

PSGSG/1 5-16/004 REV.00	Specifications for Developmental test of Surge Arrester		PRODUCT	GSM 245
			DATE	07.07.2015
	DESCRIPTION		CONFIRMATION BY VENDOR	COMMENTS / DEVIATIONS
1.0	APPLICATION:			
	Developmental test of Surge Arrester for 245kV GIS as per IEC 60099-4.		YES/NO	
2.0	Scope of Supply:			
	This enquiry is for following tests: 1) Development test shall be performed as per 4.1 to 4.3 - 2 sets		-	
3.0	Details:			
3.1				
	Rated voltage	220kV	YES/NO	
	Reference current	5mA	YES/NO	
	Discharge current	10kA	YES/NO	
	Long duration current test	~1100 A	YES/NO	
	Line discharge class	3 or 4	YES/NO	
	No. of Tests	2 Sets	YES/NO	
4.0	Following is the list of test to be carried out on surge arrester:			
4.1	Reference Voltage and current Test - Reference Voltage and current Test shall be performed as per IEC 60099-4 clause no. 7.2.		YES/NO	

4.2	<p>Lightning impulse residual voltage test:</p> <p>- Lightning impulse residual voltage test shall be performed as per IEC 60099-4 clause no. 8.3.2 with each of the following three peak values of approximately 0.5, 1 and 2 times the nominal discharge current 10kA of the arrester. The residual voltages are determined. The maximum values of the determined residual voltages shall be drawn in a residual voltage versus discharge current curve. The residual voltage read on such a curve corresponding to the nominal discharge current is defined as the lightning impulse protection level of the arrester.</p> <p>(Being a developmental test, if there is any deviation in maximum current, possible max. current shall be specified by the Test Labs).</p>	YES/NO	
4.3	<p>Switching impulse residual voltage test:</p> <p>- Switching impulse residual test shall be performed as per IEC 60099-4 clause no.8.3.3. For 10000A arrester, one switching current impulse of 250A & 1000A shall be applied with a tolerance of $\pm 5\%$. The residual voltages are determined in accordance with IEC60099-4 clause no. 6.3. The highest of these three voltages is defined as the switching impulse residual voltage of the arrester at the respective current.</p>	YES/NO	
5.0	<p>Suppliers shall quote for entire test sequence mentioned against clause no. 4.1 to 4.3 above. Offers with entire test sequence only, will be considered by BHEL .</p>	YES/NO	
6.0	<p>GENERAL :</p>		
	<p>In case of doubts in drawings or specifications the supplier shall contact BHEL for clarifications.</p>	YES/NO	