



NEW YORK
STATE OF
OPPORTUNITY

NY Prize

Stage 1 Winners

NY Prize is a three-stage competition. During Stage 1, competitively selected communities receive funding to conduct engineering assessments that evaluate the feasibility of installing and operating a community microgrid at a proposed site in New York State.

For NY Prize details visit nyserdera.ny.gov/ny-prize or email nyprize@nyserdera.ny.gov

Long Island

<p>1. VILLAGE OF BABYLON</p>	<p>The Village of Babylon lost power for several days after Hurricane Sandy. The proposed microgrid would use conventional generation as well as solar, energy storage, and fuel cells. Power from the proposed microgrid would be provided to Babylon Village Hall, the village fire station, highway and sanitation departments, Babylon EMS Response, the Babylon Union Free School District, St. Joseph’s Church/School complex, and the American Legion Hall.</p> <p>Partners: Village of Babylon, PSEG Long Island, National Grid, Metropolitan Transport Authority, New York State Department of Transportation (DOT), Suffolk County, and Town of Babylon.</p>
<p>2. TOWN OF HUNTINGTON</p>	<p>Huntington Village has suffered widespread power outages from storms in the last several years, including a power outage for more than eight days following Hurricane Sandy. The feasibility study will evaluate adding methane and natural gas fired generation with waste heat recovery, solar power, and energy storage technologies. This mix of technologies would provide electricity and thermal energy to the town hall, Huntington Hospital, Huntington Wastewater Treatment Plant, Huntington YMCA, and Flanagan Senior Center, among others being evaluated.</p> <p>Partners: Town of Huntington, PSEG Long Island, National Grid, Huntington Hospital, and Huntington YMCA.</p>
<p>3. TOWN OF EAST HAMPTON</p>	<p>This South Fork community has suffered significant power outages from coastal storms in the last several years, including an outage lasting seven days during Hurricane Sandy. The proposed microgrid would include a mix of solar, wind, advanced battery storage, and intelligent load and grid management, in addition to existing back-up generators. Facilities receiving power from the proposed microgrid include the town hall, the police substation, emergency operations center, emergency medical facility, police garage and fuel facility, the justice court, multiple auxiliary local government buildings, a drinking water well-field and pumping station, a telephone utility central station, two fire departments, and two schools.</p> <p>Partners: East Hampton Town Police Department, East Hampton Village Police Department, East Hampton Healthcare Foundation, Southampton Hospital, Verizon, Suffolk County Water Authority, East Hampton School District, Amagansett School District, East Hampton Fire Department, Amagansett Fire Department, Renewable Energy Long Island, and PSEG Long Island.</p>

Long Island (CONTINUED)

<p>4. VILLAGE OF GREENPORT</p>	<p>The Village of Greenport is located on the east end of the north fork of Long Island, with a municipal electric utility that serves about 2,000 customers, and has its own oil-fired 6.8 MW power plant. Greenport lost power during Hurricane Irene, had substantial outages after Hurricane Sandy, and has had periodic non-storm related outages. Greenport’s proposed microgrid would include a new liquefied natural gas-fueled generator and a combination of existing and proposed wind, solar, and energy storage resources that would provide power to Eastern Long Island Hospital, a regional wastewater treatment plant, and a fire department station.</p> <p>Partners: The Village of Greenport and Global Common, LLC, which is supported by GE Energy Consulting, Burns Group, Inc., and D&B Engineers and Architects, Inc.</p>
<p>5. VILLAGE OF PORT JEFFERSON</p>	<p>Located on the north shore of Long Island, this community has experienced widespread and extended power outages as a result of extreme weather events, including Hurricanes Sandy and Irene. The proposed microgrid would incorporate a mix of existing and new combined heat and power, solar, and energy storage. It would provide electric and thermal energy to selected critical facilities during both normal operating conditions and during disruptions to the main or local grids, including St. Charles Hospital and Mather Hospital, Mary Haven Center of Hope, Port Jefferson School District, Suffolk County Wastewater Treatment Plan, Bridgeport-Port Jefferson ferry, the fire station, and village hall.</p> <p>Partners: D&B Engineers and Architects, Burns Engineering, GE Energy Consulting, and Global Common LLC.</p>
<p>6. TOWN OF BROOKHAVEN</p>	<p>The Town of Brookhaven and Sachem School District have suffered significant power outages from both warm-weather storms and winter nor’easters. The proposed microgrid would provide power to the town hall to enable it to act as an emergency operations center and for two adjacent Sachem schools to function as emergency shelters. Technology would include solar panels and two existing 10 kW wind turbines, fuel cells, battery storage, and/or microturbines powered by the onsite wastewater treatment plant. The project would also incorporate sophisticated monitoring software operated by Brookhaven National Laboratory that will maximize the cost-benefit of the electrical generation and storage capacity components of the microgrid.</p> <p>Partners: Town of Brookhaven, Sachem School District, and Brookhaven National Laboratory.</p>
<p>7. TOWN OF SOUTHAMPTON</p>	<p>Southampton has suffered significant power outages from storms in the last several years, including being out of power for up to seven days during Hurricane Sandy. The town will explore a mix of power generation sources with emphasis on renewables. For existing power generation infrastructure, existing natural gas supplies at partner locations, such as Southampton Hospital, provide potential for combined heat and power. The proposed microgrid would provide power to the town hall, police station, three fire stations, village hall, library, emergency medical facility, hospital complex, department of public works complex, three school complexes, and a wastewater treatment plant.</p> <p>Partners: Town of Southampton, Village of Southampton, Southampton Hospital, Rogers Memorial Library, the Southampton School District, Suffolk County, and PSEG Long Island.</p>

Long Island (CONTINUED)

<p>8. TOWN OF EAST HAMPTON</p>	<p>The Long Island Community Microgrid Project (LICMP) would provide energy support to a community susceptible to storm damage year round. The proposed microgrid would receive up to 50 percent of its electric energy requirements from local solar — avoiding hundreds of millions of dollars in transmission investments that otherwise would be required under a traditional approach to delivering power to this grid-constrained community. Technology would include up to 15 MW of local solar, a 25-MWh energy storage system, and other distributed energy resources (DER). Critical services include two Suffolk County Water Authority (SCWA) water pumping and filtration plants and the Springs Fire District facility.</p> <p>Partners: PSEG Long Island, Long Island Power Authority, Suffolk County Water Authority, and the Springs Fire District.</p>
<p>9. CITY OF LONG BEACH</p>	<p>The City of Long Beach was devastated by Hurricane Sandy, which caused estimated damages of \$200 million to city facilities and infrastructure and total damages to all of Long Beach likely exceeding \$1 billion. Vital services (including utilities, water, and sewage systems) were out of service for several weeks and police, fire, and emergency responder facilities were rendered inoperable without power. The proposed microgrid would include combined heat and power, fuel cell, solar, and energy storage, combined with demand-management technology. Power from the proposed microgrid would be provided to city hall, police/fire headquarters, water/wastewater treatment plants, and affordable housing.</p> <p>Partners: NRG Energy, Inc., City of Long Beach, Long Beach Housing Authority, MTA Long Island Railroad, and PSEG Long Island.</p>
<p>10. TOWN OF NORTH HEMPSTEAD (PORT WASHINGTON)</p>	<p>Located on a peninsula, Port Washington Village is highly vulnerable to severe weather and experiences regular electrical outages. The proposed microgrid would use solar, energy storage, energy efficiency, and natural gas generation. Power from the proposed microgrid would be provided to local police and fire offices, a water treatment center, several school buildings, an animal shelter, a library, the Landmark on Main which is a cultural resource, and senior-housing center.</p> <p>Partners: Town of North Hempstead, Residents For a More Beautiful Port Washington, Port Washington Police Department, the Port Washington Fire Department, The Port Washington Water District, The Port Washington School District, the Town of North Hempstead Animal Shelter, Port Washington Library, and the Landmark on Main.</p>
<p>11. VILLAGE OF EAST ROCKAWAY (BAY PARK)</p>	<p>The Bay Park Sewage Treatment Plant received significant damage from Hurricane Sandy, requiring the rebuilding of four engines that provided power to the plant through natural gas-powered electric generation. Since the storm, the plant has been powered by rented natural gas generators. The proposed microgrid would combine natural gas generation with a newly-installed biogas-to-power engine, powered by gas created through waste anaerobic digestion, along with combined heat and power technology for greater efficiency. The microgrid would provide power to the treatment plant, East Rockaway Village Hall, two elementary schools, a fire department, a post office, a public library, and a public works facility.</p> <p>Partners: Nassau County, Village of East Rockaway, United Water Long Island, LIPA, National Grid, and PSEG Long Island.</p>

Long Island (CONTINUED)

12. VILLAGE OF ROCKVILLE CENTRE	<p>One of three municipally-owned electric utilities on Long Island, Rockville Centre provides power to approximately 11,000 electrical accounts. The community was devastated by Hurricane Sandy. The proposed microgrid would include up to 700 kW of solar power, six to 12 MW of dual-fuel or gas fired generation, as well as potential inclusion of energy storage, demand-side management, and/or combined heat and power. Power recipients could include South Nassau Communities Hospital, police and fire services, village hall, assisted living center, and vital retail businesses.</p> <p>Partners: Village of Rockville Centre, RRT SIGMA, and Arup.</p>
13. TOWN OF HEMPSTEAD	<p>The Town of Hempstead’s Point Lookout and Lido Beach barrier island communities have experienced many years of storm impacts, including power outages due to Hurricane Sandy, which left them without natural gas service for over a week and without electrical service for over two weeks. A mix of generation sources will be assessed for the proposed microgrid including wind, solar, hydrogen station assets in the Town’s Energy Park, battery storage, additional generators, fuel cells, and/or cogeneration. The microgrid would provide power to critical community facilities including the Point Lookout/Lido Beach Fire Station, the Town’s Water District Well #1 & #2 Main Treatment Plant, and the Town’s Department of Conservation and Waterways Administration and Marina facilities, which serve as an off-base hub for the Nassau County Police Department and Bay Constables, along with providing support and staging for incoming emergency support teams.</p> <p>Partners: Hempstead’s Department of Conservation and Waterways, Department of Water, and the Lido and Point Lookout Fire District.</p>
14. VILLAGE OF FREEPORT	<p>Village of Freeport incurred significant damage and power loss during Hurricanes Irene and Sandy. With 43,000 residents in an area of only four-and-a-half square miles – one of the highest population densities on Long Island – Freeport is an ideal candidate for a microgrid. The proposed Freeport microgrid would, in addition to repowering the municipal electric utility’s existing power plant, will seek to deploy solar, wind, fuel cell, combined heat and power, and battery storage. Power will be distributed to the village’s LIRR station, telecommunications system, police and fire operations, four public schools, as well as more than 250 commercial and 150 residential parcels.</p> <p>Partners: Village of Freeport, Freeport Electric, Anbaric Transmission, Arup, and National Grid.</p>

New York City

15. HUNTS POINT (BRONX)	<p>The Hunts Point Food Distribution Center is New York City’s primary hub for food supply storing up to 60 percent of the region’s produce, meat, and fish. The proposed microgrid would include combined heat and power, steam absorption chillers for cooling, rooftop solar, and a smart grid of intelligent meters and switchgear. The team will also explore the opportunity to expand the microgrid to include nearby businesses, such as the Hunts Point Wastewater Treatment Plant, community refuge facilities, and other locations in the residential area.</p> <p>Partners: NYC Economic Development Corporation, NYC Department of Environmental Protection, Consolidated Edison of New York, the Produce Market Co-op, Meat Market Co-op, the New Fulton Fish Market, and The Point CDC.</p>
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New York City (CONTINUED)

<p>16. EAST BRONX (BRONX)</p>	<p>This microgrid will be a district energy system that would provide utilities to Weiler Hospital, Jacobi Medical Center, the Albert Einstein College of Medicine, and Calvary Hospital. Although on-site generation is available, the proposed microgrid will mitigate risk of single generators failing during prolonged outages. In addition, the site is located in an area which is experiencing stress on the transmission and distribution system. The proposed microgrid would include combined heat and power, solar, battery systems, steam turbine generators, and heat recovery steam generators. The project will also leverage the existing steam generation plants at four hospitals.</p> <p>Partners: Gotham Energy 360, Van Zelm Engineers, and Environmental Engineering Solutions.</p>
<p>17. RED HOOK (BROOKLYN)</p>	<p>A low-income community, the Red Hook neighborhood of Brooklyn was severely impacted by Hurricanes Sandy and Irene with power outages lasting for weeks. The proposed microgrid would integrate a variety of both commercial and residential distributed generation sources, including solar power. Recipients of power would include Good Shepherd Services Miccio Cornerstone Community Center, Red Hook Initiative, Visitation Church, Ikea, Addabbo Family Health Center, Red Hook Public Library, South Brooklyn Community High School, as well as low income community residents and other facilities.</p> <p>Partners: The Friends of Brooklyn Community Board 6, the Red Hook NY Rising Community Reconstruction Plan, Smarter Grid Solutions, and IMG Rebel.</p>
<p>18. CLARKSON AVE. (BROOKLYN)</p>	<p>Within 11 city blocks of Clarkson Avenue in Brooklyn, three hospitals provide medical and mental health services to the community: the New York State Office of Mental Health (Kingsboro Psychiatric Center), State University of New York (Downstate Medical Center), and Kings County Hospital Center. As providers of critical care and places of refuge during emergencies that impact the local community, a resilient and reliable energy infrastructure is required for these facilities. These three organizations propose a microgrid that would make use of combined heat and power and renewable sources, energy storage, and advanced transmission and distribution technologies. The proposed microgrid would supply power and possible heating to the hospitals. The study will also consider the possible inclusion of Kingsbrook Jewish Medical Center and the George Wingate High School.</p> <p>Partners: New York State Office of Mental Health, State University of New York, and Kings County Hospital Center.</p>
<p>19. BROWNSVILLE VANDYKE COMMUNITY (BROOKLYN)</p>	<p>The Brownsville, Van Dyke, and Tilden housing complexes and surrounding community are a high-density population that presents the opportunity to reduce grid demand through a microgrid, as well as a low-cost alternative to expensive replacement of an aging substation. The proposed microgrid would make use of renewable energy, energy storage, and energy-efficiency measures at critical facilities and multi-family housing units. The microgrid would provide power to a health care facility, a library, three emergency shelters, 57 multi-family affordable housing buildings, and single family residential buildings in the surrounding community.</p> <p>Partners: Con Edison, Brooklyn Alliance for Sustainable Energy, New York City Environmental Justice Alliance, New York City Housing Authority, Brownsville Multi-Service Family Health Center, and Brooklyn Public Library.</p>

New York City (CONTINUED)

20. TWO BRIDGES (MANHATTAN)	<p>The Two Bridges/Beyond the Grid Community Microgrid would serve a mix of public and private residential, institutional, and commercial sites along Avenue C between East 10th Street and East 14th Street in the East Village, all of which were impacted by flooding and/or electrical outages as a result of Hurricane Sandy. The proposed microgrid would include a mix of natural gas and renewable generation sources, including combined heat and power, energy storage, and demand-side efficiency measures, and would serve three public schools, community center, pharmacy, supermarket, and a variety of apartment buildings.</p> <p>Partners: New York City Housing Authority, L+M Development Partners, New York City Department of Education, Village East Towers, LES Ready, University Settlement, and Con Edison.</p>
21. EIGHTH AVENUE MICRO-GRID (MANHATTAN)	<p>This project includes a 2.9 million-square-foot building located in the Chelsea area of Manhattan between Eighth and Ninth Avenues and 15th and 16th Streets. It is owned by Google and includes medical facilities as well as critical telecommunications equipment. The proposed microgrid would include solar, combined heat and power, fuel cell, and energy storage technology to serve the building's diverse tenant base.</p> <p>Partners: Energy & Resource Solutions, City of New York, One City Block, New York Power Authority, Beth Israel Medical Center, Schneider Electric, and Con Edison.</p>
22. SUNNYSIDE YARD (QUEENS)	<p>This Queens region lost power for a month from Hurricane Sandy, and a week in 2006 due to equipment failure. The proposed microgrid would include an existing 250 kW back-up diesel generator and proposed assets, including solar and combined heat and power, and would provide power to the Sunnyside Yard Facility, schools, a public housing complex, gas stations, and a grocery store.</p> <p>Partners: Booz Allen Hamilton, Con Edison, Viridity Energy, Verde Advisory, Amtrak, and New York City.</p>
23. CITY OF NEW YORK (STATEN ISLAND)	<p>The Staten Island University Hospital (SIUH) - North Campus continued operations throughout Hurricane Sandy, preserving patient safety even as floodwaters came within inches of causing a major power outage. Recognizing this vulnerability and the critical need for SIUH North Campus to remain resilient in the face of future storms, SIUH's proposed microgrid project would fortify the hospital's existing power plant while providing additional capacity for renewable energy, energy efficiency, and conservation measures. Power could serve three public schools, FDNY Engine Company 159, NYC Housing Authority's South Beach and Berry Houses, two City Environmental Protection pump houses, and the South Beach Psychiatric Center.</p> <p>Partners: Staten Island University Hospital, Louis Berger, Segal, and Anbaric Transmission.</p>

Mid-Hudson

<p>24. CITY OF NEW ROCHELLE</p>	<p>With more than 13 miles of shoreline, this city was severely impacted by Hurricanes Sandy and Irene. The proposed microgrid would combine existing generation assets, including combined heat and power, solar, and back-up generation. The proposed microgrid would provide power to fire stations, colleges, government offices, assisted living centers, grocery stores, schools, a senior center, and a commercial building. In addition to supporting existing facilities, the feasibility study will explore synergies between the microgrid project and the city's ambitious plans to revitalize downtown, with the potential to create a model for energy efficient and resilient transit-oriented growth.</p> <p>Partners: City of New Rochelle, Con Edison, Booz Allen Hamilton, Power Analytics, Siemens USA, Pace Energy and Climate Center, and Sustainable Westchester.</p>
<p>25. VILLAGE OF TARRYTOWN</p>	<p>The Village of Tarrytown, which currently lacks any storm-related power resiliency technology, is proposing a microgrid that would include combined heat and power, wind, solar, and potentially power from tidal currents and other smart technologies to provide added resiliency to the community. Power would feed to the village hall, police station, fire houses, water and sewer filtration/pump stations, public schools, and the housing authority.</p> <p>Partners: Village of Tarrytown, Tarrytown Municipal Housing Authority, Public Schools of the Tarrytowns, Wildey Group, New York Power Authority, Con Edison, Brookhaven National Laboratory, and Willdan Energy Solutions.</p>
<p>26. VILLAGE OF SLEEPY HOLLOW</p>	<p>The village, which lacks resiliency in the event of severe weather or other emergency, has proposed a microgrid using a combination of combined heat and power, wind, solar, tidal power, and other smart technologies. Power from the proposed microgrid would be provided to village hall, police station, fire houses, water and sewer filtration/pump stations, PK-12 schools, and affordable housing.</p> <p>Partners: Village of Sleepy Hollow, Village of Briarcliff Manor, North Tarrytown Housing Authority, Public Schools of the Tarrytowns, New York Power Authority, Con Edison, Brookhaven National Laboratory, and Willdan Energy Solutions.</p>
<p>27. TOWN OF MOUNT KISCO</p>	<p>This community has suffered numerous power outages from Hurricanes Floyd, Irene, and Sandy, plus heat waves, nor'easters, and snowstorms. The proposed microgrid would use a mix of power generation sources including solar, natural gas, and diesel, and would provide power to the village office, library, police station, fire departments, volunteer ambulance corps, medical facilities, pumping stations, service stations, schools, local industries and businesses, and shelters.</p> <p>Partners: Village of Mount Kisco, Booz Allen Hamilton, Sustainable Westchester, Pace Energy and Climate Center, Power Analytics, Siemens USA, and Con Edison.</p>
<p>28. VILLAGE OF IRVINGTON</p>	<p>During Hurricane Sandy, the Village of Irvington suffered severe damage. The entire waterfront, including Bridge Street and major parks, were underwater and there were significant power outages. The proposed microgrid would include up to 850 kW of combined heat and power, at least 500 kW of multiple solar arrays, and 200 kW of multiple energy storage systems. Microgrid will serve the village hall, police headquarters, fire department, the ambulance volunteer corp., the water and sewer department, multiple pumping and booster stations, five schools, and the senior citizen center.</p> <p>Partners: Hitachi, Green Energy Corp, GI Energy, Sustainable Westchester, and Pace Energy and Climate Center.</p>

Mid-Hudson (CONTINUED)

<p>29. TOWN OF MAMARONECK</p>	<p>This community was hit hard by Tropical Storm Lee and Hurricanes Irene and Sandy. Residents and businesses were without electrical power for days and some for weeks, and lost millions of dollars due to the storms. The town plans to utilize natural gas as their main source of generation. The proposed microgrid would provide power to the town center and police station complex, nursing facility, evacuation center, school, gas station, two shopping centers, and urgent care center.</p> <p>Partners: Town of Mamaroneck, Booz Allen Hamilton, Sustainable Westchester, Pace Energy and Climate Center, Power Analytics, Siemens USA, and Con Edison.</p>
<p>30. VILLAGE OF CROTON-ON-HUDSON</p>	<p>Croton's location downstate and directly on the banks of both the Hudson and Croton Rivers makes it particularly vulnerable to storm damage. Hurricane Sandy left much of Croton without power for nearly two weeks. Croton will follow the model of a "nested microgrid" in which there will be two main geographical areas in the system, each fed by their own portfolio of distributed generation (combined heat and power, solar, and energy storage), and each capable of staying powered in island mode during a grid outage. However, when the grid is powered, the two areas will be connected, and can be managed as a single microgrid system with generation resources optimized to meet loads across the entire system. The proposed microgrid would provide power to a municipal building, library, three fire stations, three schools and district office, medical clinic, grocery/pharmacy, and gas station.</p> <p>Partners: Village of Croton-on Hudson, Sustainable Westchester, Pace Energy and Climate Center, Green Energy Corp., Hitachi Consulting, GI Energy, and Con Edison.</p>
<p>31. VILLAGE OF MAMARONECK</p>	<p>The village is an area prone to flooding due to nearby rivers and also subject to frequent power outages. The proposed microgrid would combine solar, combined heat and power, and battery storage to provide a reliable source of power for a sustained period of time. The critical facilities include the village governing offices, police department, main fire department, three gas stations, and the area's largest wholesale ice supplier.</p> <p>Partners: Murphy Brothers Contracting (MBC), Con Edison, Village of Mamaroneck, Steven Winter Associates Inc., IntelliGen, Delta, and Spirae companies.</p>
<p>32. VILLAGE OF OSSINING</p>	<p>The Village of Ossining is located in an area that is of interest to reduce power congestion. The proposed microgrid would draw power from combined heat and power, solar, and energy storage, and would provide electricity to such critical facilities as a police station and city court, the fire department, several water facilities, the high school, the middle school, a communications company's operations center, and a state prison.</p> <p>Partners: Sustainable Westchester, Hitachi Consulting, Green Energy Corp (GEC), GI Energy, and Pace Energy and Climate Center.</p>
<p>33. CITY OF WHITE PLAINS</p>	<p>The City of White Plains was hit hard by Hurricanes Irene and Sandy and several recent severe snow events that have left the city or portions of the city without power for days. The proposed microgrid would make use of renewable energy and energy storage technology. The microgrid would serve such sites as the police and city court complex; the Westchester County Court; U.S. District Court and other federal offices; a group of healthcare facilities including the White Plains Hospital, Cancer Care Center, and Kensington Assisted Living Residence; and the White Plains Library, which can serve as an emergency shelter or response center.</p> <p>Partners: Hitachi Consulting, Green Energy Corp, GI Energy, and Pace Energy and Climate Center.</p>

Mid-Hudson (CONTINUED)

34. TOWN OF CORTLANDT	<p>Hurricanes Sandy and Irene and Tropical Storm Lee caused costly damages to Cortlandt, including loss of power to critical services, local businesses, and residents — some for a period of 10 days. The proposed microgrid would include biomass, natural gas, and diesel, and would provide power to the town hall, hospital, fire department, water filtration plant, waste-to-energy plant, gas stations, grocery stores, assisted living centers, and a school.</p> <p>Partners: Town of Cortlandt, Con Edison, Booz Allen Hamilton, Power Analytics, Siemens USA, Pace Energy and Climate Center, and Sustainable Westchester.</p>
35. TOWN OF VALHALLA	<p>The Westchester Community College and Westchester County Valhalla Campus are centrally located in one of New York’s most populous counties. The county, with two shorelines — one on the Hudson River and the other on the Long Island Sound — is especially susceptible to floods and power outages during an extreme weather event such as Hurricane Sandy. The County’s First Responder capabilities, in time of crisis, are also critical to New York City because of their strategic geographic location. The proposed microgrid would explore a mix of distributed energy resources such as solar and combined heat and power applications, along with battery storage.</p> <p>Partners: Con Edison, Entecco, Eaton, Kheops, KeyBank, TAG Mechanical, and New York Power Authority.</p>
36. TOWN OF SOMERS	<p>This community has experienced severe storms in recent years, with power outages from Hurricanes Irene and Sandy and Tropical Storm Lee lasting up to 11 days. Partial day outages are experienced throughout the year from downed power poles and line failures. The proposed microgrid would include solar and diesel. Power would be provided to a sewage plant, activity center (designated town emergency shelter), town office, gas stations, nursing home, library, schools, fire station, state trooper station, and commercial complexes.</p> <p>Partners: Town of Somers, NYSEG, Sustainable Westchester, Pace Energy and Climate Center, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>
37. CITY OF YONKERS	<p>Hurricanes Irene and Sandy caused widespread and long-lasting damage to public and private property. Sandy left more than 20,000 Yonkers residents without electricity for several days. The proposed microgrid would make use of a combined heat and power system at the medical center, battery or thermal storage and solar, along with various load-management technology. Recipients of power would include Yonkers City Hall, justice center and police headquarters, an inpatient acute care hospital and nursing home, and a residence for low-income senior citizens.</p> <p>Partners: NRG Energy, Inc., City of Yonkers, St. Joseph’s Medical Center, Griffin House, and Con Edison.</p>
38. VILLAGE OF WAPPINGERS FALLS	<p>Due to increasing extreme weather events, the Village of Wappingers Falls is partnering with the Town of Poughkeepsie and the Tri-Municipal Sewer Commission to improve the disaster resiliency of parts of their electrical grids. The project would combine existing hydropower and solar with additional energy storage technology and a new combined heat and power system. The proposed microgrid system would provide power to a water treatment facility, an inter-municipal wastewater treatment plant, two emergency shelters, two firehouses, two schools, and hundreds of residential homes.</p> <p>Partners: Village of Wappingers Falls, KC Engineering, Genesys Engineering, and Central Hudson Gas & Electric.</p>

Mid-Hudson (CONTINUED)

<p>39. VILLAGE OF FLORIDA</p>	<p>Critical services in Florida that do not have dedicated emergency back-up generation are vulnerable to prolonged interruptions for response and shelter during emergencies. A study will seek to develop a system that initially ties together existing generators to serve multiple critical facilities. This will allow more efficient utilization of existing assets, thus reducing the need to add additional capacity. The proposed microgrid would provide power to the village hall fire department, two assisted living centers, public library, two water treatment plants, water tower, public schools, three industrial complexes, grocery store, and a sewer and water pumping station.</p> <p><i>Partners:</i> Village of Florida, Booz Allen Hamilton, Power Analytics, Siemens USA, Orange and Rockland Utilities.</p>
<p>40. TOWN OF WARWICK</p>	<p>As a result of aging transmission lines and storm risk, the Village of Warwick is exploring development of a “nested” microgrid to maintain energy supplies for numerous vital assets in and around Warwick. The proposed microgrid would combine new and existing solar along with storage batteries, biogas or natural gas power generators, and possibly using combined heat and power technology. The power would go to town hall, a local hospital, assisted living facilities, police, fire, and rescue stations, public shelters, municipal water and wastewater systems, and other vital assets.</p> <p><i>Partners:</i> Town and Village of Warwick, the Warwick Valley Central School District, Bon Secours Charity Health System, Orange and Rockland Utilities, Microgrid Institute, Green Energy Corp., Hitachi Inc., and TeMIX Inc.</p>
<p>41. STEWART AIRPORT, TOWN OF NEW WINDSOR</p>	<p>Stewart International Airport serves as an emergency operations center and emergency preparedness staging area and is the location of a multitude of tenants and critical functions. For days after Hurricane Sandy, hourly flights of C-17 military aircraft streamed in, delivering relief workers and equipment from outside the region to assist in restoring power to New York City. The proposed microgrid would include combined heat and power, solar, and energy storage along with an integrated control system and management technology platform.</p> <p><i>Partners:</i> NRG Energy, Inc., Central Hudson Gas & Electric Corp., the Port Authority of New York and New Jersey, and the Town of New Windsor.</p>
<p>42. TOWN OF CLARKSTOWN</p>	<p>Orange and Rockland Utilities’ coverage area has experienced significant interruption of service due to storm-related events. This includes loss of power for over a week due to Hurricane Sandy and similarly crippling results from Hurricane Irene. The town will explore a mix of generation including solar, diesel, and natural gas. The proposed microgrid would provide power to town hall, fire department, police department, four Rockland County government buildings, an animal hospital, three schools, three shelters, three affordable housing complexes, three commercial buildings, two gas stations, two grocery stores, and the ambulance corps.</p> <p><i>Partners:</i> Town of Clarkstown, Orange and Rockland Utilities, Rockland County, New City Chamber of Commerce, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>

Mid-Hudson (CONTINUED)

43. VILLAGE OF MONTICELLO	<p>The Village of Monticello has critical services that are vulnerable to potential interruptions to service, including ice and winter storm-related outages. The village will explore a mix of generation sources including renewable energy such as wind power. The proposed microgrid would provide power to the government center, two town offices, sheriff’s department, county court, county jail, police department, a water treatment plant, three schools, a fire department, grocery store, two gas stations, and a bus yard.</p> <p>Partners: Village of Monticello, New York State Electric & Gas, Sullivan Alliance for Sustainable Development, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>
44. VILLAGE OF LIBERTY	<p>Electricity in Liberty is susceptible to outages due to chronic interruption and poor quality of service, as well as storm-related outages. The town will explore a mix of generation sources including solar and diesel through a proposed microgrid that would provide power to three schools, two gas stations, two grocery stores, a senior living center, and a local industry.</p> <p>Partners: Town of Liberty, New York State Electric & Gas, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>
45. CITY OF KINGSTON	<p>Tropical Storm Lee, as well as Hurricanes Irene and Sandy, led to extended and widespread outages in this major Mid-Hudson city. The city will explore a mix of generation sources with an emphasis on clean energy, including solar, geothermal, and natural gas. The proposed microgrid would seek to provide power to city hall, police department, fire department, hospital, healthcare facilities, commercial facilities, and a school.</p> <p>Partners: City of Kingston, Central Hudson Gas & Electric, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>
46. TOWN OF NEW PALTZ	<p>As a result of aging transmission lines and storm risk, the Village of New Paltz is exploring development of a “nested” microgrid to maintain energy supplies for numerous vital assets. The proposed microgrid would combine new and existing solar, along with energy storage and biogas or natural gas power generators, and possibly using combined heat and power technology. Power would go to town hall, a local hospital, assisted living facilities, police, fire and rescue stations, public shelters, municipal water and wastewater systems, and other vital assets.</p> <p>Partners: Town and Village of New Paltz, SUNY-New Paltz, New Paltz Central School District, New York State Department of Environmental Conservation Region 3 Office, Health Alliance of the Hudson Valley, Central Hudson Gas & Electric, Microgrid Institute, Green Energy Corp., Hitachi Inc., and TeMIX Inc.</p>

Capital Region

47. CITY OF WATERVLIT	<p>Power to Watervliet is supplied by electrical feeds located north and south of the city, therefore, events occurring both inside and outside the city can significantly impact its power supply. The city will explore a mix of generation sources including natural gas and solar. The proposed microgrid would provide power to city hall, fire station, a public library, a civic center, three shelters, a senior center, three affordable housing complexes, a drinking water filtration plant, a grocery store, and two local industries.</p> <p>Partners: City of Watervliet, National Grid, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>
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Capital Region (CONTINUED)

48. CITY OF ALBANY (EMPIRE STATE PLAZA)	<p>The Empire State Plaza is a large thermal consumer, and provides a strong case for augmenting an existing steam plant with a combined heat and power system for a new microgrid. Power would serve the plaza, and possibly the Times Union Center, city hall, the courthouse, and the new convention center; while also providing thermal energy for the Plaza. The Empire State Plaza and Times Union Center can both be used as a facilities of refuge during a natural disaster or extended power outage.</p> <p>Partners: Albany County, New York Power Authority, Office of General Services, City of Albany, Albany County Emergency Management Office, and National Grid.</p>
49. COUNTY OF ALBANY (AIRPORT)	<p>Albany County is the Capital of the State of New York, and the City of Albany is the seat of government for both the City of Albany as well as the County of Albany. Given this concentration of administrative functions there is a need for high levels of resiliency when facing natural disasters. As the county was greatly affected by Hurricane Irene and Tropical Storm Lee, the County of Albany will be exploring a mix of renewable and conventionally fueled power sources to supply a microgrid for several essential public facilities and infrastructure. The Albany County Airport will be a prime focus of this study, but will also include the Albany County Correctional Facility, Albany County Nursing Home, Albany County Hockey Facility, and hopefully other proximate private and non-profit partners.</p> <p>Partners: National Grid, Albany County, Albany County Sheriff’s Department, and Albany County Airport Authority.</p>
50. CITY OF ALBANY (UNIVERSITY HEIGHTS)	<p>The University Heights area in Albany has experienced significant load growth and a microgrid may mitigate the need for further transmission and distribution infrastructure improvements, as well as increase the reliability and availability of power. The proposed microgrid would include renewable sources, combined heat and power, and energy storage technologies. Power from this microgrid would be delivered to Albany College of Pharmacy and Health Sciences, Albany Law School, Sage College, Capital District Psychiatric Center, Parson’s Child and Family Center, Congregation Beth Emeth, and the soon-to-be-developed Gallery at Holland apartment complex.</p> <p>Partners: Allen Power Inc., National Grid, and City of Albany Planning Department.</p>
51. CITY OF TROY (RPI SAMARITAN)	<p>Neighbors Rensselaer Polytechnic Institute (RPI) and Samaritan Hospital in Troy are both looking to provide their campus with resilient and reliable power during normal operations and utility outages. The proposed microgrid would augment an existing steam system with combined heat and power on RPI’s campus, to provide up to eight MW of power. The system would provide electricity and thermal output to the campus, electricity to Samaritan Hospital, and possibly to a fire station and various county office buildings. Samaritan Hospital would be able to maintain normal operation and RPI would be able to take in members of the community to provide shelter.</p> <p>Partners: RPI, Saint Peter’s Health Partners, City of Troy, Rensselaer County Bureau of Public Safety, and National Grid.</p>

Capital Region (CONTINUED)

<p>52. TOWN OF MOREAU</p>	<p>Critical services in Moreau have emergency back-up generation but are vulnerable to prolonged interruptions to grid supplied power. Moreau is interested in optimizing the use of hydroelectric power from local dams in or near the town, with continued access during grid outages. The proposed microgrid would provide power to the town office, fire department, an industrial park, four schools, a shelter, and a family health facility.</p> <p>Partners: Town of Moreau, Booz Allen Hamilton, National Grid, Siemens USA, and Power Analytics.</p>
<p>53. VILLAGE OF BALLSTON SPA</p>	<p>The Village of Ballston Spa has a high concentration of municipal offices, and the school district currently has a combined heat and power system available for expansion. The proposed microgrid would make use of this combined heat and power system, combined with an energy storage “bank” to provide power to three schools, a nursing home, the village police station, village hall and public works building, three county building sites, the town municipal center, the area community center, as well as a local grocery/gas vendor, and a mixed-use residential, professional, and restaurant complex.</p> <p>Partners: National Grid, JW Danforth, Saratoga County, Town of Milton, Village of Ballston Spa, Zenith Care Health Group, Ballston Community Emergency Corps, Stewart’s Shops, Ballston Area Recreation Commission, and The Factory, with CHA Consulting Inc. and MTech Laboratories LLC.</p>
<p>54. CITY OF SCHENECTADY</p>	<p>Parts of the City of Schenectady experienced widespread flooding from Hurricanes Irene and Lee, and lost power for more than a week. The proposed microgrid would make use of an existing power system called Marquee Power, operated by Proctors theater and arts center, which also serves as a place of refuge in case of emergencies. Marquee, a district energy system, already provides heating and cooling to 30 nearby businesses and organizations. The proposed microgrid would expand power distribution to current Marquee thermal customers, including city mission, a fire station, a CVS, the Salvation Army, several county buildings, the county jail, the Schenectady County Sheriff’s Office, city police headquarters, the city library, a CDTA bus transit hub, and a proposed Amtrak station. The microgrid might also be expanded to include Union College, Ellis Hospital, Golub Corp., the proposed casino, and Schenectady County Community College.</p> <p>Partners: ASI Energy, City of Schenectady, Schenectady County, GE Energy Consulting, Proctors-Marquee Power, and National Grid.</p>
<p>55. CITY OF GLENS FALLS</p>	<p>The City of Glens Falls provides critical services as well as economic support services for many communities in the southeastern Adirondack region. As a result, much of the North Country is vulnerable whenever Glens Falls experiences a power outage. The proposed microgrid would be anchored by existing nearby hydropower and supplemented by solar, combined heat and power, and energy storage. It would provide power to a hospital, police department, city hall, two fire stations, a library, civic center, and a water treatment plant, along with two senior residential facilities and an affordable housing project.</p> <p>Partners: City of Glens Falls, Johnson Controls, Warren County EDC, Glens Falls Hospital, Glens Falls Housing Authority, Glens Falls Civic Center Coalition, Boralex Hydro Operations, JUST Beverages, and National Grid.</p>

North Country

56. CITY OF PLATTSBURGH (SUNY)	<p>Located in an area that is increasingly vulnerable to severe winter storms and flooding, SUNY Plattsburgh will evaluate a mix of clean energy sources and other smart technologies to mitigate the system stresses and provide added resiliency to the community. The microgrid would provide power to the university, high school, a hospital, and two nursing homes.</p> <p>Partners: SUNY Plattsburgh, City of Plattsburgh, Champlain Valley Physicians Hospital, Plattsburgh High School, Meadowbrook Nursing Home, Vilas Nursing Home, Brookhaven National Laboratory, and Willdan Energy Solutions.</p>
57. VILLAGE OF MALONE	<p>The Village of Malone often suffers long power outages. With the extreme cold typical of the North Country, this can result in a rapid escalation of unsafe conditions. The proposed microgrid could include a 2 MW solar array, three hydroelectric dams, and anaerobic digestion project, along with combined heat and power. The microgrid would provide power to up to 14 critical facilities including the waste water treatment plant, a full-service acute care hospital with a nursing home and assisted living center, five schools, one college, village police department, three state correctional facilities, fire station, and public library.</p> <p>Partners: Village of Malone, National Grid, Enbridge St. Lawrence Gas, TAP Industries, Malone Chamber of Commerce, Malone Housing Authority, and Barton & Loguidice, D.P.C.</p>
58. TOWN OF CHATEAUGAY	<p>There are some critical services in Chateaugay that do not have emergency back-up generation. In the event of interruption to grid supplied power, these services will be greatly impaired. The town was hard hit by an ice storm in 1998, which caused the power to be out for two weeks in frigid temperatures, and is vulnerable to other major storms. The town will explore a mix of generation sources with an emphasis on renewable energy including hydroelectric, biomass, and wind power. The proposed microgrid would provide power to town hall, fire station, town garage, a school, a gas station, correctional facility, business park, and a local industry.</p> <p>Partners: Town of Chateaugay, New York State Electric & Gas, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>
59. TOWN OF CANTON	<p>Located in New York's far north, Canton is prone to electricity spikes and winter outages, such as the January 1998 ice storm, in which 100,000 National Grid customers in St. Lawrence and surrounding counties were without electricity for between one and three weeks. The proposed microgrid would include solar, combined heat and power, energy storage, back-up generators, biomass generation, building load control, and an advanced microgrid controller.</p> <p>Partners: Town and village offices, St. Lawrence University, St. Lawrence County offices, Canton Central School District, SUNY Canton, St. Lawrence-Lewis BOCES, Canton Potsdam Hospital, United Helpers, National Grid, St. Lawrence Gas, and Seaway Timber Harvesting/Curran Renewables. Engineering partners include L & S Energy Services Inc. and Green Energy Corp.</p>

North Country (CONTINUED)

60. TOWN OF WATERTOWN	<p>The Town of Watertown and Jefferson County are in the heart of New York’s North Country. The entire area undergoes some of the harshest winter conditions in the country, which impact power quality and reliability. The proposed microgrid would explore a mix of distributed energy resources such as solar, wind, and anaerobic digestion, as well as natural gas for combined heat and power applications at the partners manufacturing sites. Sites to receive power include Watertown’s Fire District Station 3; the Jefferson County Community College; and five manufacturing sites located in the Jefferson County Industrial Park – Allied Motion, Henderson Manufacturing, North American Tapes, Northstar Hatchery, and Timeless Frames.</p> <p>Partners: Entecco, Eaton, Kheops, Key Bank, TAG Mechanical, National Grid, and the Jefferson County Industrial Development Agency.</p>
61. VILLAGE OF CROGHAN	<p>The Village of Croghan is a small village in a rural community that has suffered storm related outages in the past due to major storms in 1991, 1995, 1998, and 2013. A study will evaluate the feasibility of a microgrid to support critical rural community facilities such as the village hall, village fire hall, senior citizens housing complex, health clinic, and water and wastewater treatment plants. The proposed microgrid would be powered by newly installed hydroelectric generators at a renovated dam in the village and supplemental power from a solar array.</p> <p>Partners: Development Authority of the North Country, the Village of Croghan, Lewis County Development Corp., St. Lawrence Gas, Schneider Electric, Larsen Engineers, and National Grid.</p>
62. VILLAGE OF CARTHAGE	<p>Energy service in Carthage is susceptible to prolonged interruption of service, including ice and winter-storm related outages. The village will explore a mix of power generation sources with an emphasis on renewable generation including biomass and hydropower. The proposed microgrid would provide power to five commercial industries, a grocery store, a hospital, police department, three schools, and a gas station.</p> <p>Partners: Village of Carthage, Jefferson County Local Development Corporation, Carthage Industrial Development Corporation, National Grid, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>

Southern Tier

63. VILLAGE OF ENDICOTT	<p>The Village of Endicott suffered two “100-year” floods in the past 10 years. The proposed microgrid would leverage an existing thermal distribution system with a proposed combined heat and power plan and additional power from solar, energy storage, and demand-response technology. The power from the proposed microgrid would be provided to the Huron Business Park and the Village of Endicott.</p> <p>Partners: Huron Associates, Village of Endicott, New York State Electric and Gas, Taitem Engineering, and the Binghamton Regional Sustainability Coalition.</p>
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Southern Tier (CONTINUED)

<p>64. CITY OF BINGHAMTON</p>	<p>At the confluence of two great rivers, the Susquehanna and the Chenango, the City of Binghamton has sustained more than its share of flood-related damages — in both 2006 and 2011, much of the city was submerged. During these events, the city either lost or experienced diminished services of electricity, potable water, police and fire protection, as well as housing. The proposed microgrid would include combined heat and power, solar, and hydroelectric power. Power would be provided to Binghamton City Hall, Binghamton Police Department, Binghamton Fire Department, Binghamton Water Treatment Plant, YMCA of Broome, YWCA of Binghamton, Twin River Commons Student Housing Complex, Holiday Inn Arena, Bates Troy laundry, Kradjian Properties, Keystone Associates Architects, Engineers and Surveyors, and NYSEG.</p> <p>Partners: GE Energy Consulting, ASI Energy, Earthkind Energy and Keystone Associates Architects, Engineers and Surveyors, LLC.</p>
<p>65. CITY OF ELMIRA</p>	<p>The City of Elmira faces service interruptions, including major storm-related outages and intermittent power fluctuations impacting critical service facilities. The city will explore a mix of generation sources with an emphasis on renewable energy sources such as biomass. The proposed microgrid would provide power to three schools, a hospital, two fire departments, two police departments, a wastewater treatment plant, a gas station, a grocery store, a local industry, and an affordable housing complex.</p> <p>Partners: City of Elmira, New York State Electric & Gas, Chemung County Environmental Management Council (EMC), Chemung County Executive’s Advisory Commission on Natural Energy Solutions, The Hilliard Corporation, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>
<p>66. VILLAGE OF BATH</p>	<p>Bath Electric Gas and Water Systems has recently experienced prolonged system outages due to bulk system outages outside the municipal electric system. Additionally, the Bath system has been stressed in recent years by the harsh winter season, resulting in millions of dollars of unplanned energy purchases and leaving the critical facilities and residents vulnerable to potential failures. Bath will evaluate a mix of clean energy sources to mitigate the system stresses and provide added resiliency to the community as a whole. The proposed microgrid would provide power to a school, village offices, county buildings, water and wastewater plants, and emergency response facilities.</p> <p>Partners: Bath Electric Gas and Water Systems, Village of Bath, Bath Central School District, Customized Energy Solutions, Brookhaven National Laboratory, and Willdan Energy Solutions.</p>

Southern Tier (CONTINUED)

<p>67. VILLAGE OF LANSING</p>	<p>The project, submitted by Tompkins County, would ensure that the Ithaca-Tompkins Regional Airport and other local vital services would be able to continue operation in the event of a major power outage or other emergency. The proposed microgrid would include up to 3 MW of multiple biomass- or biogas-based combined heat and power units, at least one MW of solar arrays, and 450 kW of multiple energy storage systems. Several electric generators, as well as existing solar systems on three county buildings, would be integrated into the microgrid. The proposed microgrid would power Tompkins County Emergency Response (E-911) Center; Tompkins County Public Safety Building, including the Sheriff's office and County Jail; Tompkins County Health Department; and the Ithaca-Tompkins Regional Airport. Other facilities under consideration include a health care campus, a business and technology park, and the main Ithaca branch of the U. S. Post Office.</p> <p>Partners: Village of Lansing, Cornell University Real Estate, Cayuga Medical Center, Parkview Healthcare Campus, multiple businesses in the Cornell Business and Technology Park, New York State Electric and Gas, Green Energy Corp., Hitachi Consulting, and GI Energy.</p>
<p>68. CITY OF ITHACA</p>	<p>The city and nearby communities, which suffered storm damage during Tropical Storm Lee, have already committed to adding a biogas-to-power system at the local wastewater treatment center. The proposed microgrid would combine power from this system with existing back-up diesel power and proposed solar and combined heat and power systems. Users would include local schools, public works facilities, affordable housing, Ithaca College, the wastewater treatment center, possibly Cornell University, and other ratepayers.</p> <p>Partners: City of Ithaca, Town of Ithaca, Town of Dryden, New York State Electric and Gas, and Unchained Properties.</p>
<p>69. VILLAGE OF SHERBURNE</p>	<p>The rural community of Sherburne has been prone to power interruptions, especially from summer storms. The proposed microgrid would use a mix of power generation sources such as diesel and solar, battery storage, and other techniques. The feasibility study will seek to provide power to the village office, fire department, police department, public schools, wastewater treatment plant, a railroad crossing gate, wastewater pump stations, gas stations, health clinics, senior housing, local industries, and low-income housing complexes.</p> <p>Partners: Village of Sherburne, Sherburne Electric, Commerce Chenango, Booz Allen Hamilton, Power Analytics, and Siemens USA.</p>

Mohawk Valley

<p>70. VILLAGE OF FRANKFORT</p>	<p>The Village of Frankfort is a municipal utility with approximately 1,800 customers heavily reliant upon electricity for heating. Loss of power during extreme weather events, particularly during the winter months, becomes a very serious concern because of the high prevalence of electric heat utilized by village residents. The proposed microgrid would include solar, hydropower, and combined heat and power and would provide power to the water treatment plant, two public schools, the village and town police departments, the combined fire and ambulance station, and the public library.</p> <p><i>Partners:</i> Village of Frankfort, Frankfort Power and Light, National Grid, JDA Associates, Barton & Loguidice, D.P.C.</p>
<p>71. CITY OF UTICA</p>	<p>This project focuses on the districts of Baggs Square and Harbor Point. Baggs Square is the area with the oldest electric and gas distribution system, while Harbor Point is a newly-developing district that includes a brownfield over a coal gas production site. Proposed power generation sources would include combined heat and power, solar, energy storage, and distributed generation. The proposed microgrid would include Union Station (train/charter bus services), Utica City Hall, Federal Office Building, county offices, Utica Memorial Auditorium, affordable housing, Department of Motor Vehicles, CENTRO (local bus service), a natural gas refueling station, sewage treatment plant, Solid Waste Authority recycling facility, electric substations, DOT Active Canal Operation, and DPW Garage.</p> <p><i>Partners:</i> City of Utica, Utica Department of Urban and Economic Development, Urban Renewal Agency, Utica Industrial Development Agency, National Grid, Harbor Point Local Development Corporation, Bagg’s Square Association, Mohawk Valley Economic Development Growth Enterprises Corporation, Cornell University Cooperative Extension-Oneida County, and Joseph Technologies Corporation.</p>

Central New York

<p>72. CITY OF AUBURN</p>	<p>The Cayuga County Public Utility Services Agency (CCPUSA) has been actively working to develop an industrial park on the outskirts of Auburn. Currently, existing Cayuga Milk Ingredients (CMI) is the only facility in the park – soon to be joined by a neighbor manufacturing facility developed by the Grober Group, which will take the waste from CMI to produce an animal by-product. Both of these facilities have a large thermal load compared to their electric needs, providing a strong case for combined heat and power generation to meet their energy consumption. The proposed microgrid would augment’s Cayuga Milk’s existing steam plant with a new combined heat and power system to provide power to the industrial park, a gas station, police barracks, and retirement community.</p> <p><i>Partners:</i> Cayuga County Public Utility Services Agency (CCPUSA), Cayuga Milk Ingredients, the Grober Group, Cayuga-Onondaga BOCES, Cayuga County Emergency Services Office, and New York State Electric and Gas Corporation.</p>
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Central New York (CONTINUED)

<p>73. SYRACUSE UNIVERSITY</p>	<p>A feasibility study will evaluate a community microgrid to catalyze a new phase of reinvestment in the Syracuse’s Near Westside. The proposed microgrid would serve six critical facilities: three schools, a firehouse, a police station, and a primary care medical facility. A mix of public and private facilities would also be served, including a public housing complex, grocery store, church, public broadcasting complex, several community service organizations, commercial buildings, and private homes. Leveraging 138 kW of existing solar deployments in the community, the project would explore a mix of natural-gas-fired generation and solar power supported by energy storage systems.</p> <p>Partners: City of Syracuse, National Grid, Near Westside Initiative, Syracuse City School District, Syracuse Housing Authority, St. Joseph’s Hospital, Nojaim Brothers Super Market, St. Lucy’s Church, WCNY, Huntington Family Center, P.E.A.C.E. Inc., Hillside Children’s Center, Home HeadQuarters, King + King Architects, RockWest Center, and Gear Factory.</p>
<p>74. CITY OF SYRACUSE</p>	<p>The Syracuse area has suffered outages, notably a 1998 Labor Day storm that caused \$5 million in damage to local schools and disrupted power for days. The proposed microgrid would combine on-site combined heat and power with solar and the community’s largest distributed generation source, the waste-to-energy facility owned by the Onondaga County Resource Recovery Agency (OCRRA). A feasibility study will be managed by the Central New York Regional Planning and Development Board and will be performed by General Electric Energy Consulting and ASI Energy.</p> <p>Partners: Upstate University Hospital Community Campus, Loretto Nursing Home, Onondaga Community College, and OCRRA.</p>
<p>75. CITY OF OSWEGO</p>	<p>The County of Oswego has experienced numerous weather disasters over the past few decades. The proposed microgrid would leverage National Grid’s distribution system along with existing gas infrastructure and on-site equipment with new combined heat and power, renewable generation resources, intelligent control and load management, and other clean energy technologies. The proposed microgrid would power critical facilities such as the City of Oswego Water Treatment Plant, West Side Wastewater Treatment Plant, Metropolitan Water Board Raw Water Pumping Station, SUNY Oswego, Oswego Hospital, and Oswego Harbor Power station.</p> <p>Partners: SUNY Oswego, Onondaga County Metropolitan Water Board, Oswego Hospital, and NRG Energy Inc.</p>

Finger Lakes

76. CITY OF ROCHESTER (ROCHESTER DISTRICT HEATING)	<p>This heating cooperative is located in downtown Rochester. Rochester District Heating (RDH) already provides electricity and heat to a variety of downtown ratepayers. The proposed microgrid would integrate a combined heat and power system of up to 10 MW to expand the RDH customer base and provide increased resilience to downtown. The system would provide power to emergency shelters, public safety buildings, and government facilities, among other downtown RDH customers.</p> <p>Partners: Rochester District Heating, City of Rochester, Rochester Police Department, Rochester Fire Department, Willdan Energy Solutions, Brookhaven National Laboratory, and Rochester Gas and Electric.</p>
77. VILLAGE OF GENESEO (SUNY)	<p>Geneseo is the seat for Livingston County and the location of SUNY Geneseo, which is a critical shelter area for emergencies. Power generation sources include an anaerobic digester at the wastewater treatment plant, a nearby solar array, and a combined heat and power facility. The proposed microgrid would go to Geneseo's wastewater treatment plant, fire station, police station, a regional urgent care facility, Livingston County's government center and jail, SUNY Geneseo's police station, health center, dormitories, and large gymnasium capable of housing displaced community members in the event of a crisis.</p> <p>Partners: SUNY Geneseo, Village of Geneseo, Campus Auxiliary Services, and Rochester Gas and Electric.</p>
78. VILLAGE OF ARCADE	<p>The Town of Arcade electric distribution system has been stressed in recent years by the prolonged harsh winter season, resulting in millions of dollars of unplanned energy purchases and leaving the critical facilities and residents vulnerable to system failure. Arcade will evaluate a mix of clean energy sources to mitigate the system stresses and provide added resiliency to the community. The proposed microgrid would provide power to a school, village offices, water and wastewater plants, and emergency response facilities.</p> <p>Partners: Arcade Electric Department, Village of Arcade, Pioneer Central School District, Wyoming County, National Fuel Gas, Brookhaven National Laboratory, and Willdan Energy Solutions.</p>

Western New York

79. CITY OF BUFFALO (DPW DOWNTOWN DISTRICT)	<p>The City of Buffalo will explore the expansion and modernization of its underutilized downtown district energy system to help protect critical public safety campus facilities and promote rehabilitation of vacant and underutilized downtown buildings. The proposed microgrid system would include modernizing and converting the existing Buffalo district heat system to combined heat and power, options for cooling services, and incorporating downtown renewable energy generation. The proposed micrigrd would power State and federal buildings, the Central Library, Erie County Community College, several mixed-use commercial structures, several public safety facilities, downtown stadiums, and public schools.</p> <p>Partners: Buffalo Department of Public Work, Erie County, and Buffalo Urban Development Corp.</p>
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Western New York (CONTINUED)

80. BUFFALO NIAGARA MEDICAL CAMPUS	<p>This growing medical campus includes 12,000 employees and many of the city's vital medical facilities. The proposed microgrid would include combined heat and power and renewables such as solar, energy storage, alternative fuel/generation, and controllable loads. The system would have the additional benefit of providing electricity to the Medical Campus and surrounding Fruit Belt community.</p> <p>Partners: National Grid, Erie County, City of Buffalo, National Fuel Gas, Erie County Department of Health, EPRI, University at Buffalo, Gas Technology Institute, CDH Energy, IPERC, and Landis & Gyr.</p>
81. CITY OF SALAMANCA (SENECA NATION)	<p>The Seneca Nation is seeking to enhance community resiliency, create rate parity, develop renewable energy assets, and empower a local utility to share islanding-capable power with neighbors. The proposed grid would combine renewable energy technology with potential combined heat and power through existing natural gas supplies. The microgrid would provide power to critical administrative and community facilities at the Nation, including Seneca Allegany Administration Building, Lionel John Health Center, wastewater treatment plant, department of public works, marshal's office, and potentially the Allegany Casino and Resort. The microgrid would also provide power to residents located in high electricity supply areas such as Steamburg and the Highbanks Campground.</p> <p>Partners: Seneca Energy, Baker Tilly Virchow Krause, City of Salamanca, Salamanca BPU, Southern Tier West Regional Planning and Development Board, Seneca Gaming Commission, Seneca Housing Authority, Spirae, and Seimens USA.</p>
82. VILLAGE OF WESTFIELD	<p>The Westfield Electric Department has experienced added stress in recent years from the harsh winter season, which has resulted in millions of dollars of excess cost and left critical facilities and residents vulnerable to system failure at both the transmission and distribution level in the event of severe weather or other emergency. Westfield will evaluate a mix of clean energy sources and other smart technologies to provide added resiliency to the community. The microgrid would provide power to the village offices, police station, fire houses, water and wastewater treatment plants, the school district, and hospital.</p> <p>Partners: Westfield Electric Department, Village of Westfield, Westfield Academy and Central Schools, Westfield Memorial Hospital, National Fuel Gas, Brookhaven National Laboratory, and Willdan Energy Solutions.</p>
83. CITY OF JAMESTOWN	<p>The Jamestown Board of Public Utilities (JBPU) provides multiple services to the City of Jamestown and the surrounding area from five divisions including electric and district heat. The day-to-day operation of the JBPU relies upon National Grid power. If a major event such as a severe ice storm was to strike, power disruption would have a negative impact on the JBPU's 20,000 customers. The proposed microgrid would integrate existing and new power production technologies to provide power to a "core area" including critical facilities such as the JBPU Operations Center, Jamestown Department of Public Works, Jamestown City Hall, including police and fire departments, WCA Hospital, Jamestown High School, and Jamestown Savings Bank Ice Arena. Other sites within the downtown Jamestown area will also be considered.</p> <p>Partners: Jamestown Board of Public Utilities, City of Jamestown, O'Brien & Gere Engineers, and New York Power Authority.</p>