

ITMA/11/2019 CIRCULARNO. 217/2019 1st February 2019

To All Members,

Sub: **Experience in manufacturing DTs with aluminum and copper winding**

Dear Member,

This is in reference to the meeting of ITMA and ICAI delegation with Chairperson, CEA on 29th January 2019 (copy attached) wherein one of the issues regarding failure of DTs was discussed and it transpired that due to fatigue and creep in aluminum winding the failure of HV winding of DTs is huge and it was suggested that 100KVA and above rating DTs be considered with copper winding instead of aluminum to avoid failures. There is a study carried out by IIT, Roorke on the effect of creep on failure of DTs titled “Creep and Fatigue Behaviour of Aluminum and Copper High Voltage Winding in DTs” and these reports are attached herewith for your reference.

In order to take up this issue with CEA, you are requested to share your experience in handling the process of aluminum and copper winding in DTs with particular reference to fatigue and creep during the course of manufacturing the transformers together with any other observation gathered from members or field.

Kindly forward your inputs at the earliest .

With best regards

[B.LAL]
DIRECTOR GENERAL
Encl: As Above

     
Creep and Fatigue Creep life Effect of Creep on Investigation of INVESTIGATION CEA-CHAIR
Behaviour of Alumir assessment of distri Failure of Distributi cold pick-up proble REPORT - Performan 30-1-19.pdf