NYSEG
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Key Projects and Programs

NYSEG Projects/Programs

In June 2023, New York State Electric & Gas (NYSEG) filed a joint proposal with the New York State Public Service Commission to make more than $3.6 billion in investments to upgrade our aging infrastructure, meet the State's clean energy goals, and invest in smart technology to improve reliability and service.

Key projects and programs included in this proposal are:

- **Transmission Line Deficiency (TLD) Program –** The TLD Program is intended to proactively repair and/or replace transmission line infrastructure deemed beyond its useful operating life, to reduce outage risks for our customers. This work is informed by various engineering inspection programs, spans across NYSEG's operating territory, and is prioritized based on the condition of the facility and its overall impact to the system if it were to fail. **All Divisions**
- **Circuit Breaker Replacement Program** – The Circuit Breaker Replacement Program will proactively replace obsolete transmission and distribution circuit breakers that are at an elevated risk of failure, which can expose our customers to unplanned outages. This work is informed by comprehensive engineering assessments which evaluate the health, criticality, and risk. This program spans across NYSEG's operating territory and its deployment is based on a prioritization strategy focusing on maximizing overall customer reliability improvements. NYSEG plans on replacing approximately 430 circuit breakers within the 2023-2026 rate case period. **All Divisions**
- **Distribution Load Relief Program –** The Distribution Load Relief Program will address power transformer capacity (overload) needs throughout NYSEG's service territory. This work spans NYSEG's operating territory, is prioritized based on transformer overload impacts, and is central to the Company's ability to increase system capacity, enable electrification initiatives, and reduce the likelihood of transformer failure risks, which would negatively impact our customers. **All Divisions**
- **Resiliency Program –** The Resiliency Program addresses NYSEG's worst performing circuits during storm activity and proposes system upgrades to reduce outage risks for our customers. Informed by various engineering and analytical studies, the work spans NYSEG's operating territory, and is prioritized based on historical customer outage impacts. System upgrades include, but are not limited to, the installation of stronger rated poles, tree wire, automatic sectionalization devices, enhanced vegetation management, and the addition of circuit tie points. NYSEG expects to upgrade approximately 25 circuits within the 2023-2026 rate case period. **All Divisions**
- **Distribution Automation Program –** The Automation Program addresses NYSEG's worst performing circuits and proposes system upgrades to reduce outage risks for our customers. It is informed by various studies, spans NYSEG's entire operating territory, and is prioritized based on historical customer outage impacts. System upgrades include installation of automatic sectionalization devices, which allows for system faults to be isolated, thus limiting the impact to our customers. NYSEG is expected to deploy 1,200 devices across 400 circuits within the 2023-2026 rate case period. **All Divisions**

- **New Gardenville Substation Rebuild Project** – The New Gardenville Substation Rebuild Project will address numerous asset condition, system capacity, and customer reliability needs that were identified following the completion of comprehensive engineering studies. The substation is a 230/115/34.5 kV facility, located within NYSEG's Lancaster Division, which serves as a critical 230 kV connection point and a central source of power for Lancaster's 34.5 kV sub-transmission system. This project will significantly expand the station's load serving capabilities, enable electrification initiatives, and replace obsolete facilities which have been a contributing cause of customer outages in recent years. **Lancaster**

- **South Perry Substation Rebuild Project** – The South Perry Substation Rebuild Project addresses numerous asset condition and system capacity needs identified in comprehensive engineering studies. The South Perry Substation is a 230/115/69/34.5 kV facility, located within NYSEG's Hornell Division, and directly serves approximately 8,200 customers. Under its current configuration, customers served from South Perry are exposed to outage risks if a single element failure were to occur within the substation yard. This project will provide additional system redundancy to ensure that the loss of any one critical facility would not impact customers In addition, the completion of this project will allow for increased renewable resource penetration on NY's Bulk Electric System. **Hornell**

- **Ithaca Electrification Projects** – The Ithaca Electrification Project will reinforce the transmission, substation, and distribution systems around the City of Ithaca to support the anticipated increase in electrical demand from the city's ambitious decarbonization goals/electrification initiatives. The first phase of this project will provide an increase in capacity through 2026 and will include upgrades at five local substations. Phase 2 will increase capacity beyond 2030 and includes upgrades at an additional three substations, as well as transmission and distribution line upgrades. Although this project is focused on increasing system capacity, targeted asset condition upgrades will be made to existing facilities, which will make the system more resilient and less prone to equipment-driven customer outages. **Ithaca**

- **Meyer Substation Rebuild Project** – The Meyer Substation Rebuild Project will address asset condition needs and thermal capacity bus limitations identified in our engineering studies. The Meyer Substation is a 230/115/34.5/12.5/4.8 kV facility, located within NYSEG's Hornell Division, and directly serves approximately 6,740 customers. Under its current configuration, customers served from Meyer are exposed to outage risks if a single element failure were to occur within the substation yard. This project will provide additional system redundancy to ensure that the loss of any one critical facility would not impact customers. In addition, the completion of this project will increase bulk electric system capacity, unlock existing renewable energy capacity, and will contribute to the overall headroom capacity objectives outlined in NYSEG's Climate Leadership and Community Protection Act (CLCPA) Plan. **Hornell**

- **CLCPA Phase 1 Projects –** As part of its commitment to helping New York State achieve the ambitious clean energy goals established by the CLCPA, NYSEG has proposed the construction of 13 transmission and substation projects. These projects, representing "Phase 1" of NYSEG's CLCPA system plan, were each initially developed as a necessary system reliability upgrade, but were subsequently identified for expedited development because they have the additional benefit of strengthening the grid to "unlock" New York's clean energy potential. Multi-value projects such as NYSEG's Phase 1 CLCPA proposal present a unique opportunity to advance the New York's clean energy vision in a cost-effective manner that also creates tangible reliability benefits for our customers across five service divisions. **Lancaster, Lockport, Ithaca, Binghamton, Oneonta**

NYSEG Remediation Programs

By increasing capital expenditures in areas that directly impact reliability, NYSEG is investing in solutions to mitigate customer interruptions. The programs that make up these remediation efforts will differ by region based on each region's specific needs and criteria.

Key remediation programs include:

- **Distribution Line Inspection (DLI) & Wood Pole Inspection & Treatment (WPIT)** – Accelerated replacement of approximately 45,000 wood poles based on a specific list of criteria including physical condition, structural deficiencies, and recent circuit performance.

  Increased remediation of crossarms, transformers, conductor, cut outs, and poles deemed insufficient as the result of inspection programs ranked by reliability impact, the number of customers downstream of the specific location, the historical customer impact, the device type, the notifications per specific location and the historical incident count.

  Western NY: $41M
  Finger Lakes/Central NY: $46M
  Southern Tier: $28M
  Hudson Valley: $14M
  North country: $7M

- **Animal Guard** – Full implementation of Animal Guard Installation to reduce the number of interruptions caused by animal contact reducing both the frequency and duration of outages.

  Western NY: $2.6M
  Finger Lakes/Central NY: $3M
  Southern Tier: $3.5M
  Hudson Valley: $1.5M
  North country: $2.8M

- **Trip Savers** – Expanded use of automation schemes using "smart fuses" or "Trip Saver" devices to minimize outage durations and customers impacted. Trip Savers are an alternative to a standard fuse and have basic reclosing functionality. When deployed in the appropriate locations, they help mitigate the need for line personnel to manually reset the fuse, and they can automatically reset themselves in instances of temporary faults providing customers with a much faster restoration than what would have occurred with manually resetting a fuse.

  Increased remediation of units of property deemed insufficient as the result of inspection programs ranked by reliability impact, the number of customers downstream of the specific location, the historical customer impact, the device type, the notifications per specific location and the historical incident count.

  Western NY: $3.4M
  Finger Lakes/Central NY: $3.5M
  Southern Tier: $3.1M
  Hudson Valley: $2.1M
  North country: $1.4M

- **Electric Betterment Program** – The Betterments Program focuses on the replacement of various distribution system elements that contribute to high SAIFI measures. Electric Betterment projects are aimed at improving the reliability of worst performing circuits and maintaining the safe and reliable delivery of electricity to our customers. These projects focus on the reliability, operability, and flexibility of the electric distribution system. This program allows divisions to respond to smaller identified jobs to better improve reliability metrics and reduce the frequency and duration of customer outages.

  Western NY: $16M
  Finger Lakes/Central NY: $16M
  Southern Tier: $14M
  Hudson Valley: $10M
  North country: $6M