

Clarification No-I dated 22/11/2023 to the Bidding Documents for 220kV Transformer Package-TR-49 under Consultancy services to TUSCO for construction of two 220/33, 300 MVA Pooling stations and 220kV Transmission lines associated with 600MW Jhansi Solar Power Park.
Spec. No. CC/NT/W-TR/DOM/A06/23/10867

S. No.	Volume/Section Clause No.	Description	Query	POWERGRID's Reply
1.	SECTION-PROJECT; CL.No.: 2.0 Scope (2.1); Page No.: 03 of 06 3 (Three) numbers of 125MVA, 3-Ph, 220/33 kV Auto-transformers at PSS-1 for 300MW PSS-1 at Jhansi. 3 (Three) numbers of 125MVA, 3-Ph, 220/33 kV Auto-transformers at PSS-2 for 300MW PSS-2 at Jhansi.		As per Annexure -II, it is specified as Power Transformer, Please clarify the requirement is for Auto /Power Transformers.	For technical requirement of Power Transformer Annexure-II shall prevail. In Bidding Document Auto-Transformer shall be read as Power Transformer, other provision of bidding document shall remain same
2.	SECTION-PROJECT; CL.No.: 2.0 Scope (2.3.1(a)); Page No.: 03 of 06 220/33kV Auto-transformers as mentioned above along with all fittings & accessories including on-line insulating oil drying system (Cartridge type), marshalling box, foundation bolts (if any), cables, insulating oil etc.		As per Annexure -II, it is specified as Power Transformer, Please clarify the requirement is for Auto /Power Transformers	Refer reply at sl. No. 1.
3.	SECTION-PROJECT; CL.No.: 2.0 Scope (2.3.1(e)) Page No.: 03 of 06 All cables including special cables from Main Transformer unit to Marshaling box/ cooler control cabinet/ Drive Mechanism box (DM)/ any other cubicle (as applicable) and only special cable (if any) from Transformer Marshaling Box/ Drive Mechanism Box (DM)/ any other cubicle (as applicable) to C&R panels shall be in the scope of contractor. The cost of above cables including special cables is deemed to be included in the price of each Transformers.		Cabling between transformer accessories to cooler control cabinet and cooler control cabinet to RTCC Panels shall be in the scope of contractor. Any/All other cables are not in the scope of contractor. Kindly Confirm.	Bidder to quote as per bidding documents. Refer TS clause No. 2.3.1.e) for better understanding.
4.	3.14. Dynamic Short Circuit Test requirement Technical Specification SECTION- TRANSFORMER (UPTO 400 KV CLASS) 3.14.2. For 220 kV Class Transformer: Bidder / Manufacturer should have successfully carried out Dynamic Short Circuit Test on any rating of 220 kV or above		We wish to inform you that we shall not conduct Dynamic Short circuit test. We shall provide SC comparison's with 115MVA Transformer, we have attached SC	Bidder to quote as per bidding documents.

	<p>voltage class transformer as on the originally scheduled date of bid opening and shall enclose the relevant Test Report / Certificate along with bid. In case bidder has not successfully tested 220 kV or above voltage class transformer for Dynamic Short Circuit Test, their bid shall be considered technically non-responsive.</p> <p>The offered transformer should comply the requirement of similarity clause specified in IS 2026 (PART 5) / IEC 60076-5 with respect to short circuit tested transformer. Further, design review of offered transformer shall be carried out based on the design of short circuit tested transformer.</p>		<p>test transformer report dated 31.08.2017 of 115MVA, 220/11 kV more than 6 years i.e. 6 Years 3 months.</p> <p>Kindly consider the same.</p>	
5.	<p>Technical Specification; SECTION- TRANSFORMER (UPTO 400 KV CLASS) REV 13-3.9.</p> <p>The maximum flux density in any part of the core and yoke at the rated MVA, voltage and frequency shall be such that under 10 % continuous over-voltage condition it does not exceed 1.9 Tesla at all tap positions</p>		<p>As per Annexure -II -Specific Requirement -The maximum flux density in any part of the core and yoke at the rated MVA, voltage and frequency shall be 1.65 Tesla and under 10 % continuous over voltage condition it shall be 1.815 Tesla at all tap positions.</p> <p>Please clarify the same.</p>	<p>For maximum flux density, requirement of Annexure-II - Specific Technical Requirement shall prevail.</p>
6.	<p>Annexure - G Technical parameters of Current Transformers</p>		<p>Technical parameters of Current Transformers for the Present Rating is not specified, Please provide the details for the same.</p>	<p>No. of cores shall be governed by Annexure-G, 6.0 Parameters of Current Transformer for 100MVA (3-ph), 220/33 kV Transformers. However, other parameters shall be finalised during detailed engineering.</p>