



IEEE PES and IEEE Las Vegas Section Technical Meeting

Location: NV Energy, Pearson building, Wengert room, 6226 W. Sahara Ave

Date: 2/27/15

Time: 2:00 – 6:00pm presentation

Topic: Transformer Design and Manufacturing

Speaker: Ronnie Minhaz

Transformer Design and Manufacturing:

Part 1:

Title: Transformer Design and Design Parameters

Abstract:

The presentation will be on the Basic of Transformer Design. The presentation will explain how a transformer designer interprets parameters such as MVA, lightning Impulse, Switching impulse, Percentage Impedance supplied by a customer. It will touch on Power rating[MVA], Core, Rated voltages, Insulation Coordination, Short-circuit Impedance, Short-circuit Forces, Loss evaluation, Temperature limits, Cooling, Sound Level .. etc. It will also explain overload and life expectancy of a transformer as well when Delta winding is needed in Wye-Wye connection. The presentation will answer why in North America we like to regulate from low voltage side whereas in Europe regulates from high voltage side.

Part 2:

Title: Transformer Manufacturing Processes

Abstract: The presentation will be on the Industry wide manufacturing process to build a transformer in the shop floor. Processes will cover Core Construction, Insulation, Windings, Core and Coil, Processing, Tanking, Testing and Shipping. Some of the hold-points during the processes will be explained as well what a customer should look into while doing factory inspection. The presentation will also cover reconnection both in LV and HV, LTC Tap changer both in tank and separate tank, Lead works.

Ronnie Minhaz's Biography



Ronnie holds B.Sc. degree in Electrical Engineering from University of Manitoba, Canada. Before founding his own company “Transformer Consulting Services Inc (www.tc-servicesinc.com)”, Ronnie worked as Transformer Designer at Pauwels Canada(Manufacturer), as Equipment Engineer at SNC Lava Lin(EPCM) and Enmax Power(Utility), as Substation Lead Engineer at McGregor Construction(Substation Construction). Ronnie is a registered professional engineer in the province of Alberta, Canada and an IEEE member. Ronnie held various leadership positions at IEEE Section level and a regular member of IEEE PES society.

Please send your confirmation to Laura Venter at LVenter@NVEnergy.com