A Conversation about Data Sharing

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Eric Andersen, PNNL
Dan Brancaccio, Quanta Technology
Jim Ball, WAPA (retired CISO)
Session Agenda

• *Data Sharing Introduction* – Eric Andersen (Pacific Northwest National Laboratory)

• *Lessons learned from the Western Interconnection Synchrophasor Project (WISP)* – Dan Brancaccio (Quanta Technology)

• *A utility perspective on data sharing risks and concerns* - Jim Ball (Western Area Power Administration)

• *Open discussion with NASPI attendees* – Eric to moderate
Data Sharing Sources and Relationships

- **Data sources**
  - PMU data (synchrophasors+)
  - SCADA
  - Event logs

- **Utility (Internal) - Operators, engineers, planners, compliance, legal**

- **Utility External (Agreements, NDA’s)**
  - Utility to utility (TOP to TOP, TOP to RC/ISO, etc.)
  - Utility to regulator (compliance)
  - Utility to vendor (product development, troubleshooting, improvements)
  - Utility to research organizations (e.g., National Labs, Universities, innovators)

- **Data sharing repositories in the research community**
  - Signature library
  - NI4AI
  - DR POWER
  - PNNL’s Electricity Infrastructure Operations Center server enclave
Risk vs Reward

• The effort (and cost) required to share and transfer data is problematic
• The lack of data impedes progress of technology advancements
• What are the risks to utilities?
  ▪ Competitive risks
  ▪ Exposure
  ▪ Regulatory concerns
  ▪ Security
  ▪ Easier to continue as-is rather than embrace change
• What are the benefits (to utilities, to researchers)?
  ▪ Utilities are inundated with requests for data
  ▪ Utilities are time-constrained for supporting research projects
  ▪ More access means more innovators working on solving problems
  ▪ Synthetic data is not enough, researchers need real world data, with life-like examples
Understanding Data Sharing Risks and Benefits for Utilities – a NASPI Work Group Discussion

• What are the risks to utilities in sharing data (especially for research purposes)?
• Risk – real or perceived (and does it really matter?)
• How do those risks change over time?
• What are the challenges that you face in sharing your data with an RC, BA, or ISO?
• What are the challenges that you face in sharing your data with other neighboring utilities?
• What are the challenges in sharing data with researchers?
• Is it different with real time vs archive data?
• For a specific risk, other than just saying “no”, what have you done to mitigate it?
• Are differing formats for data sharing an issue for you (e.g., COMTRADE, 61850, sttp, etc.)?
• Are you overwhelmed with data requests?
• How do we create a significant value proposition for utilities?
Thank you