

Special Feature Presentation:**The Role of the National Research Council of Canada,
Institute for National Measurement Standards, in a
Deregulated Electric Power Industry****(Dr. Eddy So, Director, Electromagnetic and Temperature Standards, Institute for
National Measurement Standards, National Research Council of Canada, Ottawa)**

Reliable trade measurements, traceable to the primary physical standards, play a key role in facilitating commerce in energy. National metrology institutes, such as NRC, are essential components of the energy infrastructure of all industrialized countries. In Canada, the legislated responsibility for trade metrology is under the jurisdiction of Measurement Canada – a special operating agency of Industry Canada, which administers and enforces the Electricity and Gas Inspection Act and the Weights and Measures Act. It has the right to intervene where it deems appropriate to establish the regulations setting minimum performance specifications for instrumentation for use in trading metrology and to approve all instruments for use in such applications. However, the legislated responsibility to maintain the primary physical standards, to which all trade measurements, secondary standards and derived units of measurement are traceable, is the role of NRC, mainly through the Institute for National Measurement Standards (INMS).

This presentation focuses on the role of NRC/INMS in trade metrology issues and opportunities in the energy sector in Canada arising from the worldwide deregulation of energy industries and the establishment of trading blocks and free trade zones.

Bio

Eddy So (IEEE SM'84-F'90) received the M.Sc. and D.Sc. degrees in Electrical Engineering from George Washington University, Washington, D.C., USA.

In 1977, he joined the National Research Council of Canada, Ottawa, Ontario, Canada, where he currently is Director of the Electromagnetic and Temperature Standards Section in the Institute for National Measurement Standards. His research interest includes the development of measurement techniques and instrumentation for accurate measurements of active/reactive power and energy under difficult operating conditions, and for assessing the operating conditions of different types of high voltage insulation.

Dr. So is a registered Professional Engineer in the Province of Ontario. He is a Fellow of IEEE and Past Chairman of the IEEE Power Systems Instrumentation and Measurements Committee, Power Engineering Society, Chairman of its Subcommittee on Electricity Metering, Chairman of its Working Group on Low-Power-Factor Power Measurements, and is also its Standards Coordinator.