NEWS RELEASE

For Immediate Release:

NYISO Issues Annual Power Trends 2017 Report

Report Examines Opportunities and Challenges for New York's Power Grid

Rensselaer, NY – The New York Independent System Operator (NYISO) today released *Power Trends 2017*, an annual report that provides in-depth information and analysis on current and emerging trends that are transforming the power grid and wholesale electricity markets.

The 2017 report focuses on several important trends, including the growth in Distributed Energy Resources (DER) and the influence of public policies on wholesale markets and grid operations. *Power Trends* further explores the economic impacts of sustained low natural gas prices on future asset investment and plant operations as well as the challenge of developing large-scale renewable resources in upstate while the largest demand for electricity is downstate in southeastern New York and New York City.

"Technological, social, economic and policy impacts have combined to make this a time of exciting innovation for our electric system," said NYISO President and CEO, Brad Jones. "*Power Trends* provides important information on the status of the power grid and the changes we expect in the future. This report also offers insights into our continuing efforts to advance the grid towards an efficient, affordable and reliable future."

The emerging story of New York's electric system is one of distinct regional differences between downstate and upstate in terms of power resources and consumer demand. While there is high demand for electricity and a concentration of fossil fuel generators downstate, upstate has an abundance of clean energy resources and generation capacity, yet relatively low demand.

Among other findings, the 2017 report highlights:

Changing Patterns of Demand

- Energy efficiency efforts and DER such as rooftop solar are expected to have a strong influence on future consumption patterns. Energy efficiency and DER are forecasted to reduce peak demand on New York's bulk power system by more than 900 megawatts (MW) in 2017 and by nearly 3,300 MW in 2027.

- As a result, year-over-year growth in the overall usage of electric energy from New York's bulk power system is expected to decline slightly over the next decade, while peak demand is expected to increase at a moderate pace.

Regional Differences

- In 2016, 85% of electricity generated upstate came from nuclear, hydro and wind resources with no carbon emissions. By contrast, nearly 75% of the electricity produced in the downstate region was generated by fossil fuel resources.

- Downstate New York (Long Island, New York City, and the Hudson Valley) annually uses 66% of the state's electric energy. Yet, that region's power plants generate only 53% of the state's electricity.

Cultivating Cleaner, Greener Power

- NYISO markets have successfully integrated cleaner resources such as wind power and are advancing comparable changes to integrate solar. Last year more than 24% of New York's electricity was produced by renewable resources.

    - 1,827 MW of installed wind capacity is currently operating in the state, with 4,807 MW seeking approvals for grid interconnection.

    - 31.5 MW of bulk-system-connected solar capacity is currently operating in the state, with 881 MW seeking approvals for grid interconnection.

- From 2000 through 2016 New York's air quality improved as power plant emission rates dropped significantly, with Sulfur Dioxide, Nitrogen Oxide and Carbon Dioxide declining by 98%, 87% and 43% respectively.

Integrating Distributed Resources

- Technological advancements and public policies, particularly New York State's Reforming the Energy Vision (REV) initiative, are encouraging greater adoption of DER to meet consumer and electric system needs.
- Competitive markets and system operations will benefit from access to emerging technologies that can adjust demand on an economic basis in response to price signals from the market.
    - DER can improve market efficiency and allow consumers to take greater control of their electricity use and costs.
    - DER will contribute to improved environmental quality through the development of new renewable generation and energy storage technologies.
    - Distributed resources can help grid operators by improving system resiliency, energy security, and fuel diversity.
- The NYISO will use its *Distributed Energy Resource Roadmap* to guide efforts to integrate distributed resources into wholesale electricity markets over the next three to five years.

Transmission Expansion to Meet Public Policy Needs

- A cleaner, greener, integrated grid – one that includes both central power station and distributed resources - will depend on a modernized, upgraded, and expanded transmission system.
- Energy from growing clean energy resources upstate is often unable to reach downstate load centers. Transmission enhancements will relieve constraints on the system, making more effective use of current and future renewable resources.
- Enabling upstate resources to better serve the broader, statewide market provides benefits such as grid resiliency, resource diversity, and enhanced market competition. Upgraded transmission capability is vital to meeting public policy goals and efficiently moving power to address regional power needs.

Click here to download *Power Trends 2017*.

For more information, please contact:
David Flanagan (518) 356-7325 [office] / (518) 727-1569 [mobile]/ dflanagan@nyiso.com
Ken Klapp (518) 356-6253 [office] / (518) 461-3564 [mobile]/ kklapp@nyiso.com