

Date: 01/09/2012

Technical Notice-6 2012

With reference to clause-4 of OES-5, OES-5a & clause 1.3 of OES-6 for the requirement of transformers to give continuous maximum ratings(CMR) at full load with a condition of temperature rise limits not to exceed 40degrees centigrade above ambient for the oil & not to exceed 50degrees centigrade above ambient for winding, DCRP found that some distribution & power transformer manufacturers has not conducted related Temperature Rise test & has declared transformers losses base on Routine tests which is not accepted. Also discovered installation manuals of some manufacturers recommending OTI & WTI alarm & trip settings limits beyond OES temperature rise limits which is surprising.

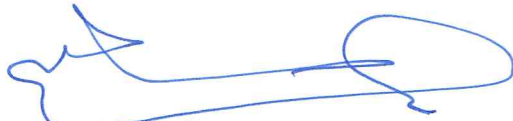
Some other manufacturers has not done any type tests on some ratings of its approved transformers & keep supplying to distribution system without achieving this quality assurance requirement.

OES-6 stated winding current density to be 2.6A/sqmm of conductor area & transformers core flux density not to exceed 1.6tesla; unfortunately some manufacturer has not complied with this requirement & offer transformers with 1.7tesla core flux density.

DCRP strongly advices distribution companies to obtain current density calculation and conductors cross section area with flux density calculation and core areas table with calculation. Submitted conductor & core areas have to be checked/measured by engineers at FAT which should be conducted prior to core tanking.

Therefore all approved manufacturers are required to conduct type tests on proto type transformers of each rating in which to be subjected to stage inspection to measure core & conductors areas. Type tests must be witnessed by DCRP officials & losses to be approved by DCRP at each transformer rating GTP. Requirement must be fulfilled within 18 months from date of this notice.

With best Regards



Hamed bin Salim Al Magdhari
Chairman
Distribution Code Review Panel



cc.
Distribution GMs
DCRP members.
File