm. of mercury for 30 minutes for transformers up to 200 KVA and 500 mm of mercury for 30 minutes for transformers above 200 KVA and up to including 2500 KVA.**

Permanent deflection of flat plate, after pressure has been released, shall not exceed the values given below:-

<u>Length of plate</u>	<u>Deflection</u>
Upto 750 mm	5 mm
751 to 1250 mm	6 .5mm

Supplier should ensure that each and every fabricated tank is subjected to pressure & vacuum test at his works and confirmation to this effect is submitted in the test certificate along with routine test certificate while offering the material for final/pre- dispatch inspection.

- (iv) **Vector Group Test:-** All the transformers must be complied with requirements to confirm the Vector Group of Dyn-11.

**B. Over Fluxing of Core:-**

Transformer shall be subjected to test for over fluxing of core, wherever required by the Purchaser's inspecting officer.

**C. Test for spill current in neutral:-**

The test will comprise of measuring current between shorted secondary phases and neutral on applying impedance voltage at primary winding. The value should not exceed 2% of full load current.

**24. TESTING FACILITIES:**

The tenderer should have adequate testing facilities for all routine and acceptance tests and also arrangement for measurement of losses, resistance etc.

**25. RANDOM TESTING OF TRANSFORMER:-**

As per clause 6 of "Section-IV Special Terms and Conditions of Purchase."

**26. TEST REPORTS ON THE ANALYSIS OF RAW MATERIALS:**

The supplier shall furnish details of source(s) of raw-materials, test certificates and report on the analysis of electrolytic Copper/Aluminium used for the winding and the steel used for core, insulation material and also other bought out items from sub-suppliers.

**27. DRAWINGS:**

The dimensional drawing (General arrangement drawing), internal construction drawing, Core assembly and flux density calculation sheet, name plate drawing of DTR & Silica gel Breathers for 500 gm and HT & LT bimetallic connectors shall be submitted with the tender. Guaranteed and other technical particulars of the transformers should also be submitted in A-4 size for our approval.

-Sd-

**Chief Engineer (Purchase)  
O/o MD (WZ), MPPKVCL,  
Indore**

## **SECTION-VI (B)**

### **TECHNICAL SPECIFICATIONS AND GTP OF TYPE II INSULATING TRANSFORMER OIL**

Insulating oil for Transformers & Switchgears shall be as per ISS-335-2018 (5<sup>th</sup> revision) incorporating up to date amendment and additional characteristics as incorporated below.

It will be pure hydrocarbon mineral oil, clean and sufficiently free from moisture and of other foreign matter likely to impair its properties.

The test results for the characteristics of the oil when tested in accordance with ISS 335-2018 (5<sup>th</sup> revision) incorporating up to date amendment and additional characteristic required by us shall be as hereunder: -

Sr. No.	Property	Test Method	Limits (Type II Transformer Oil) as per ISS-335-2018 (5th revision)
<b>A Function</b>			
i)	Viscosity at 40°C	IS 1448 (Part 25)	15mm <sup>2</sup> /s, <i>Max</i>
ii)	Viscosity at 0°C <sup>1)</sup>	IS 1448 (Part 25)	1800 mm <sup>2</sup> /s, <i>Max</i>
iii)	Viscosity at -30°C <sup>1)</sup>	IS 1448 (Part 25)	—
iv)	Viscosity at -40°C <sup>2)</sup>	IS 16084	—
v)	Pour point	IS 1448 (Part 10/Sec 2)	-10°C, <i>Max</i> To be based on LCSET refer Table 1 <sup>1)</sup> of IS
vi)	Water content	IEC 60814	30 mg/kg <sup>3)</sup> /40 mg/kg <sup>4)</sup> , <i>Max</i>
vii)	Breakdown voltage	IS 6792	30kV/70 kV <sup>5)</sup> , <i>Min</i>
viii)	Density at 20°C	IS 1448 (Part 16)	0.895 g/ml, <i>Max</i>
ix)	DDF at 90°C	IS 16086	0.005, <i>Max</i>
x)	Particle content	IS 13236	No general requirement <sup>10)</sup>
<b>B Refining/stability</b>			
xi)	Appearance	—	Clear, free from sediment and suspended matter
xii)	Acidity	IEC 62021-1	0.01 mg KOH/g, <i>Max</i>
xiii)	Interfacial tension	ASTM D971	No general requirement <sup>6)</sup>
xiv)	Total sulphur content	ISO 14596 or ASTM D4294 <sup>12)</sup>	No general requirement
xv)	Corrosive sulphur	DIN 51353	Not corrosive
xvi)	Potentially corrosive sulphur	IS 16310	Not corrosive
xvii)	DBDS	IS 16497 (Part 1)	Not detectable (<5 mg/kg)
xviii)	Inhibitors according to IS 13631/IEC 60666 ;	IS 13631	(U) Uninhibited oil: not detectable (< 0.01%)
xix)	Metal passivator additives according to IS 13631/IEC 60666	IS 13631	Not detectable (<5mg/kg), or as agreed upon with the purchaser
xx)	Other additives		---
xxi)	2-Furfural and related compounds content	IS 15668	Not detectable (< 0.05 mg/kg) for each individual compound

<b>C Performance</b>			
xxii)	Oxidation stability	IS 12422 (Method C) Test duration <sup>11)</sup> (U) Uninhibited oil: 164 h	For oils with other antioxidant additives and mental passivator Additives
a)	• Total acidity <sup>9)</sup>	1.9.4 of IS 12422	1.2 mg KOW/g, <i>Max</i>
b)	• Sludge <sup>9)</sup>	1.9.1 of IS 12422	0.8%, <i>Max</i>
c)	• DDF at 90°C <sup>9)</sup>	1.9.6 of IS 12422	0.500 <sup>9)</sup> , <i>Max</i>
xxiii)	Gassing tendency	IEC 60628, Method A	No general requirement <sup>8)</sup>
xxiv)	ECT	---	No general requirement <sup>8)</sup>
<b>D Health, Safety and Environment (HSE)</b>			
xxv)	Flash point	IS 1448 (Part 21)	135°C, <i>Min</i>
xxvi)	PCA content	IP 346	3%, <i>Max</i>
xxvii)	PCB content	IS 16082	Not detectable (< 2 mg/kg)
1) This is the standard LCSET for a transformer oil and can be modified depending on the climatic condition of each region. Pour point should be minimum of 10°C below LCSET. 2) Standard LCSET for low temperature switchgear oil. 3) For bulk supply 4) For delivery in drums and IBC. 5) After laboratory treatment. 6) Where it is used as general requirement, a limit of minimum 40 mN/m is recommended. 7) The supplier shall declare the generic type of all additives and their concentrations in the case of antioxidant additives. 8) To be agreed upon between supplier and purchaser. 9) At the end of oxidation stability tests. 10) Particle content in drums at the delivery of the oil can be agreed between supplier and customer based on a statistical reference at delivery. 11) A DDF of maximum 0.020 after 2 h of oxidation ( <i>see</i> IS 12422 or IEC 61125) can be used for application in EHV instrument transformers and bushings. 12) In case of any dispute, ISO 14596 should be used.			

-Sd-  
**Chief Engineer (Purchase)**  
**O/o MD (WZ), MPPKVVCL,**  
**Indore**

## **SECTION-VI (C)**

### **TECHNICAL SPECIFICATION FOR BIMETALLIC CLAMPS**

#### **1. SCOPE**

The specification covers the design, manufacture, testing and delivery at any of the Area Stores of Discom-WZ in Madhya Pradesh.

Sl. No.	Rating in KVA	Rated full load current (in amps)	
		on HT side	on LT side
1	100	5.25	133.33
2	200	10.5	266.67
3	315	16.53	420.00

#### **2. MATERIAL**

The material of bimetallic Clamps shall be of Aluminium and Brass. The brass used should be of high strength & corrosion resistant. The connector should be design for the purpose of the connecting together two dissimilar materials for preventing electrolytic corrosion.

All Aluminium and Aluminium alloys used in the manufacture of bimetallic clamps should conform to [IS-5082/1998](#). The brass used should be of high strength & corrosion resistant. The connector shall be smooth and free from cavities, blow holes and such other defects which would be likely to cause them to be unsatisfactory in service.

The connector shall be so designed and proportioned that they are capable of safely withstanding stresses to which they may be subjected(including those due to short-circuit and climatic conditions) and that the effects of vibration both on the conductor and the connector itself are minimized. They shall be designed, manufactured and finished so as to avoid sharp radii of curvature, ridges and excrescences which might lead to localized pressure on or damage to the conductor in service.

The finish should be natural and free from flaws, rust, crevices, cracks & other defects harmful for the joints.

All the edges and corners shall be rounded off to avoid corona effect due to sharpness. The Bimetallic joints should be protected from the effects of electrolytic action. The resistance of the clamps shall be very low. These should be free from burrs.

Sufficient contact pressure should be maintained at the joint by the provision of the required number of bolts or other fixing arrangements. But the contact pressure should not be so great as to cause relaxation of the joint by cold flow. The joint should be such that the pressure is maintained within this range under all conditions of service. To avoid excessive local pressure, the contact pressure should be evenly distributed by use of pressure plates/ washers or suitable saddles of adequate area and thickness.

All parts of connectors shall either be inherently resistant to atmospheric corrosion or suitably protected against corrosion, both during storage and in service.

The temperature rise of bimetallic Clamp above a reference ambient temperature of 400 C when carrying rated current shall not exceed 450 C.

The bolts should be of galvanized mild steel. The fit joint between Al. alloy & brass component of the connector shall be high pressure.

3. **TENSILE STRENGTH:** -The tensile strength shall be 60 Mpa (min).

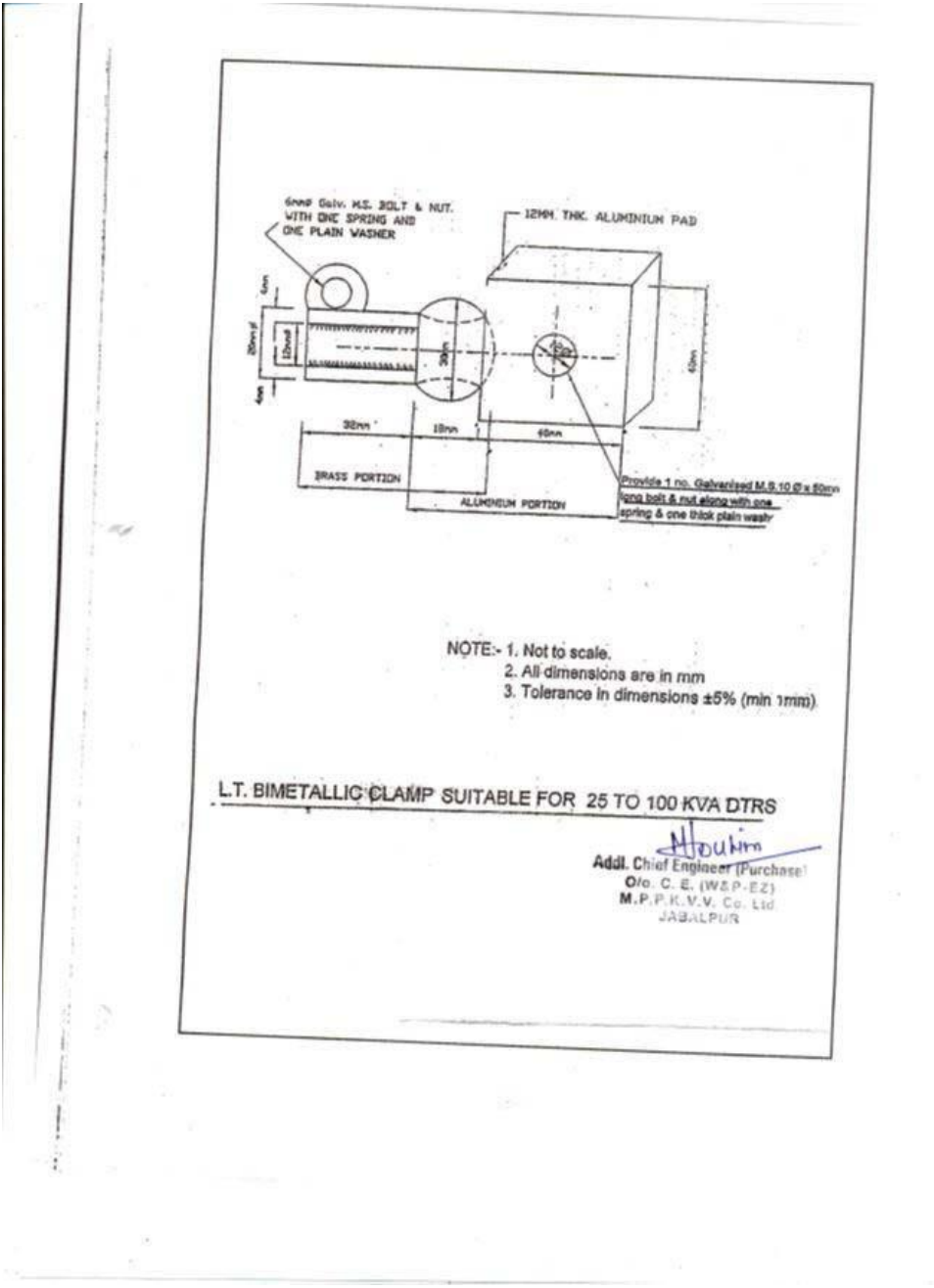
4. **Dimension:-** Dimension shall be as given in the drawing enclosed.

5. **MARKING**

The connectors shall be indelibly marked with rated current or any identifying mark to enable full particulars of the connector.

Encl.: Drawings - 2 pages

-Sd-  
**Chief Engineer (Purchase)**  
**O/o MD (WZ), MPPKVVCL,**  
**Indore**







**SECTION-VI (D)****TECHNICAL SPECIFICATION OF SILICA GEL BREATHERS FOR DISTRIBUTION TRANSFORMERS**

1. The Silica Gel Breather required for distribution transformers shall be Aluminium die casted with tin container containing 500 /1000 gms. of Silica Gel conforming to ISS 3401/1992 with its latest amendments and it should be suitable for connecting to ¾" pipe thread.
2. The general dimensions/features of required Silica Gel Breathers are indicated in the enclosed drawing. Silica Gel Breathers shall conform to the requirements of the enclosed drawing.
3. **Silica Gel:-** The Silica Gel required for distribution transformers shall be conforming to ISS 3401/1992 with its latest amendments.

The material shall be solid with grainy porous structure free from extraneous impurities. The indicating type gel should be odorless, non toxic & non corrosive with stable chemical and thermal characteristics. The inter connected pores form a vast surface area; silica gel should absorb moisture 40% or more of its weight at 100% humidity.

Bulk Density:-The bulk density of the material shall be more than 0.6 gm/ml.

Particle Size & Colour: - The material shall be blue in colour and its size should be from 4 to 6 mm.

Loss on Drying: - The material when tested according to the method prescribed in ISS shall not lose more than 5% of its mass.

Adsorption capacity: - The material when tested according to the method prescribed in ISS 3401-1992 shall adsorb minimum 27% of moisture on the basis of its mass.

pH Value: -The pH of aqueous extract of the material when determined by the method prescribed in ISS 3401-1992 shall be not more than 8 and not less than 3.5.

Loss on attrition: - When subjected to the test according to the method prescribed in aforesaid ISS not more than 2.5% of the material shall pass through the test sieve.

Chemical Requirements: - The gel shall also comply with the requirement prescribed in the ISS 3401-1992.

**4. Constructional Features for Silica Gel Breathers**

S.No.	Particulars	Specification	
1	Rating	Suitable for DTRs up to 200 KVA rating	Suitable for DTRs above 200 KVA rating
2	Pipe Connection BSP Thread	¾ "	¾ "
3	Material of Body	Aluminium Alloy (Grade LM-6)	
4	Silica gel content (gms.)	500	1000

S.No.	Particulars	Specification	
1	Rating	Suitable for DTRs up to 200 KVA rating	Suitable for DTRs above 200 KVA rating
5	Height' in mm	250	290
6	Dia in mm	84	116
7	Window hole Dia in mm	20	20
8	Oil content in ml	50	200

9	Type of Die casting	Pressure Die casting	Pressure/ gravity Die casting
10	Type of Painting	Powder coating	

**Tolerances applicable**

- (i) Overall length  $\pm 10$  mm
- (ii) Overall width  $\pm 2$  mm
- (iii) Silica Gel  $\pm 50$  gms.

**5. Material of breather Body & Parts**

- (i) Fabricated from high quality aluminum alloy LM-6 and powder coated for corrosion resistance.
- (ii) Special grade nitrile gasket to ensure water proof and air tight joints.
- (iii) The glass/transparent polycarbonate window for visualizing Silica Gel & oil level should be fixed by screws to the main body with gasket to prevent leakage of oil.

**6. Following details should be provided on name plates**

Following details should be provided on each breather.

- (i) Name of manufacturer and type of materials.
- (ii) Mass of

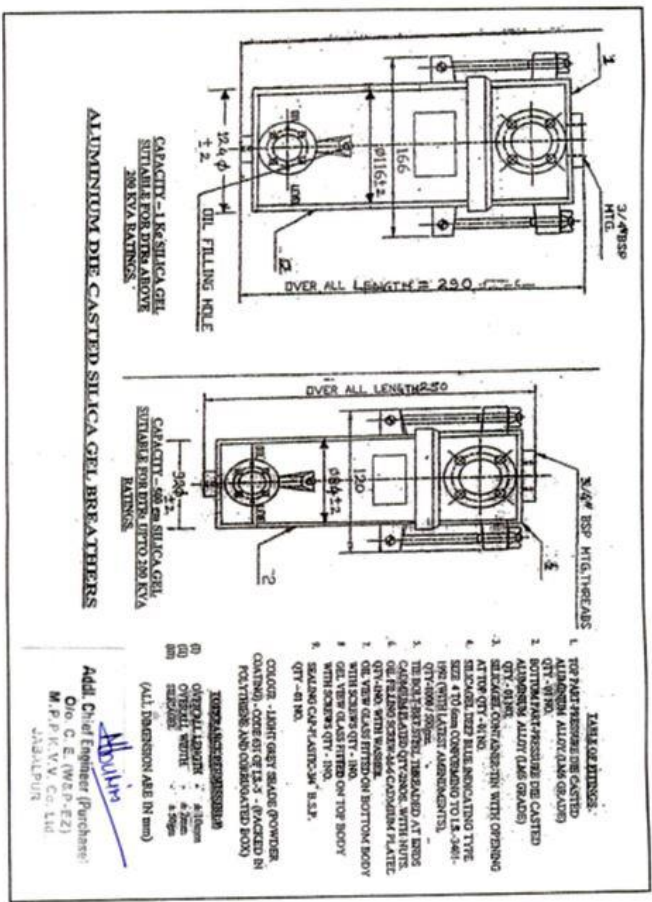
silica gel Encl.:

Drawing - 1

page

-Sd-  
**Chief Engineer (Purchase)**  
**O/o MD (WZ), MPPKVCL,**  
**Indore**

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## **SECTION-VI (E)**

### **SCHEDULE OF FITTINGS FOR DISTRIBUTION TRANSFORMERS**

The fittings on the transformers shall be as under:

1. Rating and diagram plate - 1 No.
2. Earthing terminals with lugs - 2 Nos.
3. Lifting lugs 8 mm thick reinforced by welded plates edge wise below the lugs upto reinforcing angle of the tank. - 2 Nos. Upto 100 KVA
4. Oil filling hole with cap on conservator - 1 No.
5. Conservator with drain plug - 1 No.
6. Thermometer pocket fitted with captive screwed top to prevent the ingress of water. - 1 No.
7. Aluminium Die cast Silica gel breather with tin container (500 gms. capacity upto 100 KVA and 1000 gms. for 200, 315 & 500 KVA.) (As per specifications & drawings enclosed with the TS) - 1 No.
8. Platform mounting channel - 2 Nos.  
(with hole suitable for axle of roller for transformers of 200 KVA and above rating)
9. Oil level gauge indicating three position of oil marked as below :
  - a - Minimum (-)5<sup>0</sup> C
  - b - 30<sup>0</sup> C

c - Maximum 98° C

10. (a) Bushings :

H.T. - 3 Nos.

L.T. - 4 Nos.

Each bushing should be provided with 3 Nos. of Brass/ tinned Copper nuts and 2 plain thick tinned washers for connecting terminal.

(b) LT bushing Protection Box - Not Applicable

11. Radiator

(i) LV bushing side - 2 Nos.

(ii) H.V. bushing side - 2 or 3 Nos. as required.

12. Arcing horn for H.T. Bushings - 6 Nos.

13. Pulling lugs - 4 Nos.

14. Drain valve with spot welded - Not applicable  
metallic cover to be provided

15. Explosion vent in case of transformers of - **Not applicable**  
200 KVA and above.

16. Rollers for 200 KVA and above - **Not applicable**

17. Air release plug (15mm) on top cover of the tank - 1 No.

18. Filter valve - 32mm dia for 200 KVA & above - 1 No.

19. Off circuit tap changing switch with indicator - **Not Applicable**  
handle and locking device with tap ranging from  
(+) 3% to (-) 9% in steps of 3% on HV side for HV  
variation. Direction of rotation marked for 315 KVA  
& above ratings only.

20. Top cover lifting lugs - 2 Nos.

21. Bimetallic connectors / Heavy Duty Copper Lugs

(for L.V. studs of 25 KVA DTRs only for all ratings

to be fitted on the studs

(As per specifications & drawings enclosed):

(i) HV (Bimetallic connectors) - 3 Nos.

(ii) LV (Heavy Duty Copper Lugs) - 4 Nos.

for 25 KVA DTRs only

(iii) L.V. (Bimetallic Connectors)

for other ratings expect 25 KVA DTRs.

**Note:** Transformers provided with Aluminium stems, caps, Nuts & Washers will not be accepted.

-Sd-  
**Chief Engineer (Purchase)**  
**O/o MD (WZ), MPPKVVCL,**  
**Indore**

# PART-2

**Schedule-I**  
**Price & Quantity Schedule**

Sr. No.	Particulars	HSN/SAC Code	Confirm Quoted for "CRGO" OR "Amorphous" Core	Unit	Tender Qty.	Qty offered	Ex works Price (Rs. / unit)	Freight & Insurance Charges (Rs./ unit)	Total (Rs./ unit)	GST on total			Total GST amount (INR)	Total FOR Destination price inclusive of Ex works Freight & Insurance Charges, GST (Rs./ unit)
										CGST	SGST	IGST		
										%	%	%		
1	2	3		4	5	6	7	8	9=7+8	10	11	12	13	14= 9+13
1	BIS Certified Energy Efficiency Level - 3 (Old)/Level - 2 (New), Conventional 11/0.433 KV, 100 KVA, Distribution Transformer as per technical specification of the tender			Nos	1006									

**NOTE:-**

- GST Registration No. of the bidder ..... (Enclosed copy of Registration Certificate)**
- GST Registration Number of M.P. Paschim Kshetra Vidyut Vitaran Company Ltd., Indore is **23AADCM7397N1ZU..**
- The bidder shall fill either rate/value of CGST & SGST or IGST as applicable.
- The prices are to be filled in strictly in this format only.
- Responsibility of any lack of clarity leading to confusion will rest with bidders.
- Rates in various tapering steps shall not be considered.
- The UNIT of measurement for quoting rate of the item specified in the above Price Bid schedule should be noted carefully before quoting rate(s). The unit shall remain un-changed & applicable as per the above schedule and quoted rate shall be considered only as per the above specified unit(s) for purpose of comparison as well as placement of order. The bidder shall be bound to accept the same; else EMD shall be forfeited and if EMD is already exempted, amount equivalent to the EMD required in the tender will have to be deposited to MPPKVVCL Indore otherwise such firm shall be kept disqualified for TWO (2) future tenders of MPPKVVCL for same/similar item(s), reserving rights of other actions as per provisions of the tender & law of contracts.
- It is to certify that the relevant portion of input tax credit has been accounted for while quoting the above prices.
- New bidders are permitted to enter only HSN Code, Core Material, offered quantity, Freight & Insurance Charges & % GST in price bid and strictly enter **"0.00"** against Ex-works Price.



**SCHEDULE – II****(Undertaking)**

**The following declaration/Undertaking must be submitted by all the bidders on non-judicial stamp paper worth Rs.500/- duly notarized**

I ..... proprietor / partner / Director / Authorized Signatory of M/s..... having its Registered Office/Head Office at ..... Give an undertaking ;

1. That, M/s ..... have participated against TS No. .... due for opening on ..... For supply of .....
2. That, I have gone through the tender document and aware with all the requirement of the tender specification.
3. That, the profile of M/s ..... is as under:-
  - (a) Address of factory/works- .....
  - (b) GST Registration No. of the firm - .....
  - (c) PAN No. of the firm - .....
  - (d) Entrepreneurs Memorandum Number (If registered under MSMED Act 2006) – .....
  - (e) E-mail address of the firm - .....
  - (f) Mobile No. - .....
  - (g) Name & Branch address of bidder banker - .....
  - (h) Bank Account of the firm - .....
  - (i) IFSC Code of the branch for RTGS - .....
4. That the details of owner / partners / Directors (in case of Company) of the bidding firm is as under:-

Sr. No.	Name of Owner / Partners / Directors	Address of Owner / Partners / Directors	Mobile Numbers of Owner/Partners/Directors	PAN Number of Owner / Partners / Directors

5. That I/We undertake that we have participated in the tender as ..... (New / Regular bidder, whichever is applicable).
6. That as against tendered quantity the bidding firm have submitted their bid for ..... nos. (indicated quoted quantity)
7. That I/We confirm that there is no deviation with the commercial terms & conditions and technical requirement of the Tender Specification.
8. That the bidding firm M/s..... have supplied following items to the different SEBs/DISCOMs/Power Utilities or through their Turnkey Contractors in any state of country in past 60 months from the date of opening of tender :-

S N	Period of supply	Name of item	Name and address of purchaser	PO No. and date	Qty. under order	Qty. supplied
1	2	3	4	5	6	7

(No. of rows may be inserted as require)

9. That, the information given by us as above is true and correct and the same has been extracted from the relevant POs/Invoice/MRCs/Receipted Delivery Challan maintained by the firm.

10. That the MPPKVVCL will have full right to cancel the order, if awarded and forfeit the EMD / Performance SD as applicable in event if finds that the information given at Sl. No. 8 is misleading or false, even at a later date i.e. after opening of Price Bid/Award of Order.

11. **“Regarding Conflict of Interest ”**

I ..... sole proprietor / partner / Director ..... of  
M/s,.....undertake that :

I am not interested as a Proprietor and/or Partner and/or Director in any other  
party/firm/company participating in tender No. \_\_\_\_\_ of Purchaser due for opening on  
\_\_\_\_/\_\_\_\_/\_\_\_\_ for procurement of \_\_\_\_\_

12. **“Regarding Black listing/ Debarring of the firm ”**

We hereby undertake and submit the declaration that our firm/company is not debarred/black listed for future business with Discoms of M.P./MPSEB/other successor Companies formed after restructuring of MPSEB.

In case, at any stage if the above declaration is found false or incorrect, the Purchaser shall be free to take any punitive/legal action against us, as may be deemed fit , which shall be acceptable/binding on us and the consequences shall be to our account.

13. **“Regarding information/details given”**

I,....., the Sole Proprietor / Partner(s)/ Director(s) of  
M/s....., participating in the bidding process against tender  
No..... undertake that I am not interested as a proprietor and/or  
partner in any other firm and/or Director in any other company participated in the tender for  
procurement of....., and specifically undertake that our firm/Company:

- (i) Not follow & shall not follow unethical/unfair/fraudulent practice in any manner.
- (ii) Has no conflict of interest with any bidder/firm participating in the tender.
- (iii) Not concealing any material information.
- (iv) Not given any misleading fact or statement in the offer/bid submitted against the tender.
- (v) Has not been debarred/ blacklisted for future business with Purchaser/other Discom of MP.

14. Regarding Type Test report

We confirmed that type test report enclosed with our proposal is not issued by;

- i. Our own NABL Accredited Testing Lab; or
- ii. By any of our sister concern's Lab having commercial relations with the us; or

15. **“Regarding Serving Officer(s) or Employee(s) of the MP Discom ”**

We confirm that no Serving Officer(s) or employee(s) of the MPDiscom is/are Proprietor/Partner(s)/Director(s) of the firm/company or having controlling shares or has controlling interest in the firm. It is also confirmed that no Proprietor/Partner(s)/Director(s) of the firm/company has any close relationship (spouse, son, daughter, father, mother or brother) with any serving Officer(s) or Employee(s) of the MPDiscom.

Further, the **MPPKVVCL., Indore** will have full right to cancel the Purchase Order, if awarded and forfeit the EMD/Bid Security & Performance Guarantee as applicable in the event of the above condition/situation is observed, even at a later date i.e. after opening of Price Bid/award of Purchase Order.

SIGNATURE OF TENDERER  
NAME IN FULL  
DESIGNATION / STATUS IN THE FIRM  
COMPANY SEAL

**SCHEDULE-III**  
**ON THE LETTER HEAD OF THE CHARTED ACCOUNTANT FIRM**  
**CERTIFICATE**  
**TO WHOM SO EVER IT MAY CONCERN**

This is to certify that "M/s \_\_\_\_\_"PAN : \_\_\_\_\_ GSTIN : \_\_\_\_\_ having its registered / Head office at \_\_\_\_\_ (hereinafter referred to as Firm) have participated in the Tender No. \_\_\_\_\_ of MPPKVVCL, Indore.

In Terms of Clause \_\_\_\_\_ of the Tender Conditions the Financial Particulars of the Entity participating in the above said tender are as follows"(all the Figures are in Rs.)

- a) Since the NIT of the Tender has issued on ..... and hence for the Financial Criteria the latest Financial Year is .....
- b) Total ANNUAL TURNOVER of the Entity for the last five financial years is Rs. \_\_\_\_\_ :
- c) Annual turnover of the entity for the last financial year is Rs \_\_\_\_\_
- d) WORKING CAPITAL of the Entity as per the Balance Sheet for the last financial year / bank utilization certificate-Fund Based (not more than 30 days from the date of opening of tender) is Rs \_\_\_\_\_ .
- e) The firm fulfill the financial criteria as required under Clause-1.3, Section-II of the tender.
- f) The above said information is true and correct to the best of my knowledge and belief and the Information has been extracted from the Books of Accounts maintained by the entity.

I am aware that the Company (MPPKVVCL, Indore) is relaying this certificate as a valid proof of Financial Capability of the Company.

For, \_\_\_\_\_  
Chartered Accountant Firm,  
FRN No. \_\_\_\_\_

CA. \_\_\_\_\_  
(Designation \_\_\_\_\_)

M. No. \_\_\_\_\_  
UDIN No. \_\_\_\_\_

Date : \_\_\_\_\_  
Place: \_\_\_\_\_

Signature and Seal of Tenderer

**Note:**

- (i) *The document should be signed by the proprietor / Partner/ Director/ Authorized signatory of the Company.*
- (ii) *The information given at (b), (c) & (d) above must appear in the website of the Institute of Chartered Account against the UDIN Number as given above.*

**SCHEDULE-IV****GUARANTEED TECHNICAL PARTICULARS FOR BIS CERTIFIED, ENERGY EFFICIENCY LEVEL 3, CONVENTIONAL 11/0.433KV, 100 KVA, DISTRIBUTION TRANSFORMERS**

Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
1	System Voltage (Max)	<----- 12 KV ----->
2	Rated Voltage HV	<----- 11 KV ----->
3	Rated Voltage LV	<---- 433 – 250 V ---->
4	Continuous Max. Rating (KVA)	
5	Normal Ratio of Transformation	- 11/0.433 KV -
6	Method of Connection (Vector Group)	- Dyn 11 -
7	Max. Hot spot Temp.( Average ambient temperature of 35°C).	98.2°C (Maximum)
8	Max. oil temp. (Ambient air temp. taken as 50°C ).	85°C (Maximum)
9	Max. winding temp. (ambient air temp. taken as 50°C ).	90°C (Maximum)
10	Flux Density	
11	Type of transformer	Core/Shell type
12	<p>CORE :</p> <p>(a) Core Material &amp; Grade</p> <p>(b) No. of steps</p> <p>(c) Dimensions of core steps</p> <p>(d) Core diameter</p> <p>(e) Core length (leg centre)</p> <p>(f) Window height</p> <p>(g) Insulation between bottom of core &amp; Base channel</p> <p>(h) Core height (inclusive of Base channel and insulation in between)</p> <p>(i) Gross core area</p> <p>(j) Effective core area</p> <p>(k) Nos. &amp; Dimensions of steel channel used for clamping of core</p> <p>(l) Size &amp; No. of :</p> <p>(i) Core bolts</p> <p>(ii) Tie rods</p> <p>(m) Insulation of core bolts</p> <p>(i) Core bolts</p> <p>(ii) Tie rods</p> <p>(n) Painting of core channel, Core bolts &amp; Tie Rods</p> <p>(o) Whether top yoke is cut or holes are made for LV connections. If yes, whether enforcement is done.</p>	

Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
	(p) Size of support channel for core base (cut channels are not acceptable). (q) Weight of core only (without Channels etc.) (r) Whether yoke construction is in one piece: (i) Top (ii) Bottom	
13	Magnetizing current (% of rated current): (a) at 90% Voltage (b) at 100% Voltage (c) at 112.5% Voltage (d) Tolerance	
14	Current Density HV winding LV winding	
15	WINDINGS (a) Material (i) HV winding (ii) LV winding (b) Size of winding wires for H.T. L.T. (c) Type of insulation and minimum thickness of paper insulations (i) HV winding (DPC/min. Thickness -0.25mm) (ii) LV winding (DPC/min. Thickness -0.36mm)	E.C. Grade Aluminium  ---DPC--/____mm. ---DPC--/____mm.
	(d) Internal & external diameter of (i) HV coil (ii) LV coil (e) No. coils/phase (i) HV (ii) LV (f) No. of turns per coil (i) HV (ii) LV (g) Method of connection of winding ends to bushing terminals: (i) For HV - The one end of HV winding brazed with copper wire and other end of copper wire bolted with HV stud by forming eye loop and using washer of proper size. (ii) For LV - Other end of LV winding crimped with	

Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
	<p>Aluminium/Copper lugs and then bolted with LV stud terminals with proper size of washers.</p> <p>(iii) Method of forming of Star Connection:- All the three ends of LV windings crimped with proper size of Aluminium lugs and then bolted with Aluminium/copper Flat of 6mm thick &amp; cotton tape wrapped over it.</p> <p>(h) Resistance/phase at 75°C</p> <p>(i) HV</p> <p>(ii) LV</p> <p>(i) Height of coils:-</p> <p>(i) HV coil</p> <p>(ii) LV coil</p> <p>(j) Wire used for delta formation:-</p> <p>(i) Material</p> <p>(ii) Diameter (Min 1.5 time of the dia of HV winding wire)</p>	--- Electrolytic copper ---
16(a)	Maximum Total losses at 50% loading at normal ratio at 75°C (KW) (Max.)	
16(b)	Maximum Total losses at 100% loading at normal ratio at 75°C (KW) (Max.)	
17	Tolerance on losses at normal ratio.	No positive Tolerance permissible
18	Impedance voltage at normal ratio between HV & LV windings at 75°C. Tolerance	
19	Impulse test level of HV & LV windings at 1.2/50 micro second wave.	
20	<p>INSULATION OF MATERIAL:- Insulation material used &amp; its thickness:</p> <p>a) Between core &amp; LV</p> <p>b) Spacers</p> <p>c) Inter layer</p> <p>d) Between HV &amp; LV winding</p> <p>e) Between phases</p> <p>f) End insulation</p>	

Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
21	<p><b>CLEARANCES:-</b></p> <p>a) LV to Core (Radial)</p> <p>b) Between HV &amp; LV (Radial)</p> <p>c) Phase to phase</p> <p>between HV conductor (with providing min. of 2x1 mm Press Board to cover the rods)</p> <p>d) Between winding &amp; body</p> <p>i) Length wise</p> <p>ii) Breadth wise</p> <p>e) End insulation</p> <p>f) Thickness of locking spacers between HV coils</p> <p>g) Axial wedges between HV &amp; LV coils</p> <p>h) Clearance between :</p> <p>(i) top cover and top of yoke for 100 KVA transformers.</p> <p>(ii) top cover and top most live part of tap changer for 200 KVA and above</p> <p>i) No. of radial spacers per phase between HV coil</p> <p>j) Size of duct between LV &amp; HV</p>	

Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
22	<p>TANK</p> <p>(a) Shape</p> <p>(b) Thickness of tank sheets:</p> <p>(i) Top &amp; Bottom</p> <p>(ii) Side walls</p> <p>(iii) Collar</p> <p>(c) Internal dimension of tank:</p> <p>(i) Length (l)</p> <p>(ii) Breadth (b)</p> <p>(iii) Height (h1)</p> <p>(h2)</p> <p>(Difference between h1 &amp; h2 should be 20mm)</p> <p>(d) Gasket used between top cover and tank</p> <p>Material (Must be of best quality and oil resistant)</p> <p>Thickness</p> <p>Whether the gasket is joint-less and in one piece</p> <p>(e) Pulling lugs</p> <p>(i) No.</p> <p>Thickness</p> <p>Position of fixing</p> <p>(f) Lifting Lug</p> <p>No.</p> <p>Thickness</p> <p>(g) Reinforcement of tank sides by providing angle of size 50x50x6mm at one/two places for transformers upto 100 KVA rating.</p> <p>(h) Whether the value with spot welded Metallic Covert provided?</p>	
	(j) Whether all the transformer tanks which are to be supplied are complied with the pressure and vacuum tests as per technical specifications.	
	<p>(k) Top cover of the tank provided with the:-</p> <p>(a) Air release plug – 1 no.</p> <p>(b) Thermometer pocket – 1 no.</p> <p>(c) Top cover lifting lugs – 2 nos.</p>	
23	<p>BUSHING:</p> <p>(a) Characteristics:</p> <p>(i) Dry flash over voltage</p> <p>HV</p> <p>LV</p>	



Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
	<p>(ii) Wet flash over voltage HV LV</p> <p>(iii) Impulse flash over voltage HV LV</p> <p>(b) Material of the complete bushing studs:- (i) Bushing rods (HV/LV). (ii) Caps, Nuts, Chuck nuts and washers (HV/LV).</p> <p>(c) Size of bushing rods (i) HV side (ii) LV side</p> <p>(d) Mounting on side walls</p> <p>(e) Whether sheet metal pocket used for mounting HV Bushings (pipe are not acceptable)</p> <p>(f) External clearance of bushing terminals after providing HT &amp; LT bimetallic connectors on the bushing rods.</p> <p>(i) Phase to phase HV LV</p> <p>(ii) Phase to earth HV LV</p> <p>(g) Arrangement of studs provided for fixing of HV Bushings should be in diamond shape so that the arcing horns are positioned vertically</p>	
24	<p>Bimetallic Connectors at HV side and LV Side</p> <p>(a) Normal current rating</p> <p>(i) HV</p> <p>(ii) LV</p> <p>(b) Short time current rating for HV &amp; LV</p>	<p>---50Amps--- ---50 Amps---</p> <p>---200Amps-- --630Amps---</p> <p>----3000 Amps one second----</p>

Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
	(c) Tensile strength for HV & LV both  (d) Whether HT & LT Bimetallic connectors are provided as per specification, GTP & drawings enclosed.	-----110 Kg-----
25	BREATHER (i) Whether Breathers are provided as per specifications, GTP & drawings enclosed (ii) Make (iii) Capacity	
26	CONSERVATOR: (a) Dimensions (b) Volume (c) Internal Diameter of pipe used for connecting conservator and tank (d) Please confirm whether pipe projected into the conservator 20 mm above the bottom of conservator (e) Whether arrangement made so that oil does not fall on the active parts.	
27	RADIATORS: (a) Nos. of Radiator (b) Nos. of fins per radiator (c) Size of fin (d) Position of fixing (on LV bushing side)	
28	Oil to be filled in:- (a) Grade Characteristics as per Section-VI (C) (b) Transformer Tank (i) Volume (ii) Weight (c) Conservator (i) Volume (ii) Weight (d) Total oil filled (i) Volume (ii) Weight	----- Type-II Transformer Oil -----
29	Overall dimension of Transformer: (a) Length (b) Breadth (c) Height	
30	Engraving of Sl. No. & name of firm :	

Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
	(a) On bottom core clamping channel (b) On Side wall & top cover of tank	
31	MS Plate of size 125x125mm welded on side wall stiffener of tank with engraving of : i) Name of the firm ii) Rating iii) Serial Number iv) Order No. & date v) Date of dispatch	
32	Weight of windings only (Dry/without oil soaking) a) HV b) LV	
33	Weight of core & winding assembly with core channels, core bolts, Tie rods, insulation etc. complete.	
34	Un-tanking weight of core & winding (including oil absorption)-	
35	Weight of tank & fittings including radiators, conservators etc.	
36	Weight of complete transformer including fittings & oil [Sl.No. 35 + 37 + 30 d(ii)]	
37	Dry film thickness of Paint:- (i) Liquid Paint:- (a) Primer zinc chromatic (outside) - 2 coats (b) PU Paint (Finish coat)(Outside) 2 coats (c) Hot Oil paint/Varnish (Inside) one coat	
38	Colour of transformer:- (i) Conservator tank  (ii) Main tank & radiator	Colour of conservator tank shall be white  <b><u>For CRGO-</u></b> Traffic GREEN colour conforming to <b>Shade No.267 of IS: 5 of 2007</b> (colours for ready mixed paints) <b><u>Amorphous Transformer-</u></b> Aircraft BLUE colour conforming to <b>Shade No. 108 of IS: 5 of 2007</b> (colours for ready mixed paints)
39	Reference of valid permission of BIS, to display Energy Efficiency Level 3 on DTRs	

Sl. No.	Particulars	BIS CERTIFIED, ENERGY EFFICIENCY Level - 3 (Old)/Level - 2 (New) 11/0.433 KV, 100 KVA DTR
	(i) Permission letter no & date. (ii) Valid upto (iii) Whether permission to display Energy Efficiency Level 3 on offered DTRs (Please indicate rating of DTRs)	
40	Reference of type test reports: (a) Short circuit test (i) Report no.& date (ii) S. No. of DTR. (b) Impulse test (i) Report no. & date. (ii) S. No. of DTR. (c) Temperature rise test (i) Report no. & date. (ii) S. No. of DTR. (d) Pressure test (i) Report no. & date. (ii) S. No. of DTR.	
41	Top cover and side walls of the transformer tanks should be welded with "U" clamps on four corners and centre of both length sides.	

**REMARKS:**

1. Firm should furnish Original type test reports of the transformer manufactured as per Technical Specifications for verification purpose.
2. The proforma should be filled up for the type tested design and submitted within 05 days positively along with drawings for approval. The drawings & GTP be legible and neatly drawn.

Signature of Representative of the  
firm with seal  
Name :-  
Designation :-

**SCHEDULE-V****Undertaking for setting up repairing unit for repairing of BGP failed Amorphous Core Distribution Transformer**

The undersigned (authorized signatory on behalf of the bidding firm M/s....., who has offered to supply BIS Certified amorphous core distribution transformers of ..... rating(s) having Energy Efficiency level '2' as per amendment no. 4 of IS:1180 (part 1): 2014 with latest amendment against Tender Specification XXXXX, hereby undertakes that-

- 1) in the event of purchase order, the aforesaid bidding firm will set up a repairing unit for repair of amorphous core distribution transformers (failed or gone defective within or beyond guarantee period) in the MPWZ within a period not exceeding three years from the date of placement of purchase order.

The undersigned further undertakes that aforesaid firm's failure to set up the repairing unit as committed above, will amount to breach of the terms of the purchase order and MPWZ will be at liberty to forfeit BG / SD-cum-performance guarantee furnished by the firm against the purchase order in addition to debarring of the firm for future business with MP Discoms.

- 2) to repair our earlier supplied BGP failed Amorphous Core Distribution transformers available with MPWZ at the repairing rates prevailing under Rate Contract Award in MPWZ Company for repair of Amorphous/CRGO-Distribution transformers.

Present rates of repairing are given below and same will be acceptable to us: -

**SCHEDULE OF PRICES FOR REPAIRING OF 16 KVA TO 200 KVA DTR**

Sr. No.	Item	Unit	Lump-sum unit repairing cost for each capacity (Rs./DTR)									
			16 KVA		25 KVA		63 KVA		100 KVA		200 KVA	
			Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)	Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)	Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)	Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)	Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Lump-sum charges for repairing of transformers which shall include To & Fro transportation charges upto 50 KMs and opening of X-mer cover, un-tanking core & coil assembly, cleaning, washing of dust & dirt etc. from all parts including core tank, cooling tubes, radiators, removal of parts needs replacement providing identical new HV coils, reconditioning of all LV coils, replacement of HV/LV bushing, metal parts, silica gel breather, HT/LT Bi-metallic clamps, oil level gauge, tapping switch (if available in defective unit) drain/ filter valve, air release plug & any other parts required replacement minor repair of radiator tank & conservator (if required), painting from inside & outside to make Transformer as good as new.												
<b>1</b>	Lump-sum unit cost for repairing of Transformers as per complete scope of work as detailed above & in the tender including To & Fro transportation charges upto 50 KMs but exclusive of Transformer Oil and GST (in Rs. per DTR)	Rs. Per DTR	5800.00	5500.00	15440.00	16190.00	18600.00	18900.00	21350.00	23480.00	23350.00	26160.00
i	GST @ 18%	in Rs.	1044.00	990.00	2779.20	2914.20	3348.00	3402.00	3843.00	4226.40	4203.00	4708.80
(A)	<b>Total</b>		<b>6844.00</b>	<b>6490.00</b>	<b>18219.20</b>	<b>19104.20</b>	<b>21948.00</b>	<b>22302.00</b>	<b>25193.00</b>	<b>27706.40</b>	<b>27553.00</b>	<b>30868.80</b>

For supply of BIS Certified Energy Efficiency Level - 3 (Old)/Level - 2 (New), Conventional 11/0.433 KV, 100 KVA, Distribution Transformer

Tender Specification No. MD/WZ/06/PUR/1962 due on 30.06.2026

Sr. No.	Item	Unit	Lump-sum unit repairing cost for each capacity (Rs./DTR)									
			16 KVA		25 KVA		63 KVA		100 KVA		200 KVA	
			Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)	Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)	Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)	Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)	Non-Star (only new design)	BEE Level-1 (Old)/Level 2 (Old)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
	Lump-sum charges for repairing of transformers which shall include To & Fro transportation charges upto 50 KMs and opening of X-mer cover, un-tanking core & coil assembly, cleaning, washing of dust & dirt etc. from all parts including core tank, cooling tubes, radiators, removal of parts needs replacement providing identical new HV coils, reconditioning of all LV coils, replacement of HV/LV bushing, metal parts, silica gel breather, HT/LT Bi-metallic clamps, oil level gauge, tapping switch (if available in defective unit) drain/ filter valve, air release plug & any other parts required replacement minor repair of radiator tank & conservator (if required), painting from inside & outside to make Transformer as good as new.											
2	Lump sum Cost of Oil	Rs. Per DTR	4500.00	4300.00	7850.00	8800.00	12811.00	6950.00	15500.00	17000.00	27000.00	28500.00
i	GST @ 18%	in Rs.	810.00	774.00	1413.00	1584.00	2305.98	1251.00	2790.00	3060.00	4860.00	5130.00
(B)	<b>Total</b>		<b>5310.00</b>	<b>5074.00</b>	<b>9263.00</b>	<b>10384.00</b>	<b>15116.98</b>	<b>8201.00</b>	<b>18290.00</b>	<b>20060.00</b>	<b>31860.00</b>	<b>33630.00</b>
(C)	Total Repairing Cost (C=A+B)		12154.00	11564.00	27482.20	29488.2	37064.98	30503.00	43483.00	47766.40	59413.00	64498.80
3	Credit towards scrap of old HV (Aluminium) Coils, defective / damaged fittings to be retained by the repairer.	Rs. Per DTR	950.00	920.00	1220.00	1340.00	2601.00	3000.00	2940.00	3250.00	3180.00	3580.00
i	GST @ 18%	in Rs.	171.00	165.60	219.60	241.20	468.18	540.00	529.20	585.00	572.40	644.40
(D)	<b>Total</b>		<b>1121.00</b>	<b>1085.60</b>	<b>1439.60</b>	<b>1581.20</b>	<b>3069.18</b>	<b>3540.00</b>	<b>3469.20</b>	<b>3835.00</b>	<b>3752.40</b>	<b>4224.40</b>
4	Net repairing cost (C-D)	Rs. Per DTR	<b>11033.00</b>	<b>10478.40</b>	<b>26042.60</b>	<b>27907.00</b>	<b>33995.80</b>	<b>26963.00</b>	<b>40013.80</b>	<b>43931.40</b>	<b>55660.60</b>	<b>60274.40</b>

#### SCHEDULE OF PRICES FOR DTR UNECONOMICAL TO REPAIR

Sr. No.	Particulars	Unit	16 KVA	25 KVA	63 KVA	100 KVA	200 KVA
1	In case X-mer is found to be uneconomical at firm's works for the reason specified in tender document lump-sum rate (exclusive of taxes) for handling labour and to & fro transportation of un-repaired unit to concerned A/s.	Rs. Per X-mer	750.00	1000.00	1200.00	1500.00	1650.00
i	<b>GST @ 18%</b>	<b>in Rs.</b>	135.00	180.00	216.00	270.00	297.00
	<b>Total</b>		<b>885.00</b>	<b>1180.00</b>	<b>1416.00</b>	<b>1770.00</b>	<b>1947.00</b>

**Note: Net repairing cost (excluding GST) is VARIABLE as per PV formula given in TS-1620. The rates of un-economical transformers shall be FIRM.**

- 3) Whenever Discom will issue next Rate Contract for repairing of Amorphous/CRGO-Distribution transformers, the rates discovered in next RCAs will be accepted by us for repairing of DTRs.

NAME IN FULL & SIGNATURE

DESIGNATION AND SEAL OF THE FIRM

**SCHEDULE – VI:**

**CHECK LIST**

**(TO BE KEPT IN THE COVER PART-B, “COMMERCIAL/TECHNICAL BID” & UPLOAD  
ONLINE ALSO)**

<b>Sr.No.</b>	<b>Check List Item</b>	<b>Options</b>	<b>Answer</b>
1.	Whether “Earnest Money Deposit” of specified amount is kept in a sealed Cover-1& the same is uploaded online.	Yes/No	
2.	Whether NSIC/SSI/MSME/DIC Registration Certificate is attached online	Yes/No	
3.	Whether appropriate type test certificate/BIS license as required is attached	Yes/No	
4.	Whether all schedules except schedule-I (Price bid) duly filled & signed with supporting document are enclosed	Yes/No	
5.	Schedule I: Price bid is duly filled in and digitally signed by the signatory authority & uploaded online in Cover-3	Yes/No	
6.	The schedule-V i.e. Check List uploaded online in Cover-2	Yes/No	