“Connecting Renewable Generation Sources – It’s Not Just The Connection Point You Need To Think About”

Technical Talk by George Bergholcs
Senior Substation Engineer, Engineering Services, ElectraNet

Organised by the IEEE PES South Australia Chapter, in collaboration with the School of Electrical and Electronic Engineering, University of Adelaide

Date: Wednesday, 27 May 2015
Time: 11:45 am – 1.00 pm
Venue: Horace Lamb Lecture Theatre 1022,
University of Adelaide
Adelaide, 5000
(See venue map)

Presentation Synopsis:
This presentation describes South Australia’s transmission network, based on traditional planning procedures when centralised generation planning existed. The presentation also illustrates the scope of future renewable energy connections. It shows that major works are needed and there will be network wide impacts. The possible scale of work can have impact in more than one state, in particular when new interconnectors are involved. The presentation will also discuss substation configurations & plant issues both at wind farm & cut-in substation. It will cover how real-time line rating used in SA to good effect, and that it will play a greater role with time where benefits are discussed and examples of its use are covered. Generation Dispatch Limiting will be discussed as a mitigation measure for network constraints & enables fast run back of wind farms when needed. Lastly, the talk will also cover protection implications, National Electricity Rules & importance of system planning studies in connecting renewable generation to the network.

About The Speaker:
George Bergholcs BEng(Hons) joined ETSA when upon graduation from Adelaide University in 1983 with an Honours degree in Electrical Engineering. He then moved to ElectraNet when ETSA (then a vertically integrated utility) was corporatised and disaggregated in 1996. He spent 1988 through to 1995 specialising in SCADA and RTU applications for ETSA, and managed a major RTU replacement and installation project in the early 1990s. Since moving to ElectraNet he has been working primarily in the substation engineering area, first working in secondary systems area, then into the primary systems or infrastructure team. He has been Project Engineer for a number of projects from 2000 to 2005, being involved in three power station connection projects and the first wind farm connection to the transmission network in SA. George’s current responsibilities include project scope development, specification preparation, Design Manager, continual improvement on design standards, wind farm connections/applications including the recently-completed Snowtown Stage 2 wind farm.

For further information, please contact Dr. Mohammed Haque at mohammed.haque@unisa.edu.au.

Free admission - all are welcome