

Presentation on Network Model Management:

T-Nexus – AEP’s New Network Model Management Solution

Speakers

- *Eric Hatter (American Electric Power)*
- *Margaret Goodrich (Project Consultants, LLC)*
- *Charles DuBose (Siemens PTI)*

Long an innovator in the electric power transmission market, AEP Transmission continuously seeks to ensure a more reliable electric grid. It relies on sophisticated modeling and analytical tools to optimize the planning, operations, and long-term protection of its rapidly growing and increasingly complex transmission network infrastructure assets. When manual aspects of the modeling process became increasingly unsustainable, efforts to improve and modernize the approach became a priority. A new initiative was launched in 2015 with two primary goals: to better coordinate network model information across several business functional domains, and to centralize management of that information. In early 2017, AEP Transmission selected Siemens PTI to help provide and facilitate the transition to a new Network Model Manager (NMM) solution – part of AEP’s greater T-Nexus Network Model Management Improvement Program.

Siemens PTI recommended implementing PSS®ODMS, its electrical power transmission system modeling and analysis software product. Built upon the industry-approved Common Information Model (CIM) open standard, the solution would allow AEP Transmission to convert, manage, and exchange network model data, and produce short-term and long-term cases. PSS®ODMS allows system engineers and operators to quickly and easily maintain, analyze, and exchange network data. It includes built-in functions for importing and exporting data in PSS®E and CIM/XML format compliant with the IEC 61970 CIM standard and NERC CPSM and ENTSO-E profiles.

With the PSS®ODMS-based NMM implementation now underway, AEP Transmission and Siemens PTI are setting the stage for a more reliable and sustainable electric grid. “By designing and deploying a standards-based network model management solution, AEP can leverage emerging industry technologies around data management and data analytics,” says Eric Hatter, T-Nexus Program Manager at American Electric Power.