NINTH ANNUAL CARNEGIE MELLON CONFERENCE ON THE ELECTRICITY INDUSTRY

Role of Distributed Coordination in Resilient & Fine-Grain Control of Power Grids

February 5th — Day 2:
Topic: Rethinking it All

Session D2.P1
Distributed Resiliency: Pros and Cons

Jeffrey S. Katz, IBM, “Analytics and Optimization for Smart Grid Resiliency.” (Plenary Talk #4)

A new era of analytics applications is coming that will revolutionize electric power operations, however an organizational culture shift will be required to take advantage of them. The industry has generally succeeded with the first phase of smart grid for advanced distribution automation. In many cases, it is well prepared for this new second phase of more cogent, integrated analytics and optimization platforms. These platforms span the space between traditional applications, and address overall operational issues. Alternative methods of load control such as transactive energy management, and consideration of the impact of high-resolution 4D weather simulation on the entire operational process will be included. Types of applications and characteristics of supporting platforms will also be mentioned, as well as the ubiquitous issues of security and communications.