

Southwest Public Utility and Regulatory Commission Energy Storage Workshop

Tuesday, May 3rd, 2016

Technology Ventures Corporation

Albuquerque New Mexico

Presentation Outline

Presenter: Dr. Imre Gyuk, Department of Energy/ Office of Electricity Delivery and Reliability;
Energy Storage Program Manager

Topic: Energy Storage for Grid Support, Resilience and Renewable Integration

- I. Energy Storage Technologies used for Energy and/or Power Applications
- II. Energy Storage Economics
 - a. Cost of Energy Storage
 - b. Value of Energy Storage
- III. American Recovery and Reinvestment Act (ARRA) Stimulus Funding for Energy Storage Demonstration Projects
 - a. Power Systems for Frequency Regulation (and resulting FERC Orders)
 - b. ESS for Peak Shaving, Load Shifting or Ramping
 - c. Materials Research for Cost-Competitive Energy Storage
 - d. New and Innovative Energy Storage Technologies under Investigation
- IV. DOE/OE Energy Storage International Collaborations
 - a. Korea: MOU – KETET/POSCO; Low Temperature NaS Batteries
 - b. Singapore: CRADA – EMA; Energy Storage Test Bed
 - c. Japan: MOU – NITE; Energy Storage Safety Codes and Standards
 - d. Australia: MOU – AESA; Online Energy Storage Project Vetting
- V. Industry Tools Developed by DOE/OE ES
 - a. Grid Energy Storage Safety Initiative (Strategic Plan)
 - b. GESDB – Global Energy Storage Database
 - c. Energy Information Agency (Guidance): Energy Storage Reporting