

Investigate the effect of variations of ambient temperature on HST of transformer

ABSTRACT

Temperature, especially the hot spot temperature (HST) and top oil temperature (TOT), have played the most effective factor on the insulation life of the transformer. To determine HST and TOT, ambient temperature enter to equation that show the importance of ambient temperature on hot spot temperature of transformers, and Clause 7 (classic model) has been used as a standard thermal model in this research. In this article has been tried to show the effect of the variations of ambient temperature on a power transformer and at last has been compared by situation that the ambient temperature has been assumed constant.

Keyword: Oil immersed transformer; Ambient temperature; HST; Thermal model