



Data & Network Management Task Team Report Out

Co-Chairs:

Dan Brancaccio, BRIDGE Energy Group

Jim McNierney, NYISO

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Knoxville, TN



D&NMTT Breakout Agenda

- Three presentations with balance of breakout to be working session
- Discuss the formation of four sub-groups
- Identify some areas for each sub-group to focus on
- Identify some specific work products for each sub-group
- Identify leads for each sub-group and asked for additional volunteers to help out



Vendor Presentation

- Hitachi America
 - Presentations on Realization of Big Data Analysis
 - Hitachi Advanced Data Binder Platform
 - Configured with Hitachi server and data storage systems
 - HADB broke TPC-H Benchmark record
 - Demo Tested Data Store of 100 TB
 - Compared against same HW – MySQL db
 - 13 Times faster in data retrieval
 - Slides to be posted to NASPI web site



Presentation on PNNL effort

- Frank Tuffner presented and discussed project effort to revisit 2008 NASPI spreadsheet on PMU Data Application Classifications
 - Want to attach definitions to time synchronization and communication latency
 - Want to get the NASPI Community's feedback and assistance in updating the document
 - Revisit three classes of applications
 - Joint Task Team Effort with PRSVTT



IEEE PSRC C23 WG

- Tony Johnson spoke to the group about IEEE PSRC C23 work group
 - Interface with NASPI to help guide any work that we might want to push to the IEEE.
 - Made the DNMTT aware of the effort around developing guides, standards
 - Solicited help to work with PSRC
 - If NASPI ended in 2015, this might be another venue to continue some of the work that NASPI is involved with.



Sub-Groups Formed

- Four key areas to be targeted
 - Gateway Specifications / Use cases
 - Network Management
 - Data Management
 - Security



Gateways

- Use Case documentation for Phasor Gateway / Specifications (**Lead: Ritchie Carroll**)
 - We spoke of revisiting the Gateway Use Case document that DNMTT created in 2010
 - Produce a white paper / case study on the topic Phasor Gateways
 - Business Case for Gateway devices
 - Volunteers: J. Ritchie Carroll, David McKinnon, Dan Brancaccio, Yi Hu, Jim McNierney, Tim Yardley
- Time frame: October 2014



Network Issues

- Network Management (**Lead: Bob Braden**)
 - What are organizations using to move synchrophasor data today? Update on survey that was done in Fall 2013
 - Perhaps include some substation to TO communications
 - Useful checklist, metrics and questions around
 - SLAs / Contracting for telecomm services



Network Issues (Continued)

- Useful checklist, metrics and questions that you want to consider when looking at Network Management / Monitoring / Incident Management
 - Listing of network management tools that are relevant to synchrophasor data networks
 - Synchrophasor data has different challenges compared with SCADA
- Network Architectures / How to make network communications more resilient and reliable
 - Volunteers: Dan Lutter, Dave Bakken, Bob Braden, Dick Wilson, Tim Yardley



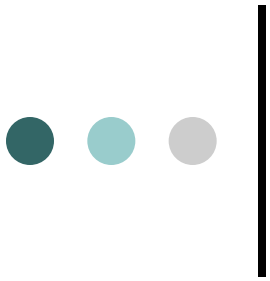
Cyber Security

- Cyber Security (**Lead: David McKinnon**)
 - GPS spoofing mitigation tactics
 - Cyber Security measures to secure data in transit including synchrophasors
 - Taking a more holistic system engineering perspective to cyber security
- How and when to trust your data sharing neighbors
 - Volunteers: David McKinnon, Jim McNierney, Magnus Danielson, Tim Yardley or designee



Data Issues

- Data Issues (**Lead: Dan Brancaccio**)
 - Consistent and meaningful data validity metrics, accuracy metrics / availability metrics
 - Extension of the PDC workshop – 3/10/14
 - Data Pedigree / Data Ownership
 - Volunteers; David McKinnon, Jim McNierney, Dan Brancaccio, Ryan Nice, Suzie Fahr, Melissa Smith, Kenta Kirihara, Jeff Otto, Tony Faris



Thank you for participating!