Notes taken by Milad Soleimani, Ph.D. student, at the Smart Grids Big Data Workshop, 5/8/2018

## Panel 2: "Synchrophasor Data"

Dr. Tom Overbye started the session and explained how the grid data and models are not available for researchers. Then, he introduced the aSynthetic Grid education. He explained how a 2000 bus synthetic network is employed for educational purposes. Then he talked about visualization with synthetic grids and he demonstrated 500 bus South Carolina weekly voltage. Then synthetic PMU data were illustrated. Then Dr. Vikram Budhraja spoke about the importance of data analysis and visualization for power systems.

Then, Jeffery Dagle talked about the 1996 western blackout and the lesson learned from that. Then, he explained about North American Synchrophasor initiative and DOE and EPRI activities for improving the reliability of the network. After, he explained about synchrophasors applications for wide area monitoring. He also mentioned the vulnerabilities associated with satellite clocks. Finally, he explained about some of the testbesds that they developed.

In the next part, David Schooley gave some explanations about the importance of PMU and their measurement abilities and how their data must be employed. Then, Dr. Vikram Budharaja discusses the value of data in validating the generator parameters.