ENGINEERING ANALYSIS TASK TEAM

Excellent Presentations!

- **Online Calibration of Phasor Measurement Unit Using Density-based Spatial Clustering** – Di Shi, Zhiwei Wang (GEIRI North America Inc), Xiao Lui, Jianyu Luo, & Chuniei Xu (State Grid Jiangsu Electric Power Company)

- **Selection of Reference Node and Angular Baselining Using Synchrophasor Measurements for Real Time Operation** – Srinivas Chitturi, Sunil K. Patil, Chandan Kumar, Rajkumar Aumasula, Pradeep Kumar Sanodiya, & Vivek Pandey (POSOCO)

- **Machine Learning with PMU Data** – Daniel Bienstock, Mauro Escobar, Apurv Shukla (Columbia), Michael Chertkov, Sidhant Misra, Marc Vuffray, & Seyoung Yun (LANL)

- **Failure Diagnosis and Cyber Intrusion Detection in Transmission Protection System Assets Using Synchrophasor Data** – Anurag Srivastava B. Cui & P Banerjee (WSU)

EATT WHITE PAPER –
DATA MINING TECHNIQUES AND TOOLS FOR SYNCHROPHASOR DATA

The purpose of this paper is to:

- give a high level overview of data mining,

- review how data mining has been used in industry,

- present common big data architecture and software languages and tools that facilitate data mining,

- provide use cases that show how data mining has been applied in the power grid community, and

- discuss possible future ways to apply data mining to the power grid and more specifically PMU data.

Goal: Draft by next NASPI meeting