Grid Enhancing Technologies

Summary
Many countries have implemented renewables portfolio standards (RPSs) to accelerate the pace of renewables generation deployment, which are distributed across the electric power system. As the penetration of the renewable power energy resources increase, in order to avoid unnecessary power system upgrades, Grid Enhancing Technologies (GET) are being deployed to maximize the utilization of the electric power system capacity, to control the power flow in transmission lines, and to improve the management of the health of the existing power system asset. This seminar will present some examples of the GET technologies that are currently being demonstrated by the utilities. The challenges associated with these technologies along with open problems/research areas will also be discussed.

Speaker
Babak Enayati received his PhD in Electrical Engineering from Clarkson University, USA in 2009. He joined Ampacimon as the Principal Strategic Advisor and New Leaf Energy as the Director of Engineering. Babak provides engineering services for the development of Dynamic Line Rating, ADR Line Health and Partial Discharge solutions as well as the solar, wind and energy storage facilities. Prior to joining Ampacimon and New Leaf Energy, Babak worked in the utility industry for 13 years holding various grid modernization engineering and managerial positions.
He joined Institute of Electrical and Electronics Engineers (IEEE) in 2006 and currently is a Senior IEEE Member. Babak currently serves as the Vice President of Education on the IEEE Power and Energy Society (PES) Governing Board. He is the current chair of the IEEE PES Transmission Subcommittee. Babak serves as the Vice Chair of the IEEE Std 1547 Standard for Interconnecting Distributed Energy Resources with Electric Power Systems, and IEEE P2800 Standard for Interconnection and Interoperability of Inverter-Based Resources Interconnecting with Associated Transmission Electric Power Systems. Babak is a registered Professional Engineer in the state of Massachusetts.