

## Corrigendum No. – 1

**Tender Enquiry No-** TPSODL/OT/2021-22/031

**Work Description** - Rate Contract for Supply of Al Wound Transformers & Cu Wound Distribution Transformers of various ratings at TPSODL.

**1) Revised calendar of events will be as follows: -**

(a)	Last Date of receipt of Tender Fee	09.08.2021 up to 17:00 Hours
(b)	Date & Time of Pre-Bid Meeting (If any)	Not Applicable
(c)	Last Date of receipt of pre-bid queries, if any	11.08.2021 up to 17:00 Hours
(d)	Last Date of Posting Consolidated replies to all the pre-bid queries as received	20.08.2021 up to 17:00 Hours
(e)	Last date and time of receipt of Bids	31.08.2021 up to 17:00 Hours
(f)	Date & Time of opening technical bids & EMD	31.08.2021 up to 18:00 Hours onwards
(g)	Date & Time of opening of Price of qualified bids	Will be notified to the successful bidders through our website / e-mail.

**2) Replies for the Technical & commercial Prebid queries are enclosed in this document as Annexure- (A).**

Warm's Regards,  
**Shubhanshu Shekhar Sahu | Contracts**

Web [www.tpsouthernodisha.com](http://www.tpsouthernodisha.com)

**TP SOUTHERN ODISHA DISTRIBUTION LIMITED**  
(A Tata Power and Odisha Government Joint Venture)

Courtpeta | Berhampur | Ganjam | Odisha - 760 004.

*Note-This document does not require signature.*

Annexure- A

Tender No. : TPSODL/OT/2021-22/031				
Package Name: - Rate Contract for Supply of AI Wound Transformers & Cu Wound Distribution Transformers of various ratings at TPSODL.				
Consolidated replies to the technical pre-bid queries				
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
For Both ENG-HV-DT AI Wdg & ENG-HV-DT Cu Wdg				
1	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.	<p>We request you to kindly give 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.</p> <p><b>Advantages of Wound core:</b> 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.</p> <p>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.</p> <p>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 &amp; coil can be done easily at the time of servicing and repairing.</p>	<b>Core: Transformer core shall be stack type</b>
2	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.	<p>We request you to kindly give option for Amorphous core construction also based on the following advantages.</p> <p>ADVANTAGES OF AMORPHOUS METAL CORE TRANSFORMERS:</p> <ul style="list-style-type: none"><li>• No-load loss reduced to a rock bottom low of 25% as compared to crgo transformers.</li><li>• Losses due to non-linear loading (I.e. Harmonic distortion) is reduced typically by about 570 watts for a 100 kva transformer.</li><li>• Less magnetizing current.</li><li>• Cumulative saving of energy cost.</li><li>• Total owning cost to customer is much less.</li><li>• Reduction in fossil fuel consumption.</li><li>• Better 'demand side management'.</li><li>• Less temperature rise of core.</li><li>• The core design and clamping structure is special and sturdy, and coils being progressively wound. The ability to withstand short circuit forces is more.</li><li>• Less noise level due to less magnetostriction.</li><li>• Higher time constant contributing to longer life.</li></ul>	<b>Amorphous metal core is not accepted</b>
2	5 General Construction of Technical Specification:	Transformer shall be wound with copper coil	<p>Transformer shall be wound with copper coil/foil.</p> <p>We request you to kindly give option for foil winding with both aluminium/copper. The benefits of Foil and AI wound over Cu Foil in Distribution Transformers along with comparison and supply list is enclosed.</p>	<p>1. The transformer shall be stacked core, copper coil, oil immersed, naturally cooled (ONAN), non-sealed type with plain rectangular tank.</p> <p>2. 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.</p> <p>3. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 30% overlap per layer of paper &amp; TPC with 25% overlap per layer</p>
3	5.2.of Technical specification	Windings shall be of Double Paper Covered Copper conductor	<p>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</p> <p>We request you to kindly give option for super enamel covering also, as per CEA guidelines and IS 1180(part-1):2014.</p>	<p>1. The transformer shall be stacked core, copper coil, oil immersed, naturally cooled (ONAN), non-sealed type with plain rectangular tank.</p> <p>2. 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.</p> <p>3. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with min. 30% overlap per layer of paper &amp; TPC with 25% overlap per layer</p>
4	Marking Plates	7. BEE LABEL (up to 200 kVA transformers only):	<p>BEE LABEL (up to 2500 kVA &amp; up to 11kV transformers only) We bring to your kind notice that, as per Ministry of Power, Government of India, the Standards &amp; Labelling (S&amp;L) scheme (affixing STAR label on transformers) is mandatory and shall be applicable for all ratings 16 kVA to 2500 kVA, upto 11 kV Class. Three Phase Distribution Transformers with government gazette notification with Amendment -1 Notification SO 4062 (E) New STAR wef 01.07.2017 with respect to star rating.</p>	<b>Bidder have to comply the ongoing statutory regulations</b>
5	4(20) of General Technical Requirements: ENG-HV-DT AI Wdg  4(22) of General Technical Requirements:ENG-HV-DT Cu Wdg	Normal flux density (at rated voltage and frequency) – 1.6T	<p>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</p> <p>(I.e-1.9 Tesla Max/1.125%≈1.6888 Tesla )</p>	<b>Normal flux density (at rated voltage and frequency) – 1.6T</b>
6	5.5 of Technical Specification	The thickness of tank should be as below: For top and bottom : 6 mm (min.) For Sides : 5 mm (min.) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852.	<p>We will provide the thickness of tank as per IS:1852 with +/- Tolerance. Kindly confirm.</p>	<p>The thickness of tank should be as below: For top and bottom : 6 mm (min.) For Sides : 5 mm (min.) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852.</p>
7	5.15 of Technical Specification	The thickness of GI coating of neutral earthing strip shall be 60 microns (minimum at any point.	<p>These two clauses are contradictory, hence please review and confirm the applicable clause.</p>	<b>The thickness of GI coating of neutral earthing strip shall be 86 microns minimum at any point.</b>
	5.28 of Technical Specification	Two GI earth strip of Size 50x6 mm for neutral earthing from both side of LV box with minimum GI coating thickness of 86 microns.		
8	5.27 of Technical Specification	The transformer shall be suitable for loading as per IS 6600.	<p>IS 6600 has been replaced with IS 2026-7.</p> <p>Hence, transformer shall be suitable for overloading as per IS 2026-7</p>	<b>The transformer shall be suitable for overloading as per IS 2026-7</b>
9	5.23 of Technical Specification	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.	<p>We are providing Stem type OTI with alarm and trip contacts.</p>	<b>Oil Temperature indicator will be required with Dial type / stem type without auxiliary contact</b>
10	5.6 of Technical Specification Profarma Radiators	Thickness of sheet for radiators shall be 1.2mm Fin radiator of 1.25mm thick sheet	<p>These two clauses are contradictory please provide the required radiator thickness.</p>	<b>Thickness of sheet for radiators shall be 1.2mm</b>
ENG-HV-DT AI Wdg				
11	CI.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.	<p>We request you to kindly confirm the application of transformers, whether Plinth Mount or Pole Mount transformers for 25kVA, 63kVA &amp; 100kVA Aluminium wound Distribution Transformers</p>	<b>For 250KVA and above ratings will be of plinth mounted Below 250KVA will be of pole mounted.</b>
	CI.No. 5.10 Cable Boxes	For plinth mount DTs in these ratings, sidewall mounted bushings with cable box are to be provided.		
	CI.No. 5.11 Terminal Connectors	For plinth mounted DT connector not required.		
	CI.No. 5.19 EXPLOSION VENT / PRESSURE RELEASE DEVICE	All plinth mounted DT shall be provided with PRV/PRD with auxiliary		
	CI.No. 5.23 OTI	OIL TEMPERATURE INDICATOR	<p>For smaller capacity of DTR's upto 100kVA OTI is not required. Kindly review and remove from specification.</p>	Accepted
ENG-HV-DT Cu Wdg				
12	CI.No. 4 (SI.No. 32) of General Technical Requirements	<p><b>For Transformers below 630kVA rating:</b> 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.</p>	<p>We request you to kindly confirm the application of transformers, whether Plinth Mount or Pole Mount transformers for 250kVA, 400kVA Copper wound Distribution Transformers</p>	<b>For 250KVA and above ratings will be of plinth mounted Below 250KVA will be of pole mounted.</b>
	CI.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.		
	CI.No. 5.10 Cable Boxes	<p><b>For Transformers below 630kVA rating:</b> For plinth mount DTs in these ratings, sidewall mounted bushings with cable box are to be provided.</p>		
	CI.No. 5.11 Terminal Connectors	<p><b>HT TERMINAL CONNECTOR:</b> For plinth mounted &amp; 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.</p>		
	CI.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.		



13	ENG-HV-DT AI Wdg/Clause No.5.1/Page No:6	<p><b>As per clause No.5.1 - Core:</b></p> <p>Transformer core shall be stack type</p>	<p>We request you to kindly add option for wound core construction by considering the advantages of Wound core construction over Stacked core construction.</p> <p>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.</p> <p>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.</p> <p>Mechanically strong to resist short circuit forces. This aspect has been adopted by PGCL for smaller distribution transformers.</p> <p>1. Thermally strong for higher load capability and longer life.</p> <p>2. Efficient, providing maximum output at minimum operating cost.</p> <p>3. Electrically strong to resist lightning and switching surges.</p> <p>4. Generation of low radial leakage flux which leads to Less short circuit axial forces.</p>	<b>Core: Transformer core shall be stack type</b>
14	ENG-HV-DT AI Wdg/Clause No.5.2-Winding Connections/Page No:7	<p><b>As per clause 5.2 Winding Connections</b></p> <p>1.Primary and secondary windings shall be constructed from high conductor (Aluminium conductors), Double paper covered (DPC) aluminium conductor.</p>	<p>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.</p> <p>Kindly confirm.</p>	<b>Primary and secondary windings shall be constructed from high conductor (copper conductors), Double paper covered (DPC) copper conductor.</b>
15	ENG-HV-DT AI Wdg/ clause No.4.1.General Technical Requirements/Page No:5	<p><b>As per clause 4.1.General Technical Requirements &amp; 5.4. LOSSES</b></p> <p>The 100% &amp; 50% Total losses are mentioned as Energy Efficiency Level - 2.</p>	<p>We wish to bring to your kind notice that losses for Energy efficiency level -3 are better than Level-2 and most of the utilities like APSDCL, APEPDCL, TSPDCL and TSNPDCL are procuring transformers with Energy Efficiency level-3. so we request you to amend this 100% &amp; 50% Total losses to Energy Efficiency Level - 3.</p> <p>Kindly confirm.</p>	The minimum acceptability of 100% & 50% Total losses shall be as per Energy Efficiency Level -2.
16	ENG-HV-DT AI Wdg/ clause No.5.5 Transformer tank and tank construction/Page No:12	<p><b>As Per Clause No.5.5 Transformer tank and tank construction</b></p> <p>The thickness of tank should be as below: For top and bottom : 5 mm (min.) For Sides : 3.15 mm (min.) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852.</p>	<p>We will provide the thickness of tank as per IS:1852 with +/- Tolerance. Kindly confirm.</p>	<p>The thickness of tank should be as below: For top and bottom : 5 mm (min.) For Sides : 3.15 mm (min.) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852.</p>
17	ENG-HV-DT AI Wdg/Clause No.5.15-Earthring connections/Page No:19	<p><b>As per clause 5.15 NEUTRAL EARTHING:</b></p> <p>1. Separate LV neutral bushing to be provided on top of LV box for neutral earthing.</p>	<p>We wish to bring to your kind notice that Separate LV Neutral bushing is not necessary for LV side for neutral earthing as Earthing connection can be provided by GI Strip.</p>	Specification to be complied
18	ENG-HV-DT AI Wdg/Clause No.5.17-Conservator/Page no:20	<p><b>As per clause 5.17 Conservator:</b></p> <p>4. The connecting pipe of the conservator shall be so fitted to transformer tank that the pipe can be detached from the tank</p>	<p>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.</p> <p>Kindly confirm.</p>	Detachable pipe will be required for 250 kVA & Above Rating Transformers
19	ENG-HV-DT AI Wdg/Clause No.5.23- Oil Temperature Indicator & Clause No.5.28 Fittings/Page No:22	<p><b>As per clause 5.23 .Oil temperature indicator</b></p> <p>Dial Type Oil temperature indicator shall be provided on the top cover of the transformer</p> <p>As per clause 5.28 .Fittings</p> <p>17. Oil Temperature indicator</p>	<p>As per amendment-I of IS:1180(Part-I):2014 clause No.20 ,Oil temperature indicator is not required.So , so kindly amend this clause as per IS:1180.</p>	Oil temperature indicator will be required for above 200 kVA Rating Transformer
20	ENG-HV-DT AI Wdg/Clause No.5.0 General Construction/Page no:6	<p><b>As per clause No.5.0 -General Construction:</b></p> <p>1. The transformer shall be stacked core, Aluminium coil, oil immersed, naturally cooled (ONAN), <b>non-sealed type</b> with plain rectangular tank.</p> <p><b>As per clause 5.17 Conservator:</b></p> <p>1. 25kVA DT shall be without conservator and self-cooled type.</p>	<p>We wish to bring to your kind notice that, these two clauses are contradicting to each other and as per IS:1180(Part-I):2014 clause No.16 Transformers of ratings 63 kVA and above with plain tank construction, the provision of conservator is mandatory. So kindly amend this clause as per IS:1180.</p>	Query is not clear However Conservator tank is not required in 25 kVA DT.
21	ENG-HV-DT AI Wdg/Clause No.5.1 Core/Page No:6	<p><b>As per clause No.5.1 -Core</b></p> <p>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..</p>	<p>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.</p>	Amorphous metal core is not accepted
22	<b>ENG-HV-DT AI Wdg/Clause No.5.21/Page No:21</b>	<p><b>As per clause No.5.21</b></p> <p>Drain and Filter Valve</p>	<p>As per amendment-I of IS:1180(Part-I):2014 clause No.20 . Fittings,filter valve (for ratings above 200kVA) and drain cum sampling valve shall be provided for ratings above 500kVA.</p> <p>Hence for ratings below 200KVA filter valveand drain valve is not required .</p>	Filter valve & Drain Valve will be required for above 200 kVA Rating Transformer
23	ENG-HV-DT AI Wdg/ clause No.4.1. General Technical Requirements/Page No:4	<p><b>As per clause No..4.1. General Technical Requirements</b></p> <p>29. 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.</p> <p><b>As per clause No..5.9. BUSHINGS AND TERMINAL CONNECTORS</b></p> <p>For Pole mounted transformers: Top cover mounting bushing(Except 25kVA)</p> <p>For Plinth mounted transformers:</p>	<p>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?</p>	For 250KVA and above ratings will be of plinth mounted Below 250KVA will be of pole mounted.
24	ENG-HV-DT AI Wdg/ clause No.8. TYPE TEST CERTIFICATES/Page No:29	<p><b>As per clause No.8. TYPE TEST CERTIFICATES</b></p> <p>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.</p>	<p>We request you to allow us to submit the similar or higher rating type test reports during the technical evaluation of this tender. However we will submit the Type test reports of offered design before commencement of supplies. Kindly accept the same enabling us to participate and submit our most competitive offer.</p>	Accepted .Undertaking to be given in letter head.However before final material inspection approved Type test report need to be submitted.
25	ENG-HV-DT AI Wdg/ clause No.5.27/Page No:23	<p><b>As per clause No.5.27. OVER LOAD CAPACITY</b></p> <p>The transformer shall be suitable for loading as per IS 6600</p>	<p>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</p>	The transformer shall be suitable for overloading as per IS 2026-7
<b>Technical Clarifications Against: Specification of 3-Phase 11kV AL Winding Distribution Transformer 160 KVA to 2MVA</b>				
26	ENG-HV-DT Cu Wdg/Clause No.5.2 WINDING CONNECTIONS;/Page No:8	<p><b>As per Clause No.5.2 WINDING CONNECTIONS:</b></p> <p>1. Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with 60% overlap..</p>	<p>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.</p> <p>we will provide the overlap for Double Paper Covered (DPC) copper conductor with min. 30% overlap per layer of paper &amp; TPC with 25% overlap per layer.</p> <p>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.</p> <p>Kindly confirm</p>	Primary and secondary windings shall be constructed from high- conductivity (copper conductors), Double Paper Covered (DPC) copper conductor with 60% overlap..
27	ENG-HV-DT Cu Wdg/Clause No.4 /Page No:4	<p><b>As per Clause No.4.0 General Technical Requirements:</b></p> <p>22.0 Normal flux density (at rated voltage and frequency) – 1.6T</p> <p>26.Maximum flux density (Increase of +12.5% combined voltage and frequency variation from rated voltage and frequency) - 1.9T</p>	<p>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 )</p>	<b>Normal flux density (at rated voltage and frequency) – 1.6T</b>
28	ENG-HV-DT Cu Wdg/Clause No.5.4-Losses/Page No:10	<p><b>As per clause 4.General Technical Requirements</b></p> <p>The 100% &amp; 50% Total losses are mentioned as Energy Efficiency Level - 2.</p>	<p>We wish to bring to your kind notice that losses for Energy efficiency level -3 are better than Level-2 and most of the utilities like APSDCL, APEPDCL, TSPDCL and TSNPDCL are procuring transformers with Energy Efficiency level-3. so we request you to amend this 100% &amp; 50% Total losses to Energy Efficiency Level - 3.</p> <p>Kindly confirm.</p>	The minimum acceptability of 100% & 50% Total losses shall be as per Energy Efficiency Level -2.
29	ENG-HV-DT Cu Wdg/Clause No.5.25-Surface Preparation and Painting/Page No:26	<p><b>As per clause 5.25 Surface preparation and painting</b></p> <p>Heat resistant (Hot oil proof) paint shall be used for the inside surface and whereas for external surface one coat of thermosetting powder paint or one coat of epoxy primer (zinc chromate) followed by two coats of polyurethane (P.U.) base paint</p>	<p>We wish to bring to your kind notice that instead of Zinc Chromate , we will use Zinc Phospate as Primer, as Zinc Chromate has toxic substances and causes damage to Environment .</p> <p>Kindly confirm.</p>	Accepted
30	ENG-HV-DT Cu Wdg/Clause No.5.15-Earthring connections/Page No:22	<p><b>As per clause 5.15 NEUTRAL EARTHING:</b></p> <p>1. Separate LV neutral bushing to be provided on top of LV box for neutral earthing.</p>	<p>We wish to bring to your kind notice that Separate LV Neutral bushing is not necessary for LV side for neutral earthing as Earthing connection can be provided by GI Strip.</p>	Specification to be complied



31	ENG-HV-DT Cu Wdg/Clause No.5.17- Conservator/Page No:23	<b>As per clause 5.17 Conservator:</b>  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.	Detectable pipe will be required for 250 kVA & Above Rating Transformers
32	ENG-HV-DT Cu Wdg/Clause No.5.23- Oil Temperature Indicator & Clause No.5.28 Fittings/Page No:25	<b>As per clause 5.23 .Oil temperature indicator</b>  14.Dial Type Oil temperature indicator shall be provided on the top cover of the transformer  As per 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.	Oil temprature indicator will be required for above 200 kVA Rating Transformer
33	ENG-HV-DT Cu Wdg/ Clause No.5.28 Fittings/Page No:27	<b>As per clause 5.28 .Fittings</b>  24 Magnetic Oil Level Gauge,	We wish to bring to your kind notice that as per IS:1180(Part-I):2014 clause No.20 .2 Fittings,Magnetic oil level guage is provided for ratings above 1600kVA .So , so kindly amend this clause as per IS:1180.	Accepted as per relevant IS
34	ENG-HV-DT Cu Wdg/ Clause No.5.28 Fittings/Page No:27	<b>As per clause 5.28 .Fittings</b>  17.Jacking Pads,,	We wish to bring to your kind notice that as per IS:1180(Part-I):2014 clause No.20 .2 Fittings,Jacking padsare provided for ratings above 1600kVA .So , so kindly amend this clause as per IS:1180.	Accepted as per relevant IS
35	ENG-HV-DT Cu Wdg/Clause No.5.1 Core/Page no:7	<b>As per clause No.5.1 -Core</b>  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.	<b>Amorphous metal core is not accepted</b>
36	ENG-HV-DT Cu Wdg/ clause No.4.0. General Technical Requirements /Page No:7	<b>As per clause No..4.0. General Technical Requirements</b>  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. <b>As per clause No..5.9. BUSHINGS AND TERMINAL CONNECTORS</b> 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?	For 250KVA and above ratings will be of plinth mounted Below 250KVA will be of pole mounted.
37	ENG-HV-DT Cu Wdg/ clause No.5.10. CABLE BOXES /Page No: 18	<b>As per clause No..5.10. CABLE BOXES</b> 1. For HV side, bare bushings shall be provided on top for 160 kVA, 250 kVA, 315 kVA, 400 kVA and 500 kVA transformers suitable for bare jumper connections. For plinth mount DTs in these ratings, sidewall mounted bushings with cable box are to be provided. <b>As per clause No..5.11. TERMINAL CONNECTORS</b>	We wish to bring to your kind notice that, these two clauses are contradicting to each other in case of cable box, terminal connectors shall not be provided please confirm the requirement of cable boxes.	Ratings of plinth mounted & pole mounted have been clarified at serial no 36 Query Clarification. Specification will prevail.
38	ENG-HV-DT Cu Wdg/Clause No.5.5- TRANSFORMER TANK AND TANK CONSTRUCTION/Page No:14	<b>As per clause 5.5- TRANSFORMER TANK AND TANK CONSTRUCTION</b>  4. Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852.	We wish to bring to your kind notice that, We will provide the thickness of tank as per IS:1852 with +/- Tolerance. Kindly confirm.	The thickness of tank should be as below: For top and bottom : 5 mm (min.) For Sides : 3.15 mm (min.) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852.
39	ENG-HV-DT Cu Wdg/ clause No.8. TYPE TEST CERTIFICATES/Page No:33	<b>As per clause No.8. TYPE TEST CERTIFICATES</b> 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 request you to allow us to submit the similar or higher rating type test reports during the technical evaluation of this tender. However we will submit the Type test reports of offered design before commencement of supplies. Kindly accept the same enabling us to participate and submit our most competitive offer.	Accepted .Undertaking to be given in letter head.However before final material inspection approved Type test report need to be submitted.
40	ENG-HV-DT Al Wdg/ clause No.5.27/Page No:27	<b>As per clause No.5.27</b> 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	The transformer shall be suitable for overloading as per IS 2026-7
41	ENG-HV-DT Al Wdg/ clause No.5.6/Page No:16	<b>As Per Clause No.5.6 of Technical Specification</b> Thickness of sheet for radiators shall be 1.2mm. H) Profarma Radiators Fin radiator of 1.25mm thick sheet	These two clauses are contradictory please provide the required radiator thickness	Thickness of sheet for radiators shall be 1.2mm
42	ENG-HV-DT Al Wdg/ clause No.4.28/Page no:6	<b>4.28 LT CT'S for metering purpose</b>	CT not required in neutral.Kindly confirm	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 will be reviewed for during final drawing approval.
43	ENG-HV-DT Al Wdg/ clause No.5.29/Page No:27	<b>5.29.WTI</b>	<b>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.</b>	Winding temprature Indicator will be required for above 200 kVA Rating Transformer
44	ENG-HV-DT Al Wdg/ clause No.5.17 & 5.28(24)/Page No:27	<b>As per Clause no.5.17.</b> 7. 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 auxilliary terminal box. As per Clause no.5.28(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 requirement of MOG rating wise.	Accepted as per relevant IS
45	TPSODL/OT/21-22/031/Clause no. 8.5. Warranty Period/ Page no. 16 of 26	The warranty period will be 66 months from date of supply of transformer. Other details of warranty clause will remain same as mentioned in technical specifications.	We bring to your kind notice that many DISCOMs has adopted the Warranty period of the Transformers as 36 months from the date of supply of transformer.  Kindly consider the same and amend the warranty period as requested above.	The warranty period will be 66 months from date of supply of transformer. Other details of warranty clause will remain same as mentioned in technical specifications.
<b>Tender No. : TPSODL/OT/2021-22/031</b>				
<b>Package Name: - Rate Contract for Supply of Al Wound Transformers &amp; Cu Wound Distribution Transformers of various ratings at TPSODL.</b>				
<b>Consolidated replies to the commercial pre-bid queries</b>				
1	TPSODL/OT/21-22/031/General Conditions of Contract/Clause no. 8.0. Security cum Performance Deposit	Associates shall submit within 15 days from the effective date of issue of PO/RC, Security cum 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.	We request you to amend the clause as per the below:  Associates shall submit within 15 days from the effective date of issue of PO/RC, Security cum Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPSODL for:  (a) 1% of the PO value if purchase order value is more than Rs 5 Crores.  (b) 3% 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.	Please Refer Point No- 7.1 Special Condition of Contract of the tender document.  (Business Associate (BA) shall submit applicable Performance Bank Guarantee as per GCC within 30 days of issuance of rate contract. PBG applicable shall be 5% of Rate Contract Value. PBG submitted, shall be released after completion of applicable guarantee period plus one month.)