



IEEE

Ottawa Section



PES Distinguished Lecturer Seminar by IEEE Ottawa PES, IMS, and RS&PEL Chapters, Educational Activities, Women in Engineering and Algonquin College Student Branch

The IEEE Ottawa Section is inviting all interested IEEE members and nonmembers to a seminar on

Power System Line Protection

By

Meliha Selak, BC Hydro, Vancouver, British Columbia

DATE: Friday, December 21, 2012.

TIME: Refreshments, Registration and Networking: 5:30 p.m.; Seminar: 6:00 p.m. – 8:00 p.m.

PLACE: Algonquin College, [T-Building](#), Room T129, [1385 Woodroffe Ave.](#), Ottawa.

PARKING: No fee after 5 p.m. at the Parking Lots 8&9. Please respect restricted areas.

Abstract Power system lines provide connections among various parts of the electrical power system and the associated equipment. As the transmission & distribution circuits vary widely in their characteristics, configurations, length, and relative impedance, their protection and protective techniques are also different. The protective techniques commonly used for line protection are overcurrent, distance and differential (pilot) protection, depending on requirements. Several fundamental factors influence the final choice of the protection applied to a power line: type of circuit (overhead, cable, single line, parallel lines, multi-terminals), line function and importance (effect of service continuity, realistic and practical time requirements to isolate the fault from the rest of the system), coordination and influence on power system stability (steady state and dynamic state simulation) and EMTP. In addition to these four factors, economic factors must be considered as well. The seminar topics will include:

- Power System Introduction and Power System Modeling
- Fundamental Principles of Protective Relaying
- Reliability (Dependability and Security)
- Radial lines, Lines with sources on both ends and Multi-terminal lines
- Communication Assisted Scheme (Permissive Schemes)
- Direct Transfer Trips (DTT)
- Applications and Settings (multi-functional protective devices)

Meliha B. Selak's Bio Ms. Selak has been with BC Hydro since 2000, working in the Power System Protection & Control Planning Group as a Specialist Engineer. Her technical activities include power system protection and control applications, power system analysis, evaluations and interconnection studies for the various plants connecting to the power system, as well as development of the BC Hydro's power system protection guidelines. She has over 35 years of experience in power systems engineering including utility protection, R&D, project management and consulting on international projects. Prior to joining BC Hydro, she worked as a research engineer in the Power System Group at the University of British Columbia, on the development of an EMTP based real-time power system simulator. She received her Dipl.Eng. Degree in Electrical Engineering from the University of Sarajevo. After graduation from the University, she was with Energoinvest, Sarajevo for 18 years.



Ms. Selak is a registered Professional Engineer in the Province of British Columbia, and a Senior Member of IEEE. She is a member of the IEEE Power & Energy Society (PES) Governing Board and is currently serving as PES Vice President for Chapters. Also, she is a member of the IEEE Power System Relay Committee (PSRC) working on IEEE guide for "Protective Relaying of Utility-Consumer Interconnections". She has written numerous technical reports and papers on power system topics, and serves as a reviewer for PES and other publications. Ms. Selak is a Distinguished Lecturer (DL) of the IEEE PES DL Program.

Admission:

Free. Registration required.

Please register by e-mail contacting: almuhtadi@ieee.org.