EIDSN - A Network of Sharing

NASPI Work Group Meeting – Richmond, VA October 28-30, 2019 Kent Simendinger, EIDSN Technical Director





EIDSN's Purposes

- Facilitate an efficient, effective and secure network for the sharing of operating reliability data within the Eastern and Quebec Interconnections among its members and participants.
- Promote the reliable and efficient operation of the Bulk Electric System (BES) through use of Electric Information Network (Elnet).
- Currently includes sharing both SCADA and synchrophasor data among appropriate entities.
- Facilitate the adoption, development and support for various software tools for members and participants that promotes the reliable and efficient operation of the Bulk Electric System.



Electric Information Network Elnet

- EIDSN deployed Elnet, a private MPLS wide-area-network, in the summer of 2015.
- EIDSN worked with North American Electric Reliability Corporation (NERC) to transition users of the aging NERC network (NERCnet) to Elnet, facilitating NERC's desire to retire NERCnet.
- Allows for the sharing of operational data among entities that manage the bulk electric system in the eastern two-thirds of the United States and Canada.



Elnet Technical Information

- Vendor-diverse, redundant, encrypted, and scalable, serves 25+ companies across North America with ~70 nodes.
- Two major telecom communication companies provide the Elnet "backbones," supporting diversity and resiliency.
- Users can monitor their nodes on Elnet and report problems directly to the vendors, making visibility to members straightforward and secure.



Elnet Technical Information

- Flexibility allows a variety of configurations at the local user network interface depending on user needs, including bandwidth sizing / # of circuits.
- For synchrophasor data exchange, EIDSN provides a sizing tool to estimate bandwidth.



EIDSN Data Sharing

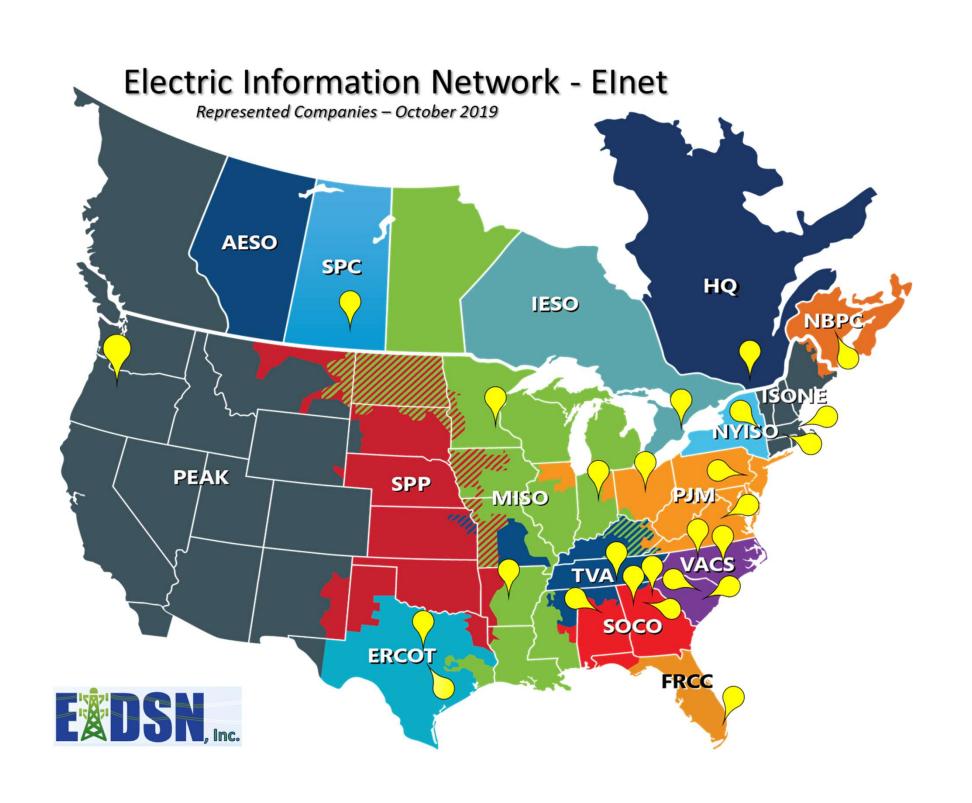
- EIDSN was also formed with the purpose of facilitating the adoption, development, and support of tools for its interested Members and Participants.
- Elnet allows users to exchange synchrophasor data, in addition to standard ICCP data.
- EIDSN currently provides or is developing software tools to its Members that enhance their BES operations, using Member data provided via Elnet.



EIDSN Member Companies

- Duke Energy Carolinas, LLC (VACS)
- Florida Reliability Coordinating Council, Inc. (FRCC)
- Hydro-Quebec TransEnergie (HQ)
- Independent Electricity System Operator (IESO)
- ISO New England, Inc. (ISONE)
- Midcontinent Independent System Operator, Inc. (MISO)
- NB Power Corporation (NBPC)
- New York Independent System Operator, Inc. (NYISO)
- PJM Interconnection, L.L.C. (PJM)
- Southern Company Services, Inc. (SoCo)
- Southwest Power Pool, Inc. (SPP)
- Tennessee Valley Authority (TVA)





Joining EIDSN, Inc.

- Nonstock, nonprofit corporation 501(c)(6)
- In early 2018, EIDSN's Board of Directors approved the removal of the geographic restriction for joining the Company
 - Any NERC designated Reliability Coordinator (RC), Transmission Operator (TOP), Transmission Owner (TO), and Balancing Authority (BA) in North America can join as Member or Participant
- Agreements requiring execution
 - Master Confidentiality Agreement
 - Network Service Agreement
 - Member OR Participant Agreement



EIDSN Contact Information

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