New York State Transmission Assessment and Reliability Study (STARS)

The New York Transmission Owners[1] (NYTOs) are initiating a long-term transmission study, the New York State Transmission Assessment and Reliability Study (STARS), which is intended to:

- Complement and support the New York Independent System Operator (NYISO) planning processes and the New York State Energy Planning Process.
- Support growth of renewable energy sources.
- Maintain reliability of the power system.

A reliable and robust bulk power system (BPS) infrastructure is vital to meeting the future energy needs of New York State.

- A long term plan needs to be developed to a) meet the growing electric power needs of New York State; b) encourage the addition of significant renewable energy sources in New York and the surrounding areas; and c) address an aging infrastructure. This plan may require upgrades and significant investment in the existing system.
- The NYISO planning process assumes that the existing transmission infrastructure will remain intact through a ten-year planning period. With an aging transmission infrastructure, some elements of the transmission system will be approaching the end of their useful life during this time period.
- The last major upgrade to the New York Control Area (NYCA) BPS having a major impact on intrastate transfers was the Marcy-South project that was completed in the 1980s.
- This study will provide input to future NYISO Comprehensive System Planning Process (CSPP) analyses by addressing existing transmission infrastructure and transmission asset conditions as well as future investment needs.

A thorough evaluation of the BPS infrastructure is needed to prepare efforts to rebuild, modernize, and/or expand the system to meet the state's future energy needs.

- The NYTOs have a responsibility to ensure safe and reliable transmission service in New York State.
- The NYTOs conduct jointly an evaluation of the state's transmission system to determine whether upgrades or enhancements to the systems are needed
- The project will integrate cost effective new technologies that support increased situational awareness through smart grid applications.

[1] Central Hudson Gas & Electric Corporation, Consolidated Edison Company Of New York, Inc., Long Island Power Authority, Niagara Mohawk Power Corporation D/B/A National Grid, New York Power Authority, New York State Electric And Gas Corporation, Orange & Rockland Utilities, Inc., and Rochester Gas & Electric Corporation.

The interconnected nature of the BPS requires a coordinated effort to develop and implement a thorough assessment and long-range reliability plan. STARS will:

- Assess the BPS infrastructure for the period through 2028, which will support and complement the NYISO planning process that evaluates the capability of the power system over the next ten years.
- Examine reliability needs, condition of transmission assets, and also focus on whether the system needs to be upgraded or enhanced to facilitate efficient power delivery.
- Focus on existing rights-of-way and how they may be utilized to mitigate environmental and community impacts.
- Explore synergies of transmission replacement and expansion in affected corridors.
- Evaluate upgrading, expanding, modernizing, including Smart Grid applications, of the power system.
- Seek to enhance integration of renewable energy resources.

The NYISO will provide technical support to the STARS effort.

- This effort is consistent with state and federal policy to plan for, maintain, and enhance reliable energy infrastructure.
- The NYTOs will coordinate their study efforts with the NYISO's planning process.
- The NYTOs will continue to meet all of the requirements of FERC Order 890.
- The STARS process, in collaboration with the NYISO, will provide for stakeholder input and transparency.