Tender	TTPSODL/OT/2021-22/099			
Packag	Rate Contract for Supply of 1Phase and 3Phase AL Wound and CU Wound Distribution Transformer of various rating at TPSODL			
Note :	The said format to be used only for Technical Pre-Bid Query. Any Commercial Query has to be strictly in Format B2 Format for Commercial Pre-Bid Query and sent seperately			
	Format to be used for query regarding Technical Pre-Qualifcation Requirement, Safety Pre-Qualifcation Requirement, Technical Set of Documnt			
	Pre-Bid Query has to be sent in editable Excel file fomat only			
	Pre-Bid Query has to be sent through e-mail in TPSODL E-Tender System			

Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
1	2	3	4	5
1	ENG-ELC-050 / Clause No.5.1 / Page No.7	Clause No.:5.1: CORE I. Transformer core shall be wound type, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere, if required) to relieve stresses.	We wish to bring to your kind notice that, The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Specification to be complied
2	ENG-ELC-050 / Clause No.5.3 / Page No.9 ENG-ELC-050 / Clause No.4(60 &61) / Page No.6	clause 5.2 Winding I. Primary and secondary windings shall be constructed from high- conductivity (aluminium conductors), Double Paper Covered (DPC) aluminium conductor of grade 2(Al 99.6%) as per IS 5484 with min. 25% overlap per layer of paper. Epoxy diamond dotted Kraft paper to be used for DPC conductor all rating. 4(60).HV winding Insulation - Double Paper Covered with min 25% overlap per layer of Paper 4(61). LV winding Insulation - Double Paper Covered with min 25% overlap per layer of Paper	We wish to bring to your kind notice that, Option for Super enamel covering is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). Kindly allow us for both super enamel/paper covering.	Specification to be complied
3	ENG-ELC-050 / Clause No.5.4 / Page No.11 ENG-ELC-050 / Clause No.4(70&71) / Page No.6	5.5 TRANSFORMER TANK AND TANK CONSTRUCTION I.The transformer tank shall be hermetically sealed, round type and shall be built up of electrically tested welded mild steel plates of thickness 5 mm (min.) for bottom, top, and 3.15 mm (min) for the sides for all the three ratings of distribution transformers. 4. GENERAL TECHNICAL REQUIREMENTS: 70. Top and Bottom - 5 mm (Minimum) 71. Side - 3.15 mm (Minimum)	We wish to bring to your kind notice that, Kindly Allow us for Top & Bottom Plate:2.5 mm Min.(Sheet thickness tolerance applicable as per IS 1852) and For sides:2.2mm Min.(Sheet thickness tolerance applicable as per IS 1852). And with the above thickness we will meet the pressure and vacuume test as per technical specification. Kindly Confirm.	Specification to be complied
4	ENG-ELC-050 / Clause No.5.5 / Page No.12	5.6 Lifting Lugs & Mounting Lugs	We Wish to bring to your kind notice that, Kindly Provide the Information about Lifting Lugs (Enclosed type) Construction. Kindly Confirm.	Refer to clause no 5.6 Lifting Lugs & Mounting Lugs
5	ENG-ELC-050 / Clause No.5.10 / Page No.17	5.10 Make of the Major component & Material A.Copper	We wish to Bring to your kind notice that, As per Technical Specification Clause no.:5.3 the winding material is Aluminium Wound. But as per Clause no.:5.10. Winding Material is mentioned as Copper. Kindly Confirm the Winding material.	As per specification LV termination is with cable box & HV termination is with bare bushing & Transformers for 1Ph 16kVA, 25kVA & 3Ph, 25kVA, 63kVA & 100kVA, Winding material shall be Aluminium and for all other ratings Material shall be Copper.
6	ENG-ELC-050 / Clause No.5.20 / Page No.24 ENG-ELC-050 / Clause No.5.9 / Page No.15	As per clause No.:5.20. Fittings j) Terminal Connector For HT & Palm Connector For LT side. 5.9 LV BOX with MCCB	We Wish to bring to your kind notice that,as per clause no.5.9 we are providing LV side cable box. Hence palm connector is not applicable. Kindly confirm.	Lugs may be considered
7	ENG-ELC-050 / Clause No.5.9 / Page No.16	As per clause no.:5.9: LV box with MCCB: 4. The Single phase MCCB Shall be provided with suitable size of Al bus bar w.r.t minimum current density (calculated) of 1A/ sq. mm inside for further distribution of supply.	We wish to bring to your kind notice that, MCCB Al Bus Bar Current density is 1A/sq.mm Minimum is mentioned. Al Bus bar Maximum current density Should be 1A/sq.mm. Kindly Amend this Clause as Above.	Maximum Current Density for AL Bus bar shall be Maxm 1A/Sq.mm.
8	ENG-ELC-050 / Clause No.4 / Page No.4	4. GENERAL TECHNICAL REQUIREMENTS: 1. Rated voltage HV (kV) - 12 3. Service voltage (KV max.) - 11	Kindly confirm the HV Rated voltage is 11kV or 12kV?	Rated voltage HV (kV) - 12 Service voltage (KV max.) - 11
9	ENG-ELC-050 / Clause No.4 / Page No.5 ENG-ELC-050 / Clause No.5.1 / Page No.7	4. GENERAL TECHNICAL REQUIREMENTS: 30. No Load Current at Rated Voltage - 2% 31. No Load Current at 112.5 % Rated Voltage - 5% Clause No.:5.1: CORE X. The No-load current shall not exceed 3% of the Full Load Current and will be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5% of rated voltage shall not increase the no load current by 5% maximum of full load current.	We wish to bring to your kind notice that, these two clauses are contradicting to each other and as per Clause No 8.9.2 of IS: 1180 (Part-I): 2014, No load current shall not exceed 3 percent of full load cunient and will be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5 percent of rated voltage shall not increase the no-load current by 6 percent maximum of full load current. Kindly confirm.	Please refer Clause No. 4.General Technical Requirements
10	ENG-ELC-050 / Clause No.5.1 / Page No.7	Clause No.:5.1: CORE I. Transformer core shall be wound type, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere, if required) to relieve stresses.	We wish to bring to your kind notice that, The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Specification to be complied
11	ENG-ELC-050 / Clause No.5.3 / Page No.9 ENG-ELC-050 / Clause No.4(60 &61) / Page No.6	clause 5.2 Winding I. Primary and secondary windings shall be constructed from high- conductivity (aluminium conductors), Double Paper Covered (DPC) aluminium conductor of grade 2(Al 99.6%) as per IS 5484 with min. 25% overlap per layer of paper. Epoxy diamond dotted Kraft paper to be used for DPC conductor all rating. 4(60).HV winding Insulation - Double Paper Covered with min 25% overlap per layer of Paper 4(61). LV winding Insulation - Double Paper Covered with min 25% overlap per layer of Paper	We wish to bring to your kind notice that, Option for Super enamel covering is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). Kindly allow us for both super enamel/paper covering.	Specification to be complied
12	ENG-ELC-050 / Clause No.5.4 / Page No.11 ENG-ELC-050 / Clause No.4(70&71) / Page No.6	5.5 TRANSFORMER TANK AND TANK CONSTRUCTION I.The transformer tank shall be hermetically sealed, round type and shall be built up of electrically tested welded mild steel plates of thickness 5 mm (min.) for bottom, top, and 3.15 mm (min) for the sides for all the three ratings of distribution transformers. 4. GENERAL TECHNICAL REQUIREMENTS: 70. Top and Bottom - 5 mm (Minimum) 71. Side - 3.15 mm (Minimum)	We wish to bring to your kind notice that, Kindly Allow us for Top & Bottom Plate:2.5 mm Min.(Sheet thickness tolerance applicable as per IS 1852) and For sides:2.2mm Min.(Sheet thickness tolerance applicable as per IS 1852). And with the above thickness we will meet the pressure and vacuume test as per technical specification. Kindly Confirm.	Specification to be complied
13	ENG-ELC-050 / Clause No.5.5 / Page No.12	5.6 Lifting Lugs & Mounting Lugs	We Wish to bring to your kind notice that, Kindly Provide the Information about Lifting Lugs (Enclosed type) Construction. Kindly Confirm.	Refer to clause no 5.6 Lifting Lugs & Mounting Lugs
14	ENG-ELC-050 / Clause No.5.10 / Page No.17	5.10 Make of the Major component & Material A.Copper	We wish to Bring to your kind notice that, As per Technical Specification Clause no.:5.3 the winding material is Aluminium Wound. But as per Clause no.:5.10. Winding Material is mentioned as Copper. Kindly Confirm the Winding material.	Transformers for 1Ph 16kVA, 25kVA & 3Ph, 25kVA, 63kVA & 100kVA, Winding material shall be Aluminium and for all other ratings Material shall be Copper.
15	ENG-ELC-050 / Clause No.5.20 / Page No.24 ENG-ELC-050 / Clause No.5.9 / Page No.15	As per clause No.:5.20. Fittings j) Terminal Connector For HT & Palm Connector For LT side. 5.9 LV BOX with MCCB	We Wish to bring to your kind notice that,as per clause no.5.9 we are providing LV side cable box. Hence palm connector is not applicable. Kindly confirm.	Lugs may be considered
16	ENG-ELC-050 / Clause No.5.9 / Page No.16	As per clause no.:5.9: LV box with MCCB: 4. The Single phase MCCB Shall be provided with suitable size of Al bus bar w.r.t minimum current density (calculated) of 1A/ sq. mm inside for further distribution of supply.	We wish to bring to your kind notice that, MCCB Al Bus Bar Current density is 1A/sq.mm Minimum is mentioned. Al Bus bar Maximum current density Should be 1A/sq.mm. Kindly Amend this Clause as Above.	Maximum Current Density for AL Bus bar shall be Maxm 1A/Sq.mm.
17	ENG-ELC-050 / Clause No.4 / Page No.4	4. GENERAL TECHNICAL REQUIREMENTS: 1. Rated voltage HV (kV) - 12 3. Service voltage (KV max.) - 11	Kindly confirm the HV Rated voltage is 11kV or 12kV?	Rated voltage HV (kV) - 12
18	ENG-ELC-050 / Clause No.4 / Page No.5 ENG-ELC-050 / Clause No.5.1 / Page No.7	4. GENERAL TECHNICAL REQUIREMENTS: 30. No Load Current at Rated Voltage - 2% 31. No Load Current at 112.5 % Rated Voltage - 5% Clause No.:5.1: CORE X. The No-load current shall not exceed 3% of the Full Load Current and will be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5% of rated voltage shall not increase the no load current by 5% maximum of full load current.	We wish to bring to your kind notice that, these two clauses are contradicting to each other and as per Clause No 8.9.2 of IS: 1180 (Part-I): 2014, No load current shall not exceed 3 percent of full load cunient and will be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5 percent of rated voltage shall not increase the no-load current by 6 percent maximum of full load current. Kindly confirm.	Please refer Clause No. 4.General Technical Requirements

19	ENG-ELC-047 4(20) / page no.6 Clause No	"As per Clause No.4.0 General Technical Requirements: Normal flux density (at rated voltageand frequency) – 1.6T 21.Maximum flux density (Increase of +12.5% combined voltage and frequency variation from rated voltage and frequency) - 1.9T"	We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla)	Specification to be complied
20	ENG-ELC-047 / page no.8 Clause No.5.1	Clause No.:5.1(I): CORE I Transformer core shall be stack type, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere, if required) to relieve stresses.	We wish to bring to your kind notice that, The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Specification to be complied
21	ENG-ELC-047 / page no.9 Clause No.5.1	Clause 5.1(x): CORE The No load current shall not exceed 2% of the Full Load Current and will be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5% of rated voltage shall not increase the no load current by 5% maximum of full load current	We wish to bring to your kind notice that as per Clause No 6.9.2 of IS: 1180 (Part-I): 2014, the No load current up to 200kVA shall not exceed 3% of full load current and will be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5% of rated voltage shall not increase the no load by 6 percent maximum of full load current. Hence, we request you to take note of the above and amend the this clause inline with IS 1180 (Part-I) : 2014.	Specification to be complied
22	ENG-ELC-047 / page no.10 Clause No.5.2	Clause 5.2 Winding Primary and secondary windings shall be constructed from high-conductivity(aluminium conductors), Double Paper Covered (DPC) aluminium conductor of grade 2(Al 99.6%) as per IS 5484 with min. 25% overlap per layer of paper. Epoxy diamond dotted Kraft paper to be used for DPC conductor all rating.	We wish to bring to your kind notice that, Option for Super enamel covering is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). Kindly allow us for both super enamel/paper covering.	Specification to be complied
23	ENG-ELC-047 No.5.7/ page no.10 Clause	Clause no.5.7 For Pole mounted transformers: For Plinth mounted transformers:	Kindly confirm requirment of transformers i.e. plinth mounted or pole mounted	Plinght Mounted - For 250KVA and above Ratings & Pole mounted -Below 250KVA
24	ENG-ELC-047 No.5.12 / page no.19 Clause	Clause no.5.12 EXPLOSION VENT	We wish to bring to your kind notice that As per IS:1180(Part-I) latest amendment clause No.20 .. Explosion vent or Pressure relief device (for sealed type transformers (for all ratings) and non sealed type transformers (for ratings above 200kVA). Hence for ratings below 200kVA Explosion vent is not required .Kindly Confirm	Specification to be complied
25	ENG-ELC-047 No.5.12 / page no.21&22 Clause	Clause No.5.17(4)- Conservator 4.The connecting pipe of the conservator shall be so fitted to transformer tank that the pipe can be detached from the tank.	We wish to bring to your kind notice that, Detachable conservator is mostly provided for power transformer .We will provide the welded type conservator. Kindly confirm	Detechable pipe will be required for 250 kVA & Above Rating Transformers
26	ENG-ELC-047 / page no.21&22 Clause No.5.1	Clause no. 5.20 DRAIN VALVE AND FILTER VALVE	We wish to bring to your kind notice that As per IS:1180(Part-I) latest amendment clause No.20 . Fittings,filter valve (for ratings above 200kVA).and drain cum sampling valve shall be provided for ratings above 500kVA. Hence for ratings below 200kVA filter valve and drain valve is not required .Kindly Confirm	Specification to be complied
27	ENG-ELC-048/Clause No.4/Page no.6	As per Clause No.4.0 General Technical Requirements: 22.0 Normal flux density (at rated voltage and frequency) – 1.6T 26.Maximum flux density (Increase of +12.5% combined voltage and frequency variation from rated voltage and frequency) - 1.9T	We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla)	Specification to be complied
28	ENG-ELC-048/Clause No.5.1/Page no.7	As per clause No.5.1 -Core 1. Transformer core shall be stack type, 2D, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere, if required) to relieve stresses..	The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Specification to be complied
29	ENG-ELC-048/Clause No.5.17 & 5.28 / Page no.30	As per Clause no.5.17(7), VII. For DT up to 1600kVA, the conservator to be fitted with float switches such that it shall operate/open contact when the oil level in conservator goes below -5 degree C /Minimum mark. The float switch shall be with normally closed type. This contact shall be wired up in auxiliary terminal box. As per Clause no.5.28(24) XXIV. Magnetic Oil level Gauge (>1600kVA),	We wish to bring to your kind notice that, these two clauses are contradicting to each other .Kindly confirm requirement of MOG rating wise.	Specification to be complied
30	ENG-ELC-048/Clause No.5.2 & 5.3 / Page no.10 & 11	5.2 WINDING CONNECTIONS I. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper. 5.3 INSULATING PAPER AND INSULATING PRESSBOARD II. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper.	We wish to bring to your kind notice that, transformers with foil winding has low axial forces during short circuit resulting into better short circuit withstand capability when compared to strip windings. And also there will be no shearing stress between turns. Kindly allow to use Foil winding.	Specification to be complied
31	ENG-ELC-048/Clause No.5.16/ Page no.25	5.16 OIL Note: Default Oil shall be Mineral oil only if not specified / asked for other oil.	No special note was found. Hence it is presumed that the oil is mineral oil. All parameters as per clause no. 5.16 – Mineral Oil.	Specification to be complied
32	ENG-ELC-048/Clause No.4/ Page no.6	4. GENERAL TECHNICAL REQUIREMENTS: 28. Metering CT for LV side 5.12 METERING CURRENT TRANSFORMERS (This shall be decided during tender by user group.)	Kindly confirm the requirement of Metering CT's	Energy meter is not in the scope of supplier.However LT Metering ring CT should be provided in Cable LV BOX for Phase & Neutral.Enclosure shall be provided for CT secondary Terminal. However the complete design for CT Installation wil be reviewed for during final drawing approval.
33	ENG-ELC-048/Clause No.5.2 & 5.3 / Page no.10 & 11	5.2 WINDING CONNECTIONS I. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper. 5.3 INSULATING PAPER AND INSULATING PRESSBOARD II. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper.	We wish to bring to your kind notice that, Option for Super enamel covering is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). So kindly provide the provision for Super enamel covered aluminium conductor also. Kindly confirm	Specification to be complied
34	ENG-ELC-048/Clause No.5.1/ Page no.7	5.1 CORE: III. Core should be coated with hot oil proof, with insulation coating, an inorganic coating equivalent to C-5 type as ASTM A976 or IS 3024, like Carlite -3.	We wish to bring to your kind notice that, CRGO manufacturers are providing insulation coating on CRGO as per IS: 3024, C-5 over C-2. Kindly confirm shall we proceed with C-5 over C-2 instead of C-5.	Specification to be complied

35	ENG-ELC-048/Clause No.5.9 & 5.10 / Page no.20 & 21	5.9 BUSHINGS AND TERMINAL CONNECTORS Option 1: Outdoor Bushing on Top with Bird Guard Option 2: Side bushing with Cable box VII. In some situation Plinth mounted transformer may require outdoor bushing arrangement. This shall be decided during tender by user group. 5.10 CABLE BOXES HV CABLE BOX (option 2, ref: 5.9.A): XIV. The HV box shall be designed and fixed on transformer such way that only opening of cover shall facilitate for working on cable termination with ease of accessibility of terminal.	Kindly confirm the requirement of cable box on HV side.	Bare bushing shall be required on HV Side.
36	ENG-ELC-050 / Clause No.5.1 / Page No.8	Clause No.:5.1: CORE The core shall be stack type of high grade cold rolled, non-ageing, grain oriented, annealed silicon steel lamination (CRGO), having low loss & good grain properties, coated with hot oil proof insulation, bolted together to the frames firmly to prevent vibration or noise. Scrap CRGO material shall not be used for transformers.	We wish to bring to your kind notice that, The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Specification to be complied
37	ENG-ELC-050 / Clause No.5.1 / Page No.8	Clause No.:5.1: CORE The core shall be stack type of high grade cold rolled, non-ageing, grain oriented, annealed silicon steel lamination (CRGO), having low loss & good grain properties, coated with hot oil proof insulation, bolted together to the frames firmly to prevent vibration or noise. Scrap CRGO material shall not be used for transformers.	" We request you to kindly add option for wound core construction by considering the advantages of Wound core construction over Stacked core construction. Wound core construction is ideal for transformers with CRGO silicon steel also wound cores features a step – lap joint will minimizing eddy current losses. Hence, the core destruction factors will be less compared to the core with stacked construction resulting in lower No-load loss. Wound core transformers are light weight and compact. Wound core certainly eliminates the possibility to use small pieces of lamination. This can avoid the use of scrap pieces of CRGO in distribution transformers. Hence in a way if wound core transformers are incorporated, it eliminates the use of scrap CRGO.	Please refer Revised Technical Specification -DTR 13/05/2022
38	ENG-ELC-050 / Clause No.5.3 / Page No.9 ENG-ELC-050 / Clause No.4(62 &63) / Page No.6	clause 5.3 Winding 1) Primary and secondary windings shall be constructed from high-conductivity(aluminium conductors), Double Paper Covered (DPC) aluminium conductor of grade 2(Al 99.6%) as per IS 5484 with min. 25% overlap per layer of paper. 4(62).HV winding Insulation - Double Paper Covered with min 25% overlap per layer of Paper 4(63). LV winding Insulation - Double Paper Covered with min 25% overlap per layer of Paper	We wish to bring to your kind notice that, Option for Super enamel covering is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). Kindly allow us for both super enamel/paper covering.	Specification to be complied
39	ENG-ELC-050 / Clause No.5 / Page No.7 & ENG-ELC-050 / Clause No.5.4 / Page No.11	clause 5. GENERAL CONSTRUCTION: The transformer shall be double-wound, Aluminium coil, oil immersed, naturally cooled (ONAN) and sealed type with rectangular tank. 5.4 TRANSFORMER TANK 1) The transformer tank should be round and made of good quality, electrically tested welded mild steel sheet of adequate thickness suitably stiffened to provide sturdy and robust construction to withstand extreme pressure conditions. 4) The Circular bottom plate edges of the tank should be folded upward for at least 25mm to have sufficient overlap with Vertical side wall of Transformer so that oil shall not reach bottom surface to avoid oil leakage.	We wish to bring to your kind notice that, these two clauses are contradicting to each other, and generally for single phase transfomers round tank shall be used. We will provide the round tank as per clause no.5.4. kindly confirm?	Please refer revised Technical Specification -DTR 13/05/2022
40	ENG-ELC-050 / Clause No.5.4 / Page No.11 ENG-ELC-050 / Clause No.4(72&73) / Page No.6	5.4 TRANSFORMER TANK 3) The Thickness of the Tank should be as: For Top & bottom plate – 5mm. Min, For sides – 3.15mm. Min. 72. Top and Bottom - 5 mm (Minimum) 73. Side - 3.15 mm (Minimum)	We wish to bring to your kind notice that, Kindly Allow us for Top & Bottom Plate:2.5 mm Min.(Sheet thickness tolerance applicable as per IS 1852) and For sides:2 .2mm Min.(Sheet thickness tolerance applicable as per IS 1852). And with the above thickness we will meet the pressure and vacuume test as per technical specification. Kindly Confirm.	Specification to be complied
41	ENG-ELC-050 / Clause No.5.4 / Page No.12	5.4 TRANSFORMER TANK 6) The Tank cover shall be conical shape (Slope at least 15 degree taking Horizontal plane as surface)	We wish to bring to your kind notice that, We will provide Dome Shaped Tank Cover. Kindly Confirm.	Please refer revised Technical Specification -DTR 13/05/2022
42	ENG-ELC-050 / Clause No.5.4 / Page No.12	5.4 TRANSFORMER TANK 12) Minimum oil level mark shall be embossed inside the tank (at 25 Degree).	We Wish to Bring to your kind notice that, As per Latest amended IS 1180-2014,Minimum position corresponds to an operating temperature of 30 Deg.c for sealed type transformers. Kindly amend this Clause as per IS 1180-2014 Standard.	Please refer revised Technical Specification -DTR 13/05/2022
43	ENG-ELC-050 / Clause No.5.5 / Page No.12	5.5 Lifting Lugs & Mounting Lugs	We Wish to bring to your kind notice that, Kindly Provide the Information about Lifting Lugs (Enclosed type) Construction. Kindly Confirm.	Refer to clause no 5.6 Lifting Lugs & Mounting Lugs
44	ENG-ELC-050 / Clause No.5.10 / Page No.16	5.10 Make of the Major component & Material A.Copper	We wish to Bring to your kind notice that, As per Technical Specification Clause no.:5.3 the winding material is Aluminium Wound. But as per Clause no.:5.10. Winding Material is mentioned as Copper. Kindly Confirm the Winding material.	Transformers for 1Ph 16kVA, 25kVA & 3Ph, 25kVA, 63kVA & 100kVA, Winding material shall be Aluminium and for all other ratings Material shall be Copper.
45	ENG-ELC-050 / Clause No.5.18 / Page No.18 ENG-ELC-050 / Clause No.5.9 / Page No.15	As per clause No.:5.18. Fittings k) Terminal Connector For HT & Palm Connector For LT side. 5.9 LV BOX with MCCB	We Wish to bring to your kind notice that,as per clause no.5.9 we are providing LV side cable box. Hence palm connector is not applicable. Kindly confirm.	Lugs may be considered
46	ENG-ELC-050 / Clause No.5.9 / Page No.15	As per clause no.:5.9: LV box with MCCB: 4. The Single phase MCCB Shall be provided with suitable size of Al bus bar w.r.t minimum current density (calculated) of 1A/ sq. mm inside for further distribution of supply	We wish to bring to your kind notice that, MCCB Al Bus Bar Current density is 1A/sq.mm Minimum is mentioned. Al Bus bar Maximum current density Should be 1A/sq.mm. Kindly Amend this Clause as Above.	Max Current Density of Al Bus Bar Current density - 1A/sq.mm
47	ENG-ELC-050 / Clause No.4 / Page No.4	4. GENERAL TECHNICAL REQUIREMENTS: 1. Rated voltage HV (kV) - 12 3. Service voltage (KV max.) - 11	Kindly confirm the HV Rated voltage is 11kV or 12kV?	Rated voltage HV (kV) - 12 & Service voltage (KV max.) - 11
48	ENG-ELC-050 / Clause No.4 / Page No.4	4. GENERAL TECHNICAL REQUIREMENTS: 2. Rated voltage LV (V) - 250 5. Rated Line current LV (A) - 66.66	We wish to bring to your kind notice that, for 16kVA, 1P, if we consider LV voltage of 250V then the LV current will be 64A and if we consider LV voltage of 240V, the LV current will be 66.66A. kindly confirm the voltage and current of LV side.	Please refer revised Technical Specification -DTR 13/05/2022
49	ENG-HV-01-008 / Clause No.5.1 / Page No.8	Clause No.:5.1: CORE The core shall be Wound type of high-grade cold rolled, non-ageing , grain oriented , annealed silicon steel lamination (CRGO) , having low loss & good grain properties, coated with hot oil proof insulation, bolted together to the frames firmly to prevent vibration or noise. Scrap CRGO material shall not be used for transformers.	We wish to bring to your kind notice that, The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Specification to be complied & Please refer revised Technical Specification -DTR 13/05/2022
50	ENG-HV-01-008 /Clause No.5.3 / Page No.12	clause 5.3 Winding Primary and secondary windings shall be constructed from high- conductivity, Double Paper Covered (DPC) Aluminium conductor of Grade 2 (Al 99.6 %) as per IS 5484.	We wish to bring to your kind notice that, Option for Super enamel covering is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). Kindly allow us for both super enamel/paper covering.	Specification to be complied & Please refer revised Technical Specification -DTR 13/05/2022
51	ENG-HV-01-008 /Clause No.5.3 / Page No.12	clause 5.3 Winding The coil shall be circular in shape and their construction shall be such that there is no possibility of any distortion under likely conditions of service	We wish to bring to your kind notice that, Circular coils shall be applicable for Stacked core design,In case of Wound core as per clause no.5.1,the coil shape shall be rectangular type. Wewill proceed in case of wound core design,the coil shall be rectangular type instead of Circular Shape. Kindly Confirm.	Please refer revised Technical Specification -DTR 13/05/2022
52	ENG-HV-01-008 / Clause No.4/Page No.5	AS per clause 4.General Technical Requirements 20.Short circuit Impedance voltage at 75DegC : 4.5% As Per Clause no.19: General Technical Parameters: 23. % Impedance at 75 deg.C. 16kVA & 25kVA: 4.5%	We wish to bring to your kind notice that,both the Clauses are Contradicting with each other, as per Table 9 of IS:1180 (Part-I):2014 latest amendment 4 Impedance is 4% for single pahse distribution transformers upto and including 25kVA. Hence, we request you to take note of the above and amend the this clause inline with IS 1180 (Part-I) : 2014	Specification to be complied & Please refer revised Technical Specification -DTR 13/05/2022
53	ENG-HV-01-008 / Clause No.5.2/Page No.10	As per Clause 5.2.Losses The transformer shall be designed for minimum level of efficiency 99.05% for loading range in between 20% to 60% at unity P.F.	We wish to bring to your kin notice that, we will provide the efficiency value as per our design by meeting the losses guaranteed.	Specification to be complied & Please refer revised Technical Specification -DTR 13/05/2022
54	ENG-ELC-047 Clause No 4(20) / page no.6	"As per Clause No.4.0 General Technical Requirements: Normal flux density (at rated voltageand frequency) – 1.6T 21.Maximum flux density (Increase of +12.5% combined voltage and frequency variation from rated voltage and frequency) - 1.9T"	We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla)	Specification to be complied
55	ENG-ELC-047 Clause No.5.1 / page no.8	Clause No.:5.1(I): CORE I The core shall be Wound type of high-grade cold rolled, non-ageing, grain oriented, annealed silicon steel lamination (CRGO),having low loss & good grain properties, coated with hot oil proof insulation, bolted together to the frames firmly to prevent vibration or noise.	We wish to bring to your kind notice that, The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Specification to be complied
56	ENG-ELC-047 Clause No.5.1 / page no.9	Clause 5.1(x): CORE The No load current shall not exceed 2% of the Full Load Current and will be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5% of rated voltage shall not increase the no load current by 5% maximum of full load current	We wish to bring to your kind notice that as per Clause No 6.9.2 of IS: 1180 (Part-I): 2014, the No load current up to 200kVA shall not exceed 3% of full load current and will be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5% of rated voltage shall not increase the no load by 6 percent maximum of full load current. Hence, we request you to take note of the above and amend the this clause inline with IS 1180 (Part-I) : 2014.	Specification to be complied
57	ENG-ELC-047 Clause No.5.2 / page no.10	Clause 5.2 Winding Primary and secondary windings shall be constructed from high-conductivity(aluminium conductors), Double Paper Covered (DPC) aluminium conductor of grade 2(Al 99.6%) as per IS 5484 with min. 25% overlap per layer of paper. Epoxy diamond dotted Kraft paper to be used for DPC conductor all rating.	We wish to bring to your kind notice that, Option for Super enamel covering is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). Kindly allow us for both super enamel/paper covering.	Specification to be complied
58	ENG-ELC-047 Clause No.5.7/ page no.10	Clause no.5.7 For Pole mounted transformers: For Plinth mounted transformers:	Kindly confirm requirment of transformers i.e. plinth mounted or pole mounted	Plinght Mounted - For 250KVA and above ratings & Pole mounted -Below 250KVA
59	ENG-ELC-047 Clause No.5.12 / page no.19	Clause no.5.12 EXPLOSION VENT	We wish to bring to your kind notice that As per IS:1180(Part-I) latest amendment clause No.20 . Explosion vent or Pressure relief device (for sealed type transformers (for all ratings) and non sealed type transformers (for ratings above 200kVA). Hence for ratings below 200kVA Explosion vent is not required .Kindly Confirm	Specification to be complied

60	ENG-ELC-047 Clause No.5.12 / page no.21&22	Clause No.5.17(4)- Conservator 4.The connecting pipe of the conservator shall be so fitted to transformer tank that the pipe can be detached from the tank.	We wish to bring to your kind notice that, Detachable conservator is mostly provided for power transformer .We will provide the welded type conservator. Kindly confirm	Detechable pipe will be required for 250 kVA & Above Rating Transformers
61	ENG-ELC-047 Clause No.5.1 / page no.21&22	Clause no. 5.20 DRAIN VALVE AND FILTER VALVE	We wish to bring to your kind notice that As per IS:1180(Part-I) latest amendment clause No.20 . Fittings,filter valve (for ratings above 200kVA).and drain cum sampling valve shall be provided for ratings above 500kVA. Hence for ratings below 200kVA filter valve and drain valve is not required .Kindly Confirm	Specification to be complied
62	ENG-ELC-047 Clause No.5.1 / page no.10&23	Clause No. 5.2 Primary and secondary windings shall be constructed from high-conductivity(aluminium conductors), Double Paper Covered (DPC) aluminium conductor of grade 2(Al 99.6%) as per IS 5484 with min. & & ClauseNo. 5.24 II. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper.	We wish to bring to your kind notice that these two clauses are contradidcting each other. Kindly confirm the conductor to be used.	Transformers for 1Ph 16kVA, 25kVA & 3Ph, 25kVA, 63kVA & 100kVA, Winding material shall be Aluminium and for all other ratings Material shall be Copper.
63	ENG-ELC-048/Clause No.4/Page no.6	As per Clause No.4.0 General Technical Requirements: 22.0 Normal flux density (at rated voltage and frequency) – 1.6T 26.Maximum flux density (Increase of +12.5% combined voltage and frequency variation from rated voltage and frequency) - 1.9T	We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla)	Specification to be complied
64	ENG-ELC-048/Clause No.5.1/Page no.7	As per clause No.5.1 -Core 1. Transformer core shall be stack type, 2D, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere. if required) to relieve stresses..	The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Specification to be complied
65	ENG-ELC-048/Clause No.5.17 & 5.28 / Page no.30	As per Clause no.5.17(7), VII. For DT up to 1600kVA, the conservator to be fitted with float switches such that it shall operate/open contact when the oil level in conservator goes below -5 degree C /Minimum mark. The float switch shall be with normally closed type. This contact shall be wired up in auxiliary terminal box. As per Clause no.5.28(24) XXIV. Magnetic Oil level Gauge (>1600kVA),	We wish to bring to your kind notice that, these two clauses are contradicting to each other .Kindly confirm requirement of MOG rating wise.	Specification to be complied
66	ENG-ELC-048/Clause No.5.2 & 5.3 / Page no.10 & 11	5.2 WINDING CONNECTIONS I. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper. 5.3 INSULATING PAPER AND INSULATING PRESSBOARD II. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper.	We wish to bring to your kind notice that, transformers with foil winding has low axial forces during short circuit resulting into better short circuit withstand capability when compared to strip windings. And also there will be no shearing stress between turns. Kindly allow to use Foil winding.	Specification to be complied
67	ENG-ELC-048/Clause No.5.16/ Page no.25	5.16 OIL Note: Default Oil shall be Mineral oil only if not specified / asked for other oil.	No special note was found. Hence it is presumed that the oil is mineral oil. All parameters as per clause no. 5.16 – Mineral Oil.	Specification to be complied
68	ENG-ELC-048/Clause No.4/ Page no.6	4. GENERAL TECHNICAL REQUIREMENTS: 28. Metering CT for LV side 5.12 METERING CURRENT TRANSFORMERS (This shall be decided during tender by user group.)	Kindly confirm the requirement of Metering CT's	Energy meter is not in the scope of supplier.However LT Metering ring CT should be provided in Cable LV BOX for Phase & Neutral.Enclosure shall be provided for CT secondary Terminal. However the complete design for CT Installation wil be reviewed for during final drawing approval.
69	ENG-ELC-048/Clause No.5.2 & 5.3 / Page no.10 & 11	5.2 WINDING CONNECTIONS I. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper. 5.3 INSULATING PAPER AND INSULATING PRESSBOARD II. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper.	We wish to bring to your kind notice that, Option for Super enamel covering is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). So kindly provide the provision for Super enamel covered aluminium conductor also. Kindly confirm	Specification to be complied
70	ENG-ELC-048/Clause No.5.1/ Page no.7	5.1 CORE: III. Core should be coated with hot oil proof, with insulation coating, an inorganic coating equivalent to C-5 type as ASTM A976 or IS 3024, like Carlite -3.	We wish to bring to your kind notice that, CRGO manufacturers are providing insulation coating on CRGO as per IS: 3024, C-5 over C-2. Kindly confirm shall we proceed with C-5 over C-2 instead of C-5.	Specification to be complied
71	ENG-ELC-048/Clause No.5.9 & 5.10 / Page no.20 & 21	5.9 BUSHINGS AND TERMINAL CONNECTORS Option 1: Outdoor Bushing on Top with Bird Guard Option 2: Side bushing with Cable box VII. In some situation Plinth mounted transformer may require outdoor bushing arrangement. This shall be decided during tender by user group. 5.10 CABLE BOXES HV CABLE BOX (option 2, ref: 5.9.A): XIV. The HV box shall be designed and fixed on transformer such way that only opening of cover shall facilitate for working on cable termination with ease of accessibility of terminal.	Kindly confirm the requirement of cable box on HV side.	Bare Bushing for HV Side is required
74	As per Clause no. 4.9 Type Tests (if applicable)	The type tests specified in TPSODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/ reject such bids rests with TPSODL	Against these clauses, we wish to participate the tender by submitting type test reports of similar / higher rating & higher voltage class along with an undertaking letter. We shall conduct & submit the complete type test reports for the offered design after award of contract, at our cost without affecting the delivery schedule. We request to review our request and confirm your acceptance.	Specification to be complied
75	Doc No. ENG-HV-01-008, clause no. 8 Type tests certifiifcates/Page No. 56	The Bidder shall furnish the type test certificates of the Distribution Transformer for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI as per the relevant standards. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to TPSODL		
76	Doc No. ENG-HV-01-DT Al Wdg, clause no. 8 Type tests certifiifcates/Page No. 126	1. The Bidder shall furnish the type test certificates of the offered rating and design of transformer for the tests as mentioned above as per the corresponding standards. 2. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards. 3. In the event of any discrepancy in the test reports, i.e. any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPSODL. 4. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.		
77	Doc No. ENG-HV-01-DT Cu Wdg, clause no. 8 Type test certifiifcates/Page No. 180	1. The Bidder shall furnish the type test certificates of the offered rating and design of transformer for the tests as mentioned above as per the corresponding standards. 2. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards. 3. In the event of any discrepancy in the test reports, i.e. any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPSODL. 4. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.		
78	As per Clause no. 8.0 SECURITY CUM PERFORMANCE DEPOSIT in GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS/Page no. 210	Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPSODL for: (a) 5% of the PO value if purchase order value is more than Rs 5 Crores. (b) 10% of the PO value if purchase order value is less than Rs 5 Crores. This shall remain valid till the end of the Guarantee Period of contract, plus one month. c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.	We bring to your kind notice that, The Government of India vide office memorandum No. F/9/4/2020-PPD, Dt: 12.11.2020 & No.3/7/2017-Trans-Pt(6), Dt:23.03.2021 issued guidelines to reduce the Performance security from existing 5%-10% to 3% of total value of contract. The copies of the same are enclosed herewith for your kind perusal. In this context, we request your esteemed office to amend the Performance Security Clause with 3% of the Total Contract Value. The copy of the circular is enclosed as an annexure-3	Tender terms and conditions shall prevail
81	As per Clause no. 4.9 Type Tests (if applicable)	The type tests specified in TPSODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/ reject such bids rests with TPSODL		
82	Doc No. ENG-HV-01-008, clause no. 8 Type tests certifiifcates/Page No. 56	The Bidder shall furnish the type test certificates of the Distribution Transformer for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI as per the relevant standards. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to TPSODL		

83	Doc No. ENG-HV-01-DT Al Wdg, clause no. 8 Type tests certifiicates/Page No. 126	1. The Bidder shall furnish the type test certificates of the offered rating and design of transformer for the tests as mentioned above as per the corresponding standards. 2. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards. 3. In the event of any discrepancy in the test reports, i.e. any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPSODL. 4. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.	Against these clauses, we wish to participate the tender by submitting type test reports of similar / higher rating & higher voltage class along with an undertaking letter. We shall conduct & submit the complete type test reports for the offered design after award of contract, at our cost without affecting the delivery schedule. We request to review our request and confirm your acceptance.	Specification to be complied
84	Doc No. ENG-HV-01-DT Cu Wdg, clause no. 8 Type test certifiicates/Page No. 180	1. The Bidder shall furnish the type test certificates of the offered rating and design of transformer for the tests as mentioned above as per the corresponding standards. 2. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards. 3. In the event of any discrepancy in the test reports, i.e. any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPSODL. 4. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.		
85	As per Clause no. 8.0 SECURITY CUM PERFORMANCE DEPOSIT in GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS/Page no. 210	Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPSODL for: (a) 5% of the PO value if purchase order value is more than Rs 5 Crores. (b) 10% of the PO value if purchase order value is less than Rs 5 Crores. This shall remain valid till the end of the Guarantee Period of contract, plus one month. c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.	We bring to your kind notice that, The Government of India vide office memorandum No. F/9/4/2020-PPD, Dt: 12.11.2020 & No.3/7/2017-Trans-Pt(6), Dt:23.03.2021 issued guidelines to reduce the Performance security from existing 5%-10% to 3% of total value of contract. The copies of the same are enclosed herewith for your kind perusal. In this context, we request your esteemed office to amend the Performance Security Clause with 3% of the Total Contract Value. The copy of the circular is enclosed as an annexure-3	Tender terms and conditions shall prevail
86	3. Price Variation Clause:	3.1 Price Variation Clause for Al Wound Transformers Price variation shall be applicable as per PV formulae as below: P =P0/100 * (10 + 19*(AL/AL0) + 30*(ES/ES0) + 13*(IS/IS0) + 4*(IM/IM0) + 11*(TO/TO0) + 13*(W/W0))	Kindly note the IEEMA has revised the formula applicable for tendered rating and the formula is effective from 01.09.2021. 3.1 Price Variation Clause for Al Wound Transformers Price variation shall be applicable as per PV formulae with base date 01.03.2022 without any ceiling as below: P =P0/100 * (8 + 22*(AL/AL0) + 36*(ES/ES0) + 12*(IS/IS0) + 5*(IM/IM0) + 10*(TO/TO0) + 7*(W/W0))	Price Variation Clause for AL Wound Transformers Price variation shall be applicable as per PV formulae as below : P =P0/100 * (8 + 22*(AL/AL0) + 36*(ES/ES0) + 12*(IS/IS0) + 5*(IM/IM0) + 10*(TO/TO0) + 7*(W/W0))
87		3.2 Price Variation Clause for Cu Wound Distribution Transformers Price variation shall be applicable as per PV formulae as below: P =P0/100 * (10 + 33*(C/C0) + 24*(ES/ES0) + 9*(IS/IS0) + 4*(IM/IM0) + 5*(TO/TO0) + 15*(W/W0))	Kindly note the IEEMA has revised the formula applicable for tendered rating and the formula is effective from 01.09.2021. 3.2 Price Variation Clause for Cu Wound Distribution Transformers Price variation shall be applicable as per PV formulae with base date 01.03.2022 without any ceiling as below: P =P0/100 * (7 + 41*(C/C0) + 23*(ES/ES0) + 10*(IS/IS0) + 5*(IM/IM0) + 8*(TO/TO0) + 6*(W/W0))	Price Variation Clause for Cu Wound Distribution Transformers Price variation shall be applicable as per PV formulae as below: P =P0/100 * (7 + 41*(C/C0) + 23*(ES/ES0) + 10*(IS/IS0) + 5*(IM/IM0) + 8*(TO/TO0) + 6*(W/W0))
88	8.3. Delivery Timeline	For First RO, Delivery period shall be 90 days from date of RO/ drawing approval/ manufacturing clearance, whichever is later. For subsequent ROs, material shall be delivered within 75 days from date of receipt of release order.	Kindly amend the delivery schedule as below considering lead time for planning, procuring and manufacturing activities. For First RO, Delivery period shall be 150 days from date of RO/ drawing approval/ manufacturing clearance, whichever is later. For subsequent ROs, material shall be delivered within 120 days from date of receipt of release order. We are requesting TATA stores to issue the release order against the rate contracts in advance. As the OEM's are supposed to do following activities: # Block the producution slots, # Procure the materials [our sub-vendors itself demanding 75 days from the date of placement of PO], # Manufacture the transformers, # Stage inspection & clearance for further manufacturing, final inspections, # Issue of MDCC, # Lead time for logistics, # delivery of material etc are involving in this time period itself. OEM is penalizing if the material is not getting delivered to stores within delivery schdule@1% per week. In order to reduce the contingencies & to get the competitive prices for your discom, we request you to kindly grant delivery timelines accordingly. As the release orders are on Rate Contract basis, the advance planning from your end will suffice both our requirements. We request you to kindly consider and request to amend the delivery timelines accordingly.	Tender terms and conditions shall prevail
89	4.9 Type Tests (if applicable)	The type tests specified in TPSODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/ reject such bids rests with TPSODL.	TPSODL is procuring BIS EEL-2 as per Amendment 4 of IS 1180 part 1(2014) complying to BEE Star-2 transformers for the first time. As the tender volume is very low, we request you to kindly accept the type test reports of similar/higher rating type test reports complying to BEE START-1. In the event of order placement we will submit similar/higher rating type test reports for collecting the Short circuit type test waiver. However, we will conduct balance all type tests [Except Short Circuit] on one unit of offered rating transformer for one time at our NABL accredited laboratories in presence of TPSODL representative, without any cost implication.	Specfication to be complied
90	1.3 Calender of events	Bis submission due date: 01.06.2022	We are in the process of preparation of bid pertaining to your tender and we require another 02 week to submit our bid from the date of pre tender clarifications. Kinldy note that the losses has modifed to BEE STAR-1 to BEE STAR - 2 & hence we need to redesign all the ratings. Hence it is essential for time extension. We therefore request you to kindly grant us an extension of 02 week from date of pre tender clarifications. We look forward to receive due date extension soon, enabling us to submit our competitive bid.	pls refer corriegndum - -3
91	4(General Technical requirements)	Rated voltage:12kV Service Voltage(kV max):11kV	We are considering 12kV as system voltage & 11kV as nominal rated voltage. Pleaseconfirm.	Rated voltage:12kV Service Voltage(kV max):11kV
92	4.26,27	LV Bushing Voltage Grade:1.1kV Neutral Bushing at LV Side:1.1kV	It shall be 1kV as per amended IS 3347 Standard. Please confirm to proceed with 1kV LV Side Bushings	Specification to be complied
93	4.42	Wheels: NA. These are polemounted DT'S. To be mounted on ISMC	As it is Polemounted Transformer, it shall have polemounting brackets for hanging on a pole. As per IS 1180 Part-1 amendment -4, "for round shape single phase sealed transformers, the circular base plate edges of the tank shall be folded upward for at least 25mm, to have sufficient overlap with vertical sidewall of the trasformer". Please allow to us proceed as per IS 1180 Part-1.	Specification to be complied
94	5.2	Double Paper Covered (DPC) aluminium conductor of grade 2(Al 99.6%) as per IS 5484	As per ASTM B233 , chemical composition of AL is 99.5%(Min) only . Please allow us to follow as per standard IS 5484 & ASTM B233.	Specification to be complied
95	5.2.1 5.11.J	25% overlap per layer of paper. Percentage over lapping(not less than 60%)	It is to inform that IS 6162 (Part-1) :1971 & IS 6162 (Part-2): 1971 is calling for overlapping of 25%only. Strip conductors: TPC(Triple Paper Covering) in that first two layers are but lapped and outer most layer is 25% overlapped with opposite direction Round conductors: DPC with having overlapping not less than 25% of its width for round conductor 60% Overlap concept not applicable. Please confirm w.r.t clause 5.2.1	Refer clause no 5.2.1
96	5.2.1	Epoxy diamond dotted Kraft paper to be used for DPC conductor all rating.	Plain Kraft paper shall be used for DPC covering on Conductor and is sufficient for Class-A insulation. If EDD paper is used for covering of strip, paper shall break during winding stage and not possible for round condutors with EDD covering.Kindly make a note.	Specification to be complied
97	5.1.Xiii 5.3.VI	5.1.xiii: The core coil assembly shall have four Enclosed(No Hook) Lifting lugs But as per clause 5.3.VI, The core of coil assembly shall be provided with four lifting hooks	As these two statements are contradictory, Please confirm which statement to consider	Please Refer Cl No. 5.1.xiii
98	5.5(Tank)	The tank shall be fabricated by welding at corners . No horizontal & Vertical joints in tank side walls &its top &bottom covers shall be allowed.		Specification to be complied
99	5.5(Tank)	The tank shall be reinforced by welded flats on all the outside walls on the edge of the tank The topcover of the tank shall be slightly sloping to drain rain water approximately 50 to 100 towards HV Bushing.	The said clauses is applicable to three phase rectangular tank shaped transformers and it is not applicable to Single Phase round shaped tanks. Please confirm.	Specification to be complied
100	4.70(Tank thickness)	Tank thicnkesses i)Top & BottomPlate: 5 mm (min) ii)For sides-3.15 mm(min)	Please allow us to proceed with below mentioned regular tank sheet thicknesses which is also as per Previous Tatapower supplies i)Top& Bottom Plate:2.5 mm(Nominal) ii) Side sheet: 2.2mm(Nominal) Above nominal thicknesses are subjected to sheet thick tolerance as per IS 1852 Standard. Please allow us to proceed with above.	Specification to be complied
101	4.70(Tank thickness)	The tank cover shall be provided with air release plug	As per IS 1180 clause 20.1, the said fitting is applicable to Non Sealed transformers only. For Sealed type transformers, air release plug not applicable. Please confirm	Specification to be complied
102	4.70(Tank thickness)	Primary and secondary windings shall be constructed from high conductivity copper All other clauses of technical specification calls for HV, LV Aluminium conductors.	Please confirm the winidng material requirement. We presume the conductor is "Aluminium." Kindly confirm.	Transformers for 1Ph 16kVA, 25kVA & 3Ph, 25kVA, 63kVA & 100kVA, Winding material shall be Aluminium and for all other ratings Material shall be Copper.
103	5.7(Gasket)	i)Cork rubber gaskets shall be used ii)Nitrile/Neoprene rubber gaskets shall be used	As there is ambiquity in gasket material, we will proceed such that Gaskets shall be of Synthetic rubber/ Nitrile Rubberized bonded cork depending on suitability . Please confirm.	Nitrile/Neoprene rubber gaskets
104	5.5.ii	The tank cover shall be provided with suitable insulating shrouds on Bushing terminals	W.r.t said clause ,we will provide Birdguards on HV bushing terminals. Please confirm	Specification to be complied
105	5.5.iii	The transformer shall be provided with a minimum of two welded heavy duty closed lifting lugs of MS plate of 8mm thickness suitably reinforced by vertical supporting flat welded edge wise below the lug on the side wall upto reinforcing angle . 5.5.ii: The Lifting lugs shall be of shackle type 5.5.iii: The transformer shall be provided with four pulling lugs of MS Plate of 8mm thick to pull the transformer horizontally	The said clauses is applicable to three phase rectangular tank shaped transformers and it is not applicable to Single Phase round shaped tanks. Please confirm	Specification to be complied
106	5.5.iii	HT Bushing(17.5kV/250A): The metal portion of the internal HV& LV Bushing inside the tank shall remain dipped in oil in all operating conditions.	Since the transformers are of sealed type with air cushion above oil level and also since the HV Bushings placed on top cover. The said clause is not possible for both LV & HV Bushings . Please confirm.	Specification to be complied

107	5.5.iii	The single Phase MCCB shall be provided with suitable size of AL Busbar w.r.t minimum current density (calculated) of 1A/Sq.mm inside for further distribution of supply	As per our Previous Tatapower order executions, 25kVA , Max current density of AL Busbar inside MCCB Box shall be 1 A/Sq.mm Please confirm.	Maximum Current Density for AL Bus bar shall be Maxm 1A/Sq.mm.
108	5.5.iii	The provision for earthing connection shall be provided for 25x6 GI Strip with insulated mounted support	The said clause not applicable on HV Side as their primary(HV) Voltages are 11000V i.e 2 HV Phase bushings will exist instead of Neutral Bushings. Kindly confirm.	Noted
109	5.5.iii	Drain valve & Filter valve Drain valve & Filter valve shall be of mild steel with gate type of valve.	The said clauses is applicable to three phase rectangular tank shaped transformers and it is not applicable to Single Phase round shaped tanks. Kindly note.	Specification to be complied
110	5.15.2(Fasteners)	All nuts/ bolts/washers exposed to atmosphere shall be as follows a)Size 12mm or below-Stainless Steel b)Above 12mm: Steel with antirust coating , Hot dip galvanized	Please modify the said clause as per IS 1180 -2014 as below , All bolts/nuts/washers exposed to atmosphere shall be as follows a)Size 12mm or below-Stainless Steel b)Above 12mm-Steel with suitable finish like electro galvanized with passivation or hot dip galvanized. Please allow us to proceed with above.	Specification to be complied
111	5.20.j(Fittings)	Palm connector on LV Side	As per our Previous Tatapower Executions, The connections from Bushing stem to corresponding Busbars & MCCB shall be done by using Suitable Lugs, Insulated Flexible wire equipment which will not damage corresponding Bushing stem. As there is MCCB box on LV Side, Palm connector is not applicable. Please confirm.	Lugs may be considered
112	8.0 TYPE TEST CERTIFICATES:	The Bidder shall furnish the type test certificates of the Transformer for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards	We would like to submit similar rating type test reports of 16kVA & 25kVA, Single Phase Distribution Transformers for getting type test waiver. Kindly confirm.	Specification to be complied
113	4..0(20) of Technical Specification	Normal flux density (at rated voltage and frequency) – 1.6T	We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla)	Specification to be complied
114	5.7 BUSHINGS	The HV bushings shall be mounted on top cover of the tank.	As the 25kVA transformer is without conservator, the HV bushings shall be mounted on side cover of transformer.	Specification to be complied
115	In clause no 5(i) & 5.17)(i) &5.21 Breather	1.The transformer shall be double wound, aluminium coil, oil immersed, naturally cooled (ONAN) and non-sealed type with rectangular tank. 1)The- conservator shall be provided on all transformers of ratings 63 kVA and above with plain tank construction. 1)The volume of breather shall be suitable for 250 gms of silica gel for 25; 500gm of silica gel for 63 kVA & 100 kVA ratings conforming to IS 3401.	It is to inform that we will offer sealed Type transformer without conservator and breather for 25 kVA rating in line with IS-1180. Please confirm.	Specification to be complied
116	5.2 WINDING CONNECTIONS	Double Paper Covered (DPC) aluminium conductor of grade 2(Al 99.6%) as per IS 5484 with min.	As per ASTM B233 , chemical composition of AL is 99.5%(Min) only . Please allow us to follow as per standard IS 5484 & ASTM B233.	Specification to be complied
117	5.2 WINDING CONNECTIONS	25% overlap per layer of paper.	It is to inform that IS 6162 (Part-1) :1971 & IS 6162 (Part-2): 1971 is calling for overlapping of 25% only. (round) Strip conductors: TPC(Triple Paper Covering) in that first two layers are but lapped and outer most layer is 25% overlapped with opposite direction. Round conductors: DPC with having overlapping not less than 25% of its width for round conductor	Specification to be complied
118	5.2 WINDING CONNECTIONS	. Epoxy diamond dotted Kraft paper to be used for DPC conductor all rating.	Plain Kraft paper shall be used for DPC covering on Conductor and is sufficient for Class-A insulation. If EDD paper is used for covering of strip ,paper shall break during winding stage and not possible for round conductors with EDD covering. In this regard we request you to allow with kraft paper.	Specification to be complied
119	5.4 TRANSFORMER TANK AND TANK CONSTRUCTION	There shall be no joint at corners and not more than 2 joints in total	Please amend the clause as "There shall be no joint at corners and not more than 3 joints in total". We wish to inform you that tank side sheets will be assembled with U+I sheet .So there will 2 welding joints on sides of transformer and 1 welding joint at bottom. Please amend to 3 joints total.	Specification to be complied
120	5.8 CABLE BOXES	Cable boxes made up of Mild Steel with suitable handle and removable front cover shall be bolted type on LV side.LV cable boxes shall be fixed on the tank with nuts and bolts (gasket placed in between them) in such a way that they can be completely removed whenever required.	It is informed that the cable box is fixed to the tank with the Stud and nut arrangement . The LV front cover is also with stud and nuts ararngement as per our regular practise.	Specification to be complied
121	INSULATING PAPER AND INSULATING PRESSBOARD	Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper. In Data sheet "Percentage Overlapping (not less than 60%)"	These two clauses are contradicting. Please confirm the requiremnt is either copper or Aluminium conductors.	Transformers for 1Ph 16kVA, 25kVA & 3Ph, 25kVA, 63kVA & 100kVA, Winding material shall be Aluminium and for all other ratings Material shall be Copper.
122	5.8 CABLE BOXES	The LV cable box shall be provided with tinned brass palm connector with aluminium busbar and shall be fitted with brass glands for LV cable .	As the cable is 1 run so only it can be directly connected to bushing in place of palm connector and aluminium bus bar.	Specification to be complied
123	Transformer tank	The thickness of tank should be as below: For top and bottom : 5 mm (minimum) For Sides : 3.15 mm (minimum) . tolerance shall be applicable as per IS 1852.	We shall follow as per IS 1852 with both positive and negative tolerances.	Specification to be complied
124	5.7 BUSHINGS	2. LT bushings(1.1 kV/suitable current rating): Side straight mounted in box with common box: LV bushings shall be provided witin cable box.	We understand LV termination is with cable box & HV termination is with bare bushings and the mounting of transformers is Pole Mount transformers for 25kVA, 63kVA & 100kVA Aluminium wound Distribution Transformers. Generally for this smaller transformers cable box is not recommandble. If cable boxes are required the design is getting costlier. Kindly review and accept the bare bushing on both sides.	As per specification LV termination is with cable box & HV termination is with bare bushing Pole Mount transformers for 25kVA, 63kVA & 100kVA Aluminium wound Distribution Transformers are required.
125		1. HT Bushings (17.5 kV/250 A): Pole mounted transformers; Outdoor Bushings on Top.		
126	8 TYPE TEST CERTIFICATES:	The Bidder shall furnish the type test certificates of the Transformer for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards.	We would like to submit similar rating type test reports of 25kVA, 63kVA & 100kVA, 11/0.433kV, Three Phase Distribution Transformers for getting type test waiver.	Specification to be complied
127	5.3 INSULATING PAPER AND INSULATING PRESS	Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor	We request you to kindly give option for super enamel covering also, as per CEA guidelines and IS 1180(part-1):2014.	Specification to be complied
128	4 (32) WHEELS	The transformer shall be provided with four uni-directional rollers with locking arrangement suitable for rail gauges in both the axis for movement of transformer in either direction. Distance between wheels shall be center to center 820mm	Please allow us to follw as per IS 1180 for roller centre to centre distance.	Specification to be complied
129	4(31.11) HV phase to phase/ phase to earth	HV phase to phase/ phase to earth--130 / 90	As per IS 1180,clearnces in cable boxes are HV phase to phase/ phase to earth--130 / 80	Specification to be complied
130	4..0(20) of Technical Specification	Normal flux density (at rated voltage and frequency) – 1.6T	We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla)	Specification to be complied
131	5.2 winding connections	I. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 25% overlap per layer of paper.	It is to inform that IS 7404 (Part-1&II) :1991 & IS 6162 (Part-11): 1971 is calling for overlapping of 25% only. Strip conductors: TPC(Triple Paper Covering) in that first two layers are but lapped and outer most layer is 25% overlapped with opposite direction	Specification to be complied
132	5.5 TRANSFORMER TANK AND TANK CONSTRUCTION	The thickness of tank should be as below: For top and bottom : 6 mm (min.) For Sides : 5 mm (min.) Tolerance shall be applicable as per IS 1852 as per above thickness band.	The tank sheet thickness without Negative tolerances are non standard sizes& not avaliable in market . We will provide the thickness of tank sheets with +/- Tolerance as per IS:1852. Kindly confirm.	Specification to be complied
133	6.3 QR CODE	QR details	please provide the details to be provided in QR code .Total rating plate details cannot be provided in QR code.	Will be Finalised during Detailed Engineering
134	5.6 RADIATORS	Thickness of sheet for radiators shall be 1.20 mm (min).	The Radiator sheet thickness provided shall be as per IS 1852 with positive and negative tolerances.Please confirm.	Specification to be complied
135	5.9 BUSHINGS AND TERMINAL CONNECTORS	Option 1: Outdoor Bushing on Top with Bird Guard III. The HV bushings shall have Hot Dipped Galvanized or Alu-zinc coated or SS material arcing horns with 8mm diameter. The thickness of coating shall be 86 microns (minimum at any point). Option 2: Side bushing with Cable box VI. Transformer shall be with HT cable box on sidewall of tank having porcelain bushing as specified above. VII. In some situation Plinth mounted transformer may require outdoor bushing arrangement. This shall be decided during tender by user group.	Please confirm the ratings details required with plinth or pole mounted transformers. Please confirm the requirement of HV cable box for 250 to 1000kva ratings. For our recet ongoing supplies we are getting the reqeustr from other TATA Odisha discoms to supply the all ratings without HV cable box from 250kVA to 1000kVA, based on site conditions. In this regard we request to kinldy reconfirm the requirment of cable box for this tender.	Specification to be complied
136	5.10 CABLE BOXES	HV cable box:XIX. Bolted type terminal cover with M14/M16 HDG bolts (M12 bolts for 250KVA DT) with danger marking LV CABLE BOX::XXXVI. Bolted type terminal cover with M14/M16 HDG bolts (M12 bolts for 250KVA DT) with danger marking	Cable boxes with Stud and nut arrangement shall be provided.Please confirm.	Specification to be complied
137	5.12 METERING CURRENT TRANSFORMERS (This shall be decided during tender by user group.)	5.12 METERING CURRENT TRANSFORMERS (This shall be decided during tender by user group.)	Please confirm the requirement of CT's.	Metering CT for LV Side Required
138	5.24 FASTENERS	All the bolts or studs shall be at least 6 mm in diameter except when used for small wiring terminals. All bolts shall be of grade 8.8.	Please amend as "All the bolts or studs shall be at least 6 mm in diameter except when used for small wiring terminals". HDG bolts with 5.6 grade is sufficent for fixing. Please check	Specification to be complied
139	8 TYPE TEST CERTIFICATES:	The Bidder shall furnish the type test certificates of the Transformer for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards.	We would like to submit similar/higher rating type test reports for getting short circuit type test waiver. Kindly confirm.	Specification to be complied
140	ENG-ELC - 050 / cl. No - 4.1 / page no 4 of 35.	Sl no - 1 : Rated Voltage (HV) mentioned as 12 KV	The value of HV side voltage will be 11 KV.	Rated Voltage (HV) mentioned as 12 KV
141	ENG-ELC - 050 / cl. No - 7.3 / page no 27 of 35.	Magnetic balance test on HV & LV side required for accepatnce test	Not required for single phase transformer. Please confirm.	Ok Noted
142	ENG-ELC - 047 / cl. No - 4.26 / page no 7 of 37.	Two separate brought out neutral from main neutral bus bar, one for taking out the neutral for 4 wire system & another addditional neutral for solid earthing outside cable box)	The additional nuetral terminal on LV cable box will be shorted to Neutral of 4 wire system as per general prctice. Please confirm.	Specification to be complied
143	ENG-HV-01-008 / Clause No.4/Page No.5	AS per clause 4.General Technical Requirements 20.Short circuit Impedance voltage at 75DegC : 4.5% As Per Clause no.19: General Technical Parameters: 23. % Impedance at 75 deg.C. 16kVA & 25kVA: 4.5%	We wish to bring to your kind notice that,both the Clauses are Contradicting with each other, as per Table 9 of IS:1180 (Part-I):2014 latest amendment 4 Impedance is 4% for single pahse distribution transformers upto and including 25kVA. Hence, we request you to take note of the above and amend the this clause inline with IS 1180 (Part-I) : 2014	Please refer Revised Technical Specification -DTR 13/05/2022
144	ENG-HV-01-008 / Clause No.5.2/Page No.9	As per Clause 5.2.Losses The transformer shall be designed for minimum level of efficiency 99.05% for loading range in between 20% to 60% at unity P.F.	We wish to bring to your kin notice that, we will provide the efficiency value as per our design by meeting the losses guaranteed.	Please refer Revised Technical Specification -DTR 13/05/2023
145	ENG-HV-01-008 / Clause No.5.1 / Page No.8	Clause No..5.1: CORE The core shall be Wound type of high-grade cold rolled, non-ageing , grain oriented , annealed silicon steel lamination (CRGO) , having low loss & good grain properties, coated with hot oil proof insulation, bolted together to the frames firmly to prevent vibration or noise. Scrap CRGO material shall not be used for transformers.	We wish to bring to your kind notice that, the tender specification Calls for CRGO core only. In this regard, we wish to inform you that, many power utilities/ State Electricity Boards/DISCOMs in India are procuring the transformers with Amorphous core too, which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Please refer Revised Technical Specification -DTR 13/05/2024
146	ENG-HV-01-008 /Clause No.5.3 / Page No.12	clause 5.3 Winding Primary and secondary windings shall be constructed from high- conductivity, Double Paper Covered (DPC) Aluminium conductor of Grade 2 (Al 99.6 %) as per IS 5484.	We wish to bring to your kind notice that, As per the guidelines for Energy Efficient Distribution Transformers, issued by Central Electricity Autority (CEA), there is Option to use Super enamel covering for winding coonductor. We request you to provide the option to use super enamel/paper covering. Please confirm.	Please refer Revised Technical Specification -DTR 13/05/2025
147	ENG-HV-01-008 /Clause No.5.3 / Page No.12	clause 5.3 Winding The coil shall be circular in shape and their construction shall be such that there is no possibility of any distortion under likely conditions of service	We wish to bring to your kind notice that, the Circular coils shall be applicable for Stacked core design, In case of Wound core design, the coil shape will be rectangular type. In this regard, please confirm us to proceed the coils with rectangular type in case of wound core design, Kindly Confirm.	Please refer Revised Technical Specification -DTR 13/05/2026

148	ENG-HV-01-DT Al Wdg/Clause No.5.1 /page no.6	Clause No..5.1(1): CORE 1.Transformer core shall be stack type, 2D, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere, if required) to relieve stresses	We wish to bring to your kind notice that, The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Please refer Revised Technical Specification -DTR 13/05/2027
149	ENG-HV-01-DT Al Wdg/Clause No.5.2 /page no.7	Clause 5.2 Winding Primary and secondary windings shall be constructed from high- conductivity (Aluminium conductors), Double Paper Covered (DPC) Aluminium conductor with min. 30% overlap per layer of paper & TPC with 25% overlap per layer	We wish to bring to your kind notice that, As per the guidelines for Energy Efficient Distribution Transformers, issued by Central Electricity Autority (CEA), there is Option to use Super enamel covering for winding coonductor. We request you to provide the option to use super enamel/paper covering. Please confirm.	Please refer Revised Technical Specification -DTR 13/05/2028
150	ENG-HV-01-DT Al Wdg/Clause No.5.9 /page no.15	Clause no.5.9 For Pole mounted transformers: For Plinth mounted transformers:	Kindly confirm the requirment of transformers i.e. plinth mounted or pole mounted	Please refer Revised Technical Specification -DTR 13/05/2029
151	ENG-HV-01-DT Al Wdg/Clause No.5.5(4) / page no.12	Clause no.5.5(4) No Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS:1852.	We will provide the thickness of tank as per IS:1852 with +/- Tolerance. Kindly confirm.	Please refer Revised Technical Specification -DTR 13/05/2030
152	ENG-HV-01-DT Al Wdg/Clause No.5.17 (4) / page no.20	Clause No.5.17(4)- Conservator 4.The connecting pipe of the conservator shall be so fitted to transformer tank that the pipe can be detached from the tank.	We wish to bring to your kind notice that, Detachable conservator is mostly provided for power transformer .We will provide the welded type conservator. Kindly confirm	Please refer Revised Technical Specification -DTR 13/05/2031
153	ENG-HV-01-DT Al Wdg/Clause No.5.21 & 5.28(4) / page no.21 &23	Clause no. 5.21 & 5.28(4) DRAIN VALVE AND FILTER VALVE	We wish to bring to your kind notice that As per IS:1180(Part-I) latest amendment clause No.20 . Fittings,filter valve (for ratings above 200kVA).and drain cum sampling valve shall be provided for ratings above 500kVA. Hence for ratings below 200kVA filter valve and drain valve is not required .Kindly Confirm	Please refer Revised Technical Specification -DTR 13/05/2032
154	ENG-HV-01-DT Al Wdg/Clause No.5.19 & 5.28(5) / page no.21 & 23	Clause no.5.19 & 5.28(5) EXPLOSION VENT / PRESSURE RELEASE DEVICE	We wish to bring to your kind notice that As per IS:1180(Part-I) latest amendment clause No.20 .. Explosion vent or Pressure relief device (for sealed type transformers (for all ratings) and non sealed type transformers (for ratings above 200kVA). Hence for ratings below 200kVA Explosion vent is not required .Kindly Confirm	Please refer Revised Technical Specification -DTR 13/05/2033
155	ENG-HV-01-DT Al Wdg/Clause No.5.23 & 5.28(17) / page no.22 &23	Clause no.5.23 & 5.28(17) OIL TEMPERATURE INDICATOR	We wish to bring to your kind notice that As per IS:1180(Part-I) latest amendment clause No.20 . Oil temperature not required for small rating transformers.Kindly Remonve oill temperature indicator in the specifications	Please refer Revised Technical Specification -DTR 13/05/2034
156	ENG-HV-01-DT Cu Wdg/Clause No.4(31.1) / page No.6	Clause No. 4(31.1) of General Technical Requirements: HV phase to phase/phase to earth as per specification is – 130/90mm	We wish to bring to your kind notice that, As per IS:1180 Part-1 HV phase to phase/phase to earth for 11kV is --130/80mm. Kindly allow us to follow as per IS:1180.	Please refer Revised Technical Specification -DTR 13/05/2035
157	ENG-HV-01-DT Cu Wdg/Clause No.5.2(1) & 5.3(2) / page No.8 & 10	clause 5.2 (1) & 5.3(2) Winding Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with 60% overlap.	We wish to bring to your kind notice that, transformers with foil winding has low axial forces during short circuit resulting into better short circuit withstand capability when compared to strip windings. And also there will be no shearing stress between turns. Kindly allow to use Foil winding. Incase of over lap for Paper covering,we will provide for DPC covering 30 % over lap per layer and for TPC 25% overlap per layer. Kindly Confirm.	Please refer Revised Technical Specification -DTR 13/05/2036
158	ENG-HV-01-DT Cu Wdg/Clause No.5.4(4) / page No.13	Clause no.5.4(4)	We wish to bring to your kind notice that, we will provide Efficiency level as per our Design. Kindly Confirm.	Please refer Revised Technical Specification -DTR 13/05/2037
159	ENG-HV-01-DT Cu Wdg/Clause No.5.5(4) / page No.13	Clause no.5.5(4) No Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS:1852.	We will provide the thickness of tank as per IS:1852 with +/- Tolerance. Kindly confirm.	Please refer Revised Technical Specification -DTR 13/05/2038
160	ENG-HV-01-DT Cu Wdg/Clause No.5.5(17) / page No.14 & 15	Clause no.5.5(17)	We will provide the Overall dimensions as per our design.Kindly confirm	Please refer Revised Technical Specification -DTR 13/05/2039
161	ENG-HV-01-DT Cu Wdg/Clause No.5.17 (3) / page No.23	Clause 5.17 Conservator: 3. The connecting pipe of the conservator shall be so fitted to transformer tank that the pipe can be detached from the tank	We wish to bring to your kind notice that detachable conservator is not provided for small rating transformers and is mostly provided for power transformers. So we will provide welded type conservator tank. Kindly confirm.	Please refer Revised Technical Specification -DTR 13/05/2040
162	ENG-HV-01-DT Cu Wdg/Clause No.5.23 & 5.28 / page No.25 & 27	Clause 5.23 .Oil temperature indicator 14.Dial Type Oil temperature indicator shall be provided on the top cover of the transformer Clause 5.28 .Fittings 22.Oil Temperature indicator with alarm & trip	We wish to bring to your kind notice that Oil temperature indicator is not provided for small rating transformers and is mostly provided for power transformers. Kindly remove this clause. Kindly confirm.	Please refer Revised Technical Specification -DTR 13/05/2041
163	ENG-HV-01-DT Cu Wdg/Clause No.5.17 (7) & 5.28 / page No.23 & 27	Clause no.5.17 7.for DT upto 1600kVA,The conservator shall be fitted with float switches such that it shall operate /open contact when the oil level in conservator goes below -5Degree.C/Minimum Mark. Clause 5.28 .Fittings 24 Magnetic Oil Level Gauge > 1600kVA.	We wish to bring to your kind notice that, these two clauses are contradicting to each other.Kindly confirm requirment of Magnetic oil level gauge rating wise.	Please refer Revised Technical Specification -DTR 13/05/2042
164	ENG-HV-01-DT Cu Wdg/Clause No.5.1 / page No.7	Clause No.5.1 -Core 1. Transformer core shall be stack type, 2D, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere, if required) to relieve stresses.. .	The tender specification Calls for CRGO core only. In this regard, we wish to bring to your kind notice that, many power utilities/ State Electricity Boards in India are procuring the transformers with Amorphous core which has better advantage in meeting Losses over CRGO core. Kindly confirm us to proceed with the Amorphous Core.	Please refer Revised Technical Specification -DTR 13/05/2043
165	ENG-HV-01-DT Cu Wdg/Clause No.4.0 & 5.9 / page No.7 & 17	Clause No..4.0. General Technical Requirements 32. Wheels : Only item codes in tender having mention of 'Plinth Mounted' those DT shall have rollers. When same is not mentioned in item code then the DT shall be without rollers. Clause No..5.9. BUSHINGS AND TERMINAL CONNECTORS For Pole mounted transformers: Top cover mounting bushing For Plinth mounted transformers:	We wish to bring to your kind notice that, against these clauses please clearly confirm whether the transformers are of pole mounted or plinth mounted?	Please refer Revised Technical Specification -DTR 13/05/2044
166	ENG-HV-01-DT Cu Wdg/Clause No.8/ page No.33	clause No.8. TYPE TEST CERTIFICATES 1. The Bidder shall furnish the type test certificates of the offered rating and design of transformer for the tests as mentioned above as per the corresponding standards.	We wish to bring to your kind notice that, we will submit the Type test reports of offered design before commencement of supplies, and similar or higher rating reports will be submitted at the time of tender, kindly accept.	Please refer Revised Technical Specification -DTR 13/05/2045
167	ENG-HV-01-DT Cu Wdg/Clause No.5.27/ page No.27	Clause No.5.27 The transformer shall be suitable for loading as per IS 6600	As per BIS gazette dt:09/06/2015, IS 6600 has been replaced with IS 2026-7.Hence, transformer shall be suitable for overloading as per IS 2026-7	Please refer Revised Technical Specification -DTR 13/05/2046
168	ENG-HV-01-DT Cu Wdg/Clause No.5.6 / page No.16	As Per Clause No.5.6 of Technical Specification Thickness of sheet for radiators shall be 1.2mm. ANNEXURE – I INSPECTION TEST PLAN FOR STAGE INSPECTION OF DISTRIBUTION TRANSFORMER HI Profarma Radiators Fin radiator of 1.25mm thick sheet	These two clauses are contradictory please provide the required radiator thickness. Kindly Confirm.	Please refer Revised Technical Specification -DTR 13/05/2047
169	ENG-HV-01-DT Cu Wdg/Clause No.4(28)/ page No.6	clause No 4 (28) Metering CT for LV Side Metering CT for LV Side	CT not required in neutral.Kindly confirm	Please refer Revised Technical Specification -DTR 13/05/2048
170	ENG-HV-01-DT Cu Wdg/Clause No.5(29) / page No.10	Clause 5.29.WTI 1.WTI shall be Provided in one Winding	It is mentioned WTI shall be provided in one winding of each LV and HV phase, but in general WTI is provided only on one winding of LV. Please clarify.	Please refer Revised Technical Specification -DTR 13/05/2049
171	ENG-HV-01-DT Cu Wdg/Clause No.5.16/ page No.22	Clause No. 5.16 Default Oil shall be Mineral Oil only if not specified/asked for other oil.	No special note was found. Hence it is presumed that the oil is mineral oil. All parameters as per clause no. 5.16 – Mineral Oil.	Please refer Revised Technical Specification -DTR 13/05/2050
172	ENG-HV-01-008 / 4.24 B/ Page No. 6 of 70	Normal Flux density at rated voltage & frequency 1.5 Tesla	Confusing vaue of flux density, please clarify.	Please refer Revised Technical Specification -DTR 13/05/2051
173	ENG-HV-01-008 / 19.10.C/ Page No.39 of 70	Flux density at Normal Voltage-1.6 Tesla		Please refer Revised Technical Specification -DTR 13/05/2052
174	ENG-HV-01-008 /5.19 C/ Page No.24 of 70	HV side neutral earting strip	For 11/0.250 KV transformer only 2 phases of 11 KV system are terminated to HV terminal. No necessary for earthing for HV terminal, kindly confirm.	Please refer Revised Technical Specification -DTR 13/05/2053
175	ENG-HV-01-008 /5.8.2/ Page No.17 of 70	The HV bushing shall be 2 part and outdoor type external part made of Porcelin material and rods and nuts.	Can we provide HV bushings of 17.5 KV, 250 Amp in single piece as per general Practice.Kindly confirm	Please refer Revised Technical Specification -DTR 13/05/2054
176	ENG-HV-01-008 /5.4.4/ Page No.13 of 70	The Top and bottom plate thickness- 2.5 MM minimum and side plate 2.25 mm plate.	Confusing vaue of plate thickness, please clarify.	Please refer Revised Technical Specification -DTR 13/05/2055
177	ENG-HV-01-008 /19.0 (28.3.a & b)/ Page No.43 of 70	The Top and bottom plate thickness- 6 MM minimum and side plate 5 mm plate.		Please refer Revised Technical Specification -DTR 13/05/2056
178	ENG-HV-01-DT Al. Wdg /5.5.16 /13 of 50	The transformer shall be provided with 4 Nos.cooling lugs to pull the transformer for Horizentaly	As there is no wheel fitted with the base chanell of the transformer, so no requirement of cooling lugs, kindly confirm.	Please refer Revised Technical Specification -DTR 13/05/2057
179	ENG-HV-01-DT Al. Wdg /5.9.8 /16 of 50	25 KVA DTR shall have side inclined HV busing being without conservator.	Both the clauses contradict each other regarding mounting of HV Bushing, Kindly clarify.	Please refer Revised Technical Specification -DTR 13/05/2058
180	ENG-HV-01-DT Al. Wdg /5.10.1 /16 of 50	Bare Bushing on top of transformer when plinth mount not mentioned.(For 25 KVA DTR)		Please refer Revised Technical Specification -DTR 13/05/2059
181	ENG-HV-01-DT Al. Wdg /5.2.2 /21 of 50	The Breather shall contain 500 gm of Silicagel for 160 KVA DTs.	Please mentioned the Silica gel quantity for 25 KVA, 63 KVA and 100 KVA transformer.	Please refer Revised Technical Specification -DTR 13/05/2060
182	ENG-HV-01-DT Al. Wdg/5.17.1/20 of 50	25 KVA DT shall be without conservator and self cool type	Self cooled mentioned in tender specification,we understand the transformer is without Radiator, a) can we provide radiator b) Explosion vent is not required c) Since oil is not filled upto the top cover, thermometer pocket is to be fitted on side wall of tank. d) Since oil is not filled upto top cover, filter valve is not required. Please clarify	Please refer Revised Technical Specification -DTR 13/05/2061
183		Since conservator is not required, hence it seems to be sealed type transformer.	Whether Breather and air release plug is to be provided or not.	Please refer Revised Technical Specification -DTR 13/05/2062
184		Tie Road & Core Bolt material mentioned as S.S.	S.S Rod and nut are not required for core bolt and tie rod. M.S. or G.I rods with proper insulation can be used. Please confirm.	Please refer Revised Technical Specification -DTR 13/05/2063
185	1(Scope)	Three Phase 11kV/0.25kV, Non sealed	As per IS 1180 clause 8, All single phase ratings shall be of sealed type design. We request you to please modify " three Phase" & "Non Sealed" to Single phase & sealed type	Please refer Revised Technical Specification -DTR 13/05/2064
186	4(General Technical requirements)	Rated voltage:12kV Service Voltaae:11kV	We are treating 12kV as system voltage & 11kV as nominal rated voltage. Please confirm	Please refer Revised Technical Specification -DTR 13/05/2065
187	5.1	The core thickness shall be 0.23mm less or grade of core shalle be M3	The core thickness shall be "0.23 mm or Less" Please make a note	Please refer Revised Technical Specification -DTR 13/05/2066
188	5.2(Losses)	The transformer shall be designed for minimum level of efficiency 99.05% for loading range in between 20% to 60% at unity PF Percentage of regulation should be less than 4% at 0.8 Power factor	Kindly note that all the DTR's are currently procuring based on IS-1180 and the losses as specified therein by maintaing energy efficiency levels. Percentage efficiency value & Regulation will be arrived based on achieved No Load, Load Losses with respect to Energy Efficiency Level 2 Losses. Please allow us to proceed with percentage efficiency & Regulation w.r.t achieved Losses itself & request you to remove limits for efficiency and regulation.	Please refer Revised Technical Specification -DTR 13/05/2067
189	5.3(Winding)	The coils shall be circular in shape	As per clause 5.1, The transformer core shall be of wound type construction . As Wound core is of rectangle type construction, Correspondingly, LV & HV Coils will also be of rectangular shape only. Therefore please allow us to proceed with rectangular shaped HV & LV Coils	Please refer Revised Technical Specification -DTR 13/05/2068
190	5.4(Tank)	The tank shall be fabricated by welding at corners . No horizontal & Vertical joints in tank side walls &its top &bottom covers shall be allowed	The said is applicable to rectangular tank construction type and is not applicable to round shaped tank . However for round shaped tanks, Vertical joints in tank side walls exist. Kindly make a note.	Please refer Revised Technical Specification -DTR 13/05/2069
191	5.4(Tank thickness)	The thickness of tank shall be as follow i)Top & BottomPlate: 2.5 mm (min) ii)For sides-2.25 mm(min)	Please allow us to proceed with below mentioned regular tank sheet thicknesses which is also as per Previous Tatapower supplies i)Top& Bottom Plate:2.5 mm(Nominal) ii) Side sheet: 2.2mm(Nominal) Above nominal thicknesses are subjected to sheet thick tolerance as per IS 1852 Standard. Please allow us to proceed with above	Please refer Revised Technical Specification -DTR 13/05/2070
192	5.4.7	The tank cover shall be conical shape(Slope at least 15 degree taking horizontal plane as surface)	As per our previous executed Tatapower, TPDDL Workorders, the topcover will be of Dome Shaped .Please allow us to proceed with dome shaped topcover.	Please refer Revised Technical Specification -DTR 13/05/2071

193	5.4.13	Minimum Oil Level mark shall be embossed inside the tank (at 25 Deg.c)	As per Latest amended IS 1180-2014,Minimum position corresponds to an operating temperature of 30 Deg.c for sealed type transformers. Please allow us to proceed as per IS 1180-2014 Standard.	Please refer Revised Technical Specification -DTR 13/05/2072
194	5.4.6	The Tank cover shall have plasticized surfaced at top to guard against Bird fault. Alternatively, suitable UV resistance polymeric insulating shrouds (Height 300mm) to be provided on bushing Terminals	As per clause 5.4.6, we will provide Birdguards on HV bushing terminals. Please confirm	Please refer Revised Technical Specification -DTR 13/05/2073
195	5.8.6	The HV Bushings shall be fitted with polymeric molded heat shrinkable insulating covers suitable for protection of HT Bushing connector		Please refer Revised Technical Specification -DTR 13/05/2074
196	5.8(HV Bushing)	HV Bushings:12kV/250A The bushing shall be two part	Generally HV Bushing will be of one part and LV Bushing will be of two part as per IS 3347. Please allow us to proceed as above	Please refer Revised Technical Specification -DTR 13/05/2075
197	5.9(LV MCCB Box)	The single Phase MCCB shall be provided with suitable size of AL Busbar w.r.t minimum current density (calculated) of 1A/Sq.mm inside for further distribution of supply	As per our Previous Tatapower order executions, 25kVA , Max current density of AL Busbar inside MCCB Box shall be 1 A/Sq.mm. Please clarify	Please refer Revised Technical Specification -DTR 13/05/2076
198	5.12(Earthing connections)	The provision for earthing connection shall be provided for 25x6 GI Strip with insulated mounted support	These clauses are contradictory to each other. The said line not applicable on HV Side as their primary(HV) Voltages are 11000V i.e 2 HV Phase bushings will exist instead of Neutral Bushings. Please review and reconfirm on HV voltage 11kV or 11/√3 kV	Please refer Revised Technical Specification -DTR 13/05/2077
199	5.19(Fittings)	5.19 C HV Side Neutral earthing Strip		Please refer Revised Technical Specification -DTR 13/05/2078
200	HV Voltage	Clause 1(Scope) Three Phase 11kV/0.25kV		Please refer Revised Technical Specification -DTR 13/05/2079
201	5.19(Fittings)	Palm connector on LV Side	As per our Previous Tatapower Executions, The connections from Bushing stem to corresponding Busbars & MCCB shall be done by using Suitable Lugs, Insulated Flexible wire equipment which will not damage corresponding Bushing stem. As there is MCCB box on LV Side, Palm connector is not applicable. Please confirm.	Please refer Revised Technical Specification -DTR 13/05/2080
202	19(General Technical parameters)	10C:Flux Density at normal voltage: 1.6 wb/Sq.mm2 But as per clause 4.24B, Flux Density at rated voltage & Frequency is 1.5 Tesla	As there is ambiquity, Please confirm the flux density limit at rated conditions	Please refer Revised Technical Specification -DTR 13/05/2081
203	19(General Technical parameters)	Losses(Serial 17,18) : Total Losses mentioned at 50% , 100% belonging to three phase ratings.	Please correct in line with TS clause no. 5.2	Please refer Revised Technical Specification -DTR 13/05/2082
204	5.1 of Technical specification.	Core: Transformer core shall be stack type	We request you to kindly add an option for wound core construction by considering the advantages of Wound core construction over Stacked core construction. TPDDL – Delhi is procuring the single phase distribution transformers with wound core from long back and we have supplied the transformer for which the performance reports are attached for your ready reference. Advantages of Wound core:- Wound core construction is ideal for transformers with CRGO silicon steel also wound cores features a step – lap joint will minimizing eddy current losses. Hence, the core destruction factors will be less compared to the core with stacked construction resulting in lower No-load loss. Wound core transformers are light weight and compact. Wound core certainly eliminates the possibility to use small pieces of lamination. This can avoid the use of scrap pieces of CRGO in distribution transformers. Hence in a way if wound core transformers are incorporated, it eliminates the use of scrap CRGO. Mechanically strong to resist short circuit forces. This aspect has been adopted by PGCIL for smaller distribution transformers. Thermally strong for higher load capability and longer life. Efficient, providing maximum output at minimum operating cost. Electrically strong to resist lightning and switching surges. Generation of low radial leakage flux which leads to Less short circuit axial forces. The No of joints in a laminations are reduced, it leads to core under gone very less stresses therefore no-load losses will reduces. Human manufacturing variations are almost eliminated. Lower Maintenance cost Assembly of core & coil can be done easily at the time of servicing and repairing.	Please refer Revised Technical Specification -DTR 13/05/2083
205	5.1 of Technical specification.	Transformer core shall be stack type, 2D, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere, if required) to relieve stresses.	We request you to kindly give option for Amorphous core also based on the following advantages. Why Amorphous Metal for Transformers? The No-Load Losses in transformer are of the utmost important since they occur throughout the life of the transformer and if we can reduce these losses by any method, then the savings to the user are enormous. A unique electrical steel known as Amorphous Metal, which provides significant reduction in the core losses that helped to make high energy efficient distribution transformers. ADVANTAGES OF AMORPHOUS METAL CORE TRANSFORMERS: • No-load loss reduced to a rock bottom low of 25% as compared to crgo transformers. • Losses due to non-linear loading (i.e. Harmonic distortion) is reduced typically by about 570 watts for a 100 kva transformer. • Less magnetizing current. • Cumulative saving of energy cost. • Total owning cost to customer is much less. • Reduction in fossil fuel consumption. • Better "demand side management". • Less temperature rise of core. • The core design and clamping structure is special and sturdy, and coils being progressively wound. The ability to withstand short circuit forces is more. • Less noise level due to less magnetostriction. • Higher time constant contributing to longer life.	Please refer Revised Technical Specification -DTR 13/05/2084
206	5.2.1 of Technical specification.	Windings shall be of Double Paper Covered Aluminium conductor	We request you to kindly give option for super enamel covering also, as per CEA guidelines and IS 1180(part-1):2014.	Please refer Revised Technical Specification -DTR 13/05/2085
207	4..0(20) of Technical Specification	Normal flux density (at rated voltage and frequency) – 1.6T	We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla)	Please refer Revised Technical Specification -DTR 13/05/2086
208	5.2 winding connections	Primary and secondary windings shall be constructed from high- conductivity (Aluminium conductors), Double Paper Covered (DPC) Aluminium conductor with min. 30% overlap per layer of paper & TPC with 25% overlap per layer	It is to inform that IS 6162 (Part-1) :1971 & IS 6162 (Part-2): 1971 is calling for overlapping of 25% only. (round) Strip conductors: TPC(Triple Paper Covering) in that first two layers are but lapped and outer most layer is 25% overlapped with opposite direction Round conductors: DPC with having overlapping not less than 25% of its width for round conductor	Please refer Revised Technical Specification -DTR 13/05/2087
209	5.7 GASKETS	Only Joint free Gasket to be used.	Kindly note that on top cover gasket joints are used. As single piece of gasket may not sufficient to cover the tank top. Joint Excuted with good quality for leak proof.	Please refer Revised Technical Specification -DTR 13/05/2088
210	5.11 Terminal connector (LT terminal)	Tinned Brass palm connector (with current rating w.r.t Load current), and Aluminium busbar (current density: not more than1 A/mm^2) shall be provided.	As the cable is of 1 run, bimetallic connector can be used in place of palm connector and aluminium bus bar which is compac in size and reliable.	Please refer Revised Technical Specification -DTR 13/05/2089
211	5.21 DRAIN VALVE AND	1. The drain valve and filter value shall be of Brass with gate valve.	Brass metal wheel valve of size 3/4" of screwtype, can be used for both filter valve and drain valve.	Please refer Revised Technical Specification -DTR 13/05/2090
212		2. The drain valve and filter value shall have double round flanges. One side shall be fixed with tank and other side should be left open for oil filling/filtration purpose.		Please refer Revised Technical Specification -DTR 13/05/2091
213	5.5 transformer tank	The thickness of tank should be as below: For top and bottom : 5 mm (minimum) For Sides : 3.15 mm (minimum) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852.	The tank sheet thickness without Negative tolerances are non standard sizes& not avaliable in market . We will provide the thickness of tank sheets with +/- Tolerance as per IS:1852. Kindly confirm.	Please refer Revised Technical Specification -DTR 13/05/2092
214	5.19 explosion vent	Double diaphragm with oil observation gauge (prismatic Type) shall be provided on explosion vent pipe	Explosion vent with plain oil level gauge without markings shall be provided as there wont be any oil in the explosion vent.	Please refer Revised Technical Specification -DTR 13/05/2093
215	5.23 OTI	Dial Type Oil temperature indicator shall be provided on the top cover of the transformer. It should be suitable for outdoor mounting with maximum indicator pointer. Fixing union shall be of female thread. 2. Range: 0- 120 °C, Accuracy: +4°C. 3. The OTI shall be IP55 tested.	For smaller capacity of DTR's upto 100kVA OTI is not required. Kinldy review and remove from specification.	Please refer Revised Technical Specification -DTR 13/05/2094
216	5.24 fastners	All the bolts or studs shall be at least 6 mm in diameter except when used for small wiring terminals. All bolts shall be of arade 8.8.	The HDG bolts of grade 8.8 is not avaliable in the market generally.Please amend grade to 5.6 .	Please refer Revised Technical Specification -DTR 13/05/2095
217	6.3 QR CODE	QR details	please provide the details to be provided in QR code .Total rating plate details cannot be provided in QR code.	Please refer Revised Technical Specification -DTR 13/05/2096
218	5.6 RADIATORS	Thickness of sheet for radiators shall be 1.20 mm (min).	The Radiator sheet thickness provided shall be with +/- Tolerance as per IS:1852. Please confirm.	Please refer Revised Technical Specification -DTR 13/05/2097
219	5.9 Bushing and Terminal connector	1. The bushings shall be of outdoor type made of porcelain material and rods shall be tinned copper along with neutral rod and nuts (Tightening Nut along with Check Nut) shall be made of tinned brass material. 10. IS to be followed: IS 3347(Part-I) (Section-1 for porcelain and Section 2 for metal part) and IS 7421(latest amendment of IS).	As per IS -1180 & IS 3347,brass stem shall be used up to 250A bushing. So in this regard we reqeusr you to kindly allow us to use brass stem instead of tinnned copper stem. Please confirm	Please refer Revised Technical Specification -DTR 13/05/2098
220	5.27 of Technical Specification	The transformer shall be suitable for loading as per IS 6600.	IS 6600 has been replaced with IS 2026-7. Hence. transformer shall be suitable for overloadine as per IS 2026-7	Please refer Revised Technical Specification -DTR 13/05/2099
221	Cl.No. 5.9 Bushings and Terminal Connectors	For Plinth mounted transformers: 9. Transformer shall be with HT cable box on sidewall of tank having porcelain bushing as specified above.	We request you to kindly confirm the application of transformers, whether Plinth Mount or Pole Mount transformers for 25kVA, 63kVA & 100kVA Aluminium wound Distribution Transformers. Generally for this smaller transformers cable box is not recommandble to to smaller size. If cable boxes are required the design is getting costlier. Kindly review and accept the bare bushing on both sides.	Please refer Revised Technical Specification -DTR 13/05/2100
222	Cl.No. 5.10 Cable Boxes	For plinth mount DTs in these ratings, sidewall mounted bushings with cable box are to be provided.		Please refer Revised Technical Specification -DTR 13/05/2101
223	Cl.No. 5.11 Terminal Connectors	For plinth mounted DT connector not required.		Please refer Revised Technical Specification -DTR 13/05/2102
224	Cl.No. 5.19 EXPLOSION VENT / PRESSURE RELEASE DEVICE	All plinth mounted DT shall be provided with PRV/PRD with auxiliary		Please refer Revised Technical Specification -DTR 13/05/2103
225	5.2.1 of Technical specification.	Windings shall be of Double Paper Covered copper conductor	We request you to kindly give option for super enamel covering also, as per CEA guidelines and IS 1180(part-1):2014.	Please refer Revised Technical Specification -DTR 13/05/2104
226	5.1 of Technical specification.	Transformer core shall be stack type, 2D, constructed from high grade cold rolled, non-ageing, grain oriented, silicon steel lamination which shall be properly annealed (under inert atmosphere, if required) to relieve stresses.	We request you to kindly give option for Amorphous core also based on the following advantages. Why Amorphous Metal for Transformers? The No-Load Losses in transformer are of the utmost important since they occur throughout the life of the transformer and if we can reduce these losses by any method, then the savings to the user are enormous. A unique electrical steel known as Amorphous Metal, which provides significant reduction in the core losses that helped to make high energy efficient distribution transformers. ADVANTAGES OF AMORPHOUS METAL CORE TRANSFORMERS: • No-load loss reduced to a rock bottom low of 25% as compared to crgo transformers. • Losses due to non-linear loading (i.e. Harmonic distortion) is reduced typically by about 570 watts for a 100 kva transformer. • Less magnetizing current. • Cumulative saving of energy cost. • Total owning cost to customer is much less. • Reduction in fossil fuel consumption. • Better "demand side management". • Less temperature rise of core. • The core design and clamping structure is special and sturdy, and coils being progressively wound. The ability to withstand short circuit forces is more. • Less noise level due to less magnetostriction. • Higher time constant contributing to longer life.	Please refer Revised Technical Specification -DTR 13/05/2105
227	5.1 of Technical specification.	Windings shall be of Double Paper Covered copper conductor	Windings shall be of Double Paper Covered/ super enamel covering for Copper conductor/ aluminum conductor. (For Foil not applicable) In case of Foil winding, Insulation between the turns (foils) is 1 or 2 sheets of Epoxy Diamond Dotted kraft paper. The advantages of foil winding is enclosed for your ready reference.	Please refer Revised Technical Specification -DTR 13/05/2106

228	5.4(Losses)	The transformer shall be designed for below level of efficiency level:	Kindly note that all the DTR's are currently procuring based on IS-1180 and the losses as specified therein by maintaing energy efficiency levels. Percentage efficiency value & Regulation will be arrived based on achieved No Load, Load Losses with respect to Energy Efficiency Level 2 Losses. Please allow us to proceed with percentage efficiency & Regulation w.r.t achieved Losses itself & request you to remove limits for efficiency and regulation.	Please refer Revised Technical Specification -DTR 13/05/2107
229	4 (32) WHEELS	The transformer shall be provided with four uni-directional rollers with locking arrangement suitable for rail gauges in both the axis for movement of transformer in either direction. Distance between wheels shall be center to center 820mm	Please allow us to follw as per IS 1180 for roller centre to centre distance.	Please refer Revised Technical Specification -DTR 13/05/2108
230	5.7 GASKETS	Only Joint free Gasket to be used.	There will be joints on top cover sealing gasket. As single piece of gasket may not sufficient to cover the tank top, LV & HV Cable boxes. Joint Excuted with good quality for leak proof with dovetail joints.	Please refer Revised Technical Specification -DTR 13/05/2109
231	4..0(20) of Technical Specification	Normal flux density (at rated voltage and frequency) – 1.6T	We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla)	Please refer Revised Technical Specification -DTR 13/05/2110
232	5.2 winding connections	Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with 60% overlap	It is to inform that IS 6162 (Part-1) :1971 & IS 6162 (Part-2): 1971 is calling for overlapping of 25% only. (round) Strip conductors: TPC(Triple Paper Covering) in that first two layers are but lapped and outer most layer is 25% overlapped with opposite direction Round conductors: DPC with having overlapping not less than 25% of its width for round conductor	Please refer Revised Technical Specification -DTR 13/05/2111
233	5.5 transformer tank	The thickness of tank should be as below: For top and bottom : 6 mm (minimum) For Sides : 5 mm (minimum) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852.	The tank sheet thickness without Negative tolerances are non standard sizes& not avaliable in market . We will provide the thickness of tank sheets with +/- Tolerance as per IS:1852. Kindly confirm.	Please refer Revised Technical Specification -DTR 13/05/2112
234	5.19 explosion vent	Double diaphragm with oil observation gauge (prismatic Type) shall be provided on explosion vent pipe	Explosion vent with plain oil level gauge without markings shall be provided as there wont be any oil in the explosion vent.	Please refer Revised Technical Specification -DTR 13/05/2113
235	6.3 QR CODE	QR details	please provide the details to be provided in QR code .Total rating plate details cannot be provided in QR code.	Please refer Revised Technical Specification -DTR 13/05/2114
236	5.6 RADIATORS	Thickness of sheet for radiators shall be 1.20 mm (min).	The Radiator sheet thickness provided shall be with +/- Tolerance as per IS:1852. Please confirm.	Please refer Revised Technical Specification -DTR 13/05/2115
237	Bushing and Terminal connector	1. The bushings shall be of outdoor type made of porcelain material and rods shall be tinned copper along with neutral rod and nuts (Tightening Nut along with Check Nut) shall be made of tinned brass material. 10. IS to be followed: IS 3347(Part-I) (Section-1 for porcelain and Section 2 for metal part) and IS 7421(latest amendment of IS).	As per IS -1180 & IS 3347,brass stem shall be used up to 250A bushing. So in this regard we reqeusr you to kindly allow us to use brass stem instead of tinnned copper stem. Please confirm	Please refer Revised Technical Specification -DTR 13/05/2116
238	5.27 of Technical Specification	The transformer shall be suitable for loading as per IS 6600.	IS 6600 has been replaced with IS 2026-7. Hence, transformer shall be suitable for overloading as per IS 2026-7	Please refer Revised Technical Specification -DTR 13/05/2117
239	Cl.No. 4 (Sl.No. 32) of General Technical Requirements	For Transformers below 630kVA rating: Wheels: Only item codes in tender having mention of 'Plinth Mounted' those DT shall have rollers. When same is not mentioned in item code then the DT shall be without rollers.	We request you to kindly confirm the application of transformers, whether Plinth Mount or Pole Mount transformers for 250kVA, 400kVA Copper wound Distribution Transformers. For our recet ongoing supplies we are getting the reqeustr from other TATA Odisha discoms to supply the all ratings without HV cable box from 250kVA to 1000kVA, based on site conditions. In this regard we request to kinldy reconfirm the requirment of cable box for this tender.	Please refer Revised Technical Specification -DTR 13/05/2118
240	Cl.No. 5.9 Bushings and Terminal Connectors	For Plinth mounted transformers: 6. Transformer shall be with HT cable box on sidewall of tank having porcelain bushing as specified above.		Please refer Revised Technical Specification -DTR 13/05/2119
241	Cl.No. 5.10 Cable Boxes	For Transformers below 630kVA rating: For plinth mount DTs in these ratings, sidewall mounted bushings with cable box are to be provided.		Please refer Revised Technical Specification -DTR 13/05/2120
242	Cl.No. 5.11 Terminal Connectors	HT TERMINAL CONNECTOR: For plinth mounted & 630kVA and above ratings Aluminium lugs (with minimum of 2 hole) suitable for 3CX400 sq.mm XLPE shall be provided at HT side for cable connection.		Please refer Revised Technical Specification -DTR 13/05/2121
243	Cl.No. 5.19 EXPLOSION VENT / PRESSURE RELEASE DEVICE	All plinth mounted DT & 630kVA and above DT shall be provided with PRV/PRD with auxiliary contacts.		Please refer Revised Technical Specification -DTR 13/05/2122
244		As per tender documents	Clarification required	Please refer Revised Technical Specification -DTR 13/05/2123
245		Due date of submission of tender is 13.04.2022 as per Page No. 2 of tender.	Please confirm the due date of submission f tender.	Please refer Revised Technical Specification -DTR 13/05/2124
246		Whereas Clause No. 1.3 – Calendar of Events (e) Last date and time of receipt of Bids : 09.04.2022		Please refer Revised Technical Specification -DTR 13/05/2125
247		EMD Bank Guarantee – MSME units in Odisha are exempted from furnishing EMD BG	Please allow MSME unit to furnish EMD @ 50% as allowed by other Odisha Discoms like TPNODL & TPWODL	Please refer Revised Technical Specification -DTR 13/05/2126
248		Clause No.3 – Price Variation Clause	Please incorporate the new IEEMA PV formula which is effective from September, 2021 as follows:	Please refer Revised Technical Specification -DTR 13/05/2127
249		IEEMA PV formula for Al. Wound and Copper Wound Transformer mentioned here are obsolete.	Al Wound DTs	Please refer Revised Technical Specification -DTR 13/05/2128
250			P =P0/100 * (8 + 22*(AL/AL0) + 36*(ES/ES0) + 12*(IS/IS0) + 5*(IM/IM0) + 10*(TO/TO0) + 7*(W/W0))	Please refer Revised Technical Specification -DTR 13/05/2129
251				Please refer Revised Technical Specification -DTR 13/05/2130
252			Cu Wound DTs	Please refer Revised Technical Specification -DTR 13/05/2131
253			P =P0/100 * (7 + 41*(C/C0) + 23*(ES/ES0) + 10*(IS/IS0) + 5*(IM/IM0) + 8*(TO/TO0) + 6*(W/W0))	Please refer Revised Technical Specification -DTR 13/05/2132
254		Clause No. 8.2 Drawing Submission & Approval:	Please allow 15 days time to furnish drawings for approval. Necessary amendment in the tender document is requested.	Please refer Revised Technical Specification -DTR 13/05/2133
255		Within 7 days of Rate Contract issuance by TPSODL, it is the responsibility of BA to submit all the drawings and GTP for manufacturing clearance		Please refer Revised Technical Specification -DTR 13/05/2134
256		Clause No. 8.3 Delivery Timeline: For First RO, Delivery period shall be 90 days from date of RO/ drawing approval/ manufacturing clearance, whichever is later. For subsequent ROs, material shall be delivered within 75 days from date of receipt of release order.	Please amend the delivery time line to read as 120 days and 90 days respectively from Cat A approval for supply of first RO and subsequent Ros as per previous tenders	Please refer Revised Technical Specification -DTR 13/05/2135
257		Annexure – I	Please confirm which ratings are Al and Cu Wound Transformers. Also confirm the ratings of transformers which comes	Please refer Revised Technical Specification -DTR 13/05/2136
258		All the ratings are of Al. Wound	under Pole Mount and Plinth Mount	Please refer Revised Technical Specification -DTR 13/05/2137
259		Clause No. 5.9 of TS – Bushings & Terminal Connectors :	Generally heat shrinkable insulating covers are not in the scope of transformer suppler. Please confirm	Please refer Revised Technical Specification -DTR 13/05/2138
260		The HV bushing shall be fitted with molded heat shrinkable insulating covers suitable for to provide protection on the bushing connector		Please refer Revised Technical Specification -DTR 13/05/2139
261		Clause No. 7.1 – Type Tests	In view of the revised losses of Level 2 Transformers as per latest amendment No.4 of IS:1180, most of the manufacturers	Please refer Revised Technical Specification -DTR 13/05/2140
262		This clause allows conductance of Impulse Tests, Temperature Rise Tests and Short Circuit Tests only at CPRI / ERDA	have to get fresh type tests on DTs. Limiting only two labs for getting type tests cause delay in getting type tests resulting delay in supply. Therefore, please validate test reports of NABL Govt recognized Lab also in addition to CPRI/ERDA.	Please refer Revised Technical Specification -DTR 13/05/2141
263		Type Test Certificates	Please allow manufacturers, who do not have type test certificates for the offered designed transformers, based on an undertaking that type test reports will be furnished prior comment of supplies.	Please refer Revised Technical Specification -DTR 13/05/2142
264		Clause No. 6.1 – Marking Plate	Fresh type tests to be performed to comply the latest amendment of IS;1180 and your specification. Hence, BIS Certificate	Please refer Revised Technical Specification -DTR 13/05/2143
265		BIS Certification Mark and BEE Label	and BEE Label shall be furnished prior commencement of supplies. Please allow.	Please refer Revised Technical Specification -DTR 13/05/2144
266			This tender consist of 11 ratings and preparing fresh design as per the latest amendment of IS :1180 i.e., reduced energy	Please refer Revised Technical Specification -DTR 13/05/2145
267			efficiency transformers, is a time taking process. Therefore request you to kindly extend the due date of the tender by at	Please refer Revised Technical Specification -DTR 13/05/2146
268	TYPE TEST FOR ONLY 25 KVA,100 KVA,250 KVA AND 400 KVA	SHORT -CIRCUIT REPORT AND IMPULSE FOR ALL THESE RATING WE HAVE	OTHER KVA RATING TYPE TEST WE DON'T HAVE	Please refer Revised Technical Specification -DTR 13/05/2147
269	OUR COMPANY IS GROUP OF 2 COMPANIES	TOTAL TURNOVER IS MORE THAN 10 CRORE	CAN WE PUT PAPER FOR BOTH THE IDENTITY	Please refer Revised Technical Specification -DTR 13/05/2148
270	PART A AL WOUND	100 PERCENT QUANTITY TO QUOTE	MINIUM QTY TO QUOTE FOR QUALIFICATION	Please refer Revised Technical Specification -DTR 13/05/2149
271	PART B CU WOUND DISTRIBUTION TF	HAVE 250 KVA AND 400 KVA TYPE TEST	BUT DOES NOT HAVE TURNOVER BUT WANT TO PARTICIPATE	Please refer Revised Technical Specification -DTR 13/05/2150
272	As per Clause no. 4.9 Type Tests (if applicable)	The type tests specified in TPSODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/ reject such bids rests with TPSODL		
273	Doc No. ENG-HV-01-008, clause no. 8 Type tests certifiificates/Page No. 56	The Bidder shall furnish the type test certificates of the Distribution Transformer for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI as per the relevant standards. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to TPSODL		
274	Doc No. ENG-HV-01-DT Al Wdg, clause no. 8 Type tests certifiificates/Page No. 126	1. The Bidder shall furnish the type test certificates of the offered rating and design of transformer for the tests as mentioned above as per the corresponding standards. 2. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards. 3. In the event of any discrepancy in the test reports, i.e. any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPSODL. 4. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.	Against these clauses, we wish to participate the tender by submitting type test reports of similar / higher rating & higher voltage class along with an undertaking letter. We shall conduct & submit the complete type test reports for the offered design after award of contract, at our cost without affecting the delivery schedule. We request to review our request and confirm your acceptance.	Specification to be complied however you may participate the tender. It will be finalised during technical evaluation of the tender.
275	Doc No. ENG-HV-01-DT Cu Wdg, clause no. 8 Type test certifiificates/Page No. 180	1. The Bidder shall furnish the type test certificates of the offered rating and design of transformer for the tests as mentioned above as per the corresponding standards. 2. All the tests shall be conducted at CPRI / ERDA or as defined in 7.1 as per the relevant standards. 3. In the event of any discrepancy in the test reports, i.e. any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPSODL. 4. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.		
276	As per Clause no. 8.0 SECURITY CUM PERFORMANCE DEPOSIT in GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS/Page no. 210	Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPSODL for: (a) 5% of the PO value if purchase order value is more than Rs 5 Crores. (b) 10% of the PO value if purchase order value is less than Rs 5 Crores. This shall remain valid till the end of the Guarantee Period of contract, plus one month. c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.	We bring to your kind notice that, The Government of India vide office memorandum No. F/9/4/2020-PPD, Dt: 12.11.2020 & No.3/7/2017-Trans-Pt(6), Dt:23.03.2021 issued guidelines to reduce the Performance security from existing 5%-10% to 3% of total value of contract. The copies of the same are enclosed herewith for your kind perusal. In this context, we request your esteemed office to amend the Performance Security Clause with 3% of the Total Contract Value. The copy of the circular is enclosed as an annexure-3	Tender terms and condition shall prevail.
277	Payment terms	Payment terms mentioned in Clause No 8.4 of SCC i.e. 45 days and in GCC Clasue No-6 i.e. 30 days.	Kindly Confirm which one is correct.	payment mentioned in Special terms and condition shall supersede the GCC
278	Gurantee	1) In SCC clause No.8.6 Gurantee period is 66 Months. 2) Clause No. 13.2 (Page No 31/58) of GCC Guarentee Period is 12/24 Months. 3) In technical Specification page No.(34 of 70) mentioned 48/60 months,	Kindly clarify the which one is correct.	payment mentioned in Special terms and condition shall supersede the TS.
279	Latent Defect Guarantee	We are agree provide the Guarantee Period, bu no latent period shall be provided by us.	Kindly allow.	Specification to be complied
280	PBG (Clause No.8.1) S.C.C	performance Bank Guarantee per GCC within 30 days. PBG shall be 5% pf the Rate Contract Value,	Please allow for the submission of PBG as per RO instead of RC value.	Please refer Revised Technical Specification -DTR 13/05/2022

281	8.3. Delivery Timeline	For First RO, Delivery period shall be 90 days from date of RO/ drawing approval/ manufacturing clearance, whichever is later. For subsequent ROs, material shall be delivered within 75 days from date of receipt of release order.	Kindly amend the delivery schedule as below considering lead time for planning, procuring and manufacturing activities. For First RO, Delivery period shall be 150 days from date of RO/ drawing approval/ manufacturing clearance, whichever is later. For subsequent ROs, material shall be delivered within 120 days from date of receipt of release order. We are requesting TATA stores to issue the release order against the rate contracts in advance. As the OEM's are supposed to do following activities: # Block the producution slots, # Procure the materials [our sub-vendors itself demanding 75 days from the date of placement of PO], # Manufacture the transformers, # Stage inspection & clearance for further manufacturing, final inspections, # Issue of MDCC, # Lead time for logistics, # delivery of material etc are involving in this time period itself. OEM is penalizing if the material is not getting delivered to stores within delivery schdule@1% per week. In order to reduce the contingencies & to get the competitive prices for your discom, we request you to kindly grant delivery timelines accordingly. As the release orders are on Rate Contract basis, the advance planning from your end will suffice both our requirements. We request you to kindly consider and request to amend the delivery timelines accordingly.	Please refer Revised Technical Specification -DTR 13/05/2025
282	4.9 Type Tests (if applicable)	The type tests specified in TPSODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/ reject such bids rests with TPSODL.	TPSODL is procuring BIS EEL-2 as per Amendment 4 of IS 1180 part 1(2014) complying to BEE Star-2 transformers for the first time. As the tender volume is very low, we request you to kindly accept the type test reports of similar/higher rating type test reports complying to BEE START-1. In the event of order placement we will submit similar/higher rating type test reports for collecting the Short circuit type test waiver. However, we will conduct balance all type tests [Except Short Circuit] on one unit of offered rating transformer for one time at our NABL accredited laboratories in presence of TPSODL representative, without any cost implication.	Please refer Revised Technical Specification -DTR 13/05/2026
283	CAN WE QUOTE ONLY LINE ITEMS WHOSE TYPE TEST ARE THRE	OUT OF TOTAL LINE ITEMS WE CAN QUOTE SINGLE LINE ITEM	IN PRICE BID	Please refer Revised Technical Specification -DTR 13/05/2027
284	BASE PRICE FOR QUOTING THE PRICES	IEEMA RATE OR SOME OTHER DOCUMENT	HOW WILL BE PV CALUCULATED . IEEMA MONTH	Please refer Revised Technical Specification -DTR 13/05/2028
285		Qualification Criteria for Part-A Sl.No. 1. Average Annual Turnover 3 years - Rs. 14.00Cr. Sl.No. 4. The bidder should have executed Orders of transformers of similar or higher rating for total value of Rs. 10 Cr. during the last three years; Or, Two orders of transformers of similar or higher rating for Rs. 4 Cr. each during the last three years. Or, Single order of transformers of similar or higher rating for Rs. 5 Cr. during the last three years. 2) Guidelines for MSMEs Registered in the state of Odisha. Sl.No. 3 : Qualification Requirement for Open Tenders: Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria	please clarify whether Sl.No.3 of guidelines for MSMEs is applicable for both the Sl. No. 1 & 4 of Qualification Criteria for Part-A.	Please refer Revised Technical Specification -DTR 13/05/2029