

Panel Title: How Utilities are Preparing for the Arrival of EVs

Thursday, September 8, 2011, 10:45 AM – 12:00 Noon

Panel Moderator: Tom Molinski

Panelists: Arindam Maitra, Electric Power Research Institute
Lars Henrik Nielsen, Senior Scientist, Systems Analysis Division at
the Riso National Laboratory for Sustainable Energy, Technical
University of Denmark
Eric Bibeau, University of Manitoba
Daniel Gabel, ComEd

Panel Summary: Electric utilities need to prepare for the addition of EV load and the associated charging infrastructure, as EVs are now a reality and are being sold in many countries worldwide with many more models to be offered in the next few years. Associated with that are the codes and standards for new charging equipment that need to be finalized, which include smart grid aspects of controlling charging start times so utilities can effectively manage the new EV load by encouraging charging in the off peak (nighttime). System capacity and energy requirements, effects on the distribution system, charger efficiency, power quality, vehicle to grid, source of energy, and utility policy to promote EV are all issues that electric utilities will need to consider sooner rather than later to be in the best position to integrate EVs most effectively.

Short Biographies:

Tom Molinski P. Eng. has a B.Sc. degree in Electrical Engineering and a Masters of Electrical Engineering degree from the University of Manitoba. Tom has worked for Manitoba Hydro for the past 35 years and is currently the Section Head of Emerging Energy Systems in the Power Planning Division. He is responsible for research, planning, concept development, and recommending emerging energy technology projects suitable for Manitoba Hydro to implement now or in the future. Tom works with government, various research groups, and several learned societies to determine what are the available emerging energy strategies that Manitoba Hydro can use now and in the future.