



IEEE Canada

Northern Canada Section



IEEE-NCS, IAS/PES Presents

Tuesday, March 17th, 2015, 5:30 to 9:00pm, doors open at 5:00pm

“SCADA – The Heart of an Energy Management System”

Abstract:

There is a requirement in the oil, gas, water and electrical industries to monitor and control, in real-time, the production and delivery of products within complex wide-spread networks. Typically a centralized system control center is staffed 24 hours a day to perform this monitoring and control function. The heart of the system control center is the SCADA system which collects data from, and allows control of, devices in remote locations through a variety of communication networks. This data is presented to the control center operators through a graphical user interface and alarm management system to alert the operator to abnormal situations. This data is also passed through to the Energy Management System (EMS) advanced applications for further analysis to aid the operator in decision making. This talk will describe the functionality of a SCADA/EMS from real-time data collection and monitoring through to data archiving and analysis.

Topics:

1. Typical components and configuration of a SCADA/EMS system
2. How a SCADA/EMS differs from an industrial DCS (Distributed Control System)
3. How data is collected by the SCADA system from remote sites that can be within a few blocks or hundreds of kilometers away
4. How SCADA data is used for real-time decision making, minimizing equipment damage, preventative maintenance and system planning
5. Typical EMS advanced applications and historians
6. EMS procurement –Benefits of off the shelf “shrink wrapped” versus customized

For more details for the event or registration questions or concerns please contact Kyle Busby at kyle@altelec.net.



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Biography:



Doug Van Slyke began his career with Alberta Power (now ATCO Electric) in 1975. He has held various positions at ATCO Electric in Transmission Line Construction, Transmission/Distribution Line Maintenance, the System Control Center, and the SCADA Technologies Group.

Doug retired from ATCO Electric in 2012 as the Supervisor of the SCADA Technologies Group. He was rehired in 2012 as a SCADA Specialist, and his current responsibilities include training for the transmission and distribution operators, system analysts and support group users who use and maintain ATCO Electric's SCADA/EMS environment.

Doug is a Journeyman Powerline Technician.



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Senior Membership drive (presenter: Andy Jones)

The IEEE Northern Alberta PES/IAS Chapter will be holding a Senior Membership drive in conjunction with the SCADA seminar.

The qualifications for IEEE Senior Grade Membership can be found here:
http://www.ieee.org/membership_services/membership/senior/index.html

If you think you qualify for elevation to Senior Member grade, please bring a copy of your resume to the March 17th seminar. Application Forms and Referees will be available at the event.

Alternatively, you may complete the online application form here:
http://www.ieee.org/membership_services/membership/senior/application/index.html

During the night we will host a presenter (Andy Jones) who will deliver a short presentation on the benefits and process to become a Senior Member of IEEE.

Contact Alex Nassif [Alexandre.Nassif@atcoelectric.com] for any question related to the Senior Membership drive.



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Outstanding Engineer Award Presentation

We will deliver the Outstanding Engineer Award to Prof. Xu of the University of Alberta. Among many nominees we received he was chosen as the most outstanding among them. The bio our award committee received is given below:

- He was elevated to IEEE fellow rank;
- He is the editor-in-chief of IEEE Transactions on Power Delivery;
- He has supervised over 50 Ph.D. and M.Sc. graduates;
- He is a role model for academic and industry young professionals with demonstrated integrity, mentoring and academic leadership;
- He is the NSERC/iCORE Industrial Research in Power Quality in the University of Alberta.
- He created the Alberta Power Industry Consortium which amalgamates the efforts of all AB utilities and the Independent System Operator (AESO) into solving advanced problems faced by utilities. This joint venture has literally created a powerhouse of graduate students who leave university with extensive knowledge and problem solving techniques tailored to Alberta's needs;
- He has extensive involvement with NSERC, NRCAN, CEATI and EPRI, serving as a consultant for these and other organizations.
- He has an extensive list of patents and transaction publications including AMR signaling, DG Anti-islanding techniques and devices, Safety (trip grounding, grounding mats, grounding techniques including truck grounding), Power Quality (area filters for oilfields and residential areas), Relay setting techniques, modeling of harmonic loads, voltage stability, transformer modelling, effects of Photovoltaic large scale deployment and new devices to monitor real time power consumption broken down to appliance level. There are many more contributions to science and technology but they are just too many to list here. His paper on Harmonic Resonance Mode Analysis received the prize of best IEEE paper in 2005 – this in itself is a lifetime achievement which propelled him to the Fellow rank.



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Young Professional (YP) Speaker:

To promote IEEE's Affinity Group of Young Professionals (YP) we will have a 15 minute opening presentation from an YP Guest Speaker on:

Motor Starting Technologies for Long Conveyor Applications

Bio:

Gordon Cross is a Project Manager with Magna IV Engineering. He earned his Electrical Engineering Technologist diploma from Nait in 2003, and attended the U of A to earn his B.Sc in Electrical Engineering in 2008. He has worked with Magna IV for most of his working years since 2003, and has specifically been involved in the project management, design, supply, and commissioning of international Materials Handling/Conveying projects including large mining equipment and long overland conveying systems in Chile and Mexico



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Agenda:

At the Door Registration, Cash Bar Social with Appetizers:	5:00pm
Senior Membership drive	5:30 – 5:45pm
Outstanding Engineer Award	5:45 – 6:00pm
YP Speaker Presentation with Q&A:	6:00 – 6:30pm
Main Speaker Presentation with Q&A:	6:30 – 9:00pm

Online Registration (March 2nd – March 11th)

<https://meetings.vtools.ieee.org/m/32725>

Registration

IEEE Members: \$20
Non-IEEE members: \$30
IEEE Student Members: \$10
Non-IEEE Student: \$12.50
IEEE Life Members: Free

At the Door Registration - (Payable by cash or cheque)

IEEE Members: \$25
Non-IEEE members: \$35
IEEE Student Members: \$15
Non-IEEE Student: \$17.50
IEEE Life Members: Free

Please have your **IEEE membership card** ready to obtain the discount.



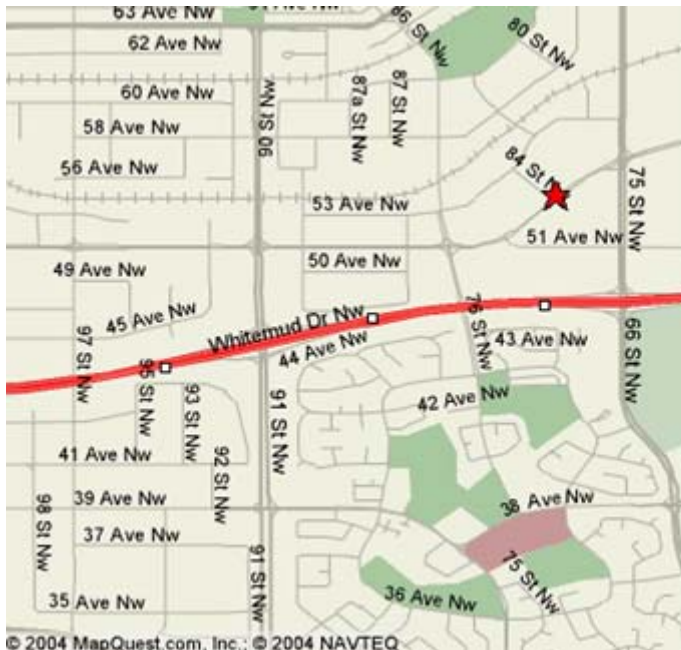
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Location:

German Canadian Cultural Centre
8310 Roper Road, Edmonton



Contact:

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