

## IEEE-PEAL Chapter Technical Event

**Presentation:** Transformer Design and Design Parameters

**Who:** Ronnie Minhaz, Transformer Consulting Services, Inc.

**Date:** Wednesday, October 25, 2017

**Place:** University of Dayton Research Institute, River Campus – Rm. S1050 (Auditorium)  
1700 South Patterson Blvd, Dayton, OH (originally NCR-HQ building)

**Parking:** Park in lot to right of main building. Proceed to Auditorium via adjacent rear entrance.

**When:** 6:00 pm Light Buffet and Refreshments (complimentary), 6:30 pm Presentation Begins

**RSVP:** Please reply through the PEAL website (<http://sites.ieee.org/dayton-peal/rsvp/>) by 18 October, 2017, whether attending as self or self plus guest. For IEEE Section members; members may bring one non-IEEE member as a guest. Questions should be directed to Russ Spyker ([russell.spyker.1@us.af.mil](mailto:russell.spyker.1@us.af.mil)).

**Subject:** The presentation will be on the Basics of Transformer Design. The presentation will explain how a transformer designer interprets parameters such as MVA, Lightning impulse, Switching impulse, and Percentage impedance. It will touch on Power Rating [MVA], Core, Rated voltages, Insulation Coordination, Short-circuit Impedance, Short-circuit Forces, Loss Evaluation, Temperature limits, Cooling, and Sound level.. It will also explain overload and life expectancy of a transformer as well as when Delta winding is needed in a Wye-Wye connection. The presentation will answer why in North America we like to regulate from the low voltage side whereas Europe regulates from the high voltage side.

**Speaker's Bio:** Ronnie holds a B.Sc. degree in Electrical Engineering from the University of Manitoba, Canada. Before founding his own company "Transformer Consulting Services Inc ([www.tc-servicesinc.com](http://www.tc-servicesinc.com))", Ronnie worked as a 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 senior member. Ronnie held various leadership positions at the IEEE Section level and is a regular member of the IEEE PES Society.

