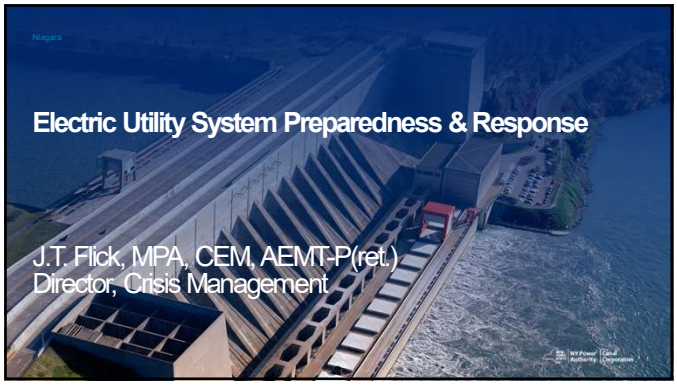


1

Our values

It's not just about what we do, but also how we get there.

We work for the greater good and a stronger, sustainable New York

We hold ourselves to the highest standards of integrity, safety and excellence

We are resilient and use our ingenuity to make big things happen

We draw strength from our diversity – everyone contributes, everyone belongs

We work as one team, putting our trust and confidence in each other

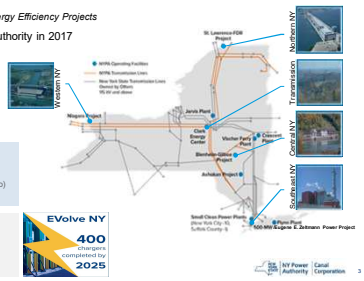
2

About the New York Power Authority

- Founded by Franklin D. Roosevelt in 1931 Power Authority Act
  - 2000+ employees, *7-member board*
  - Revenue sources – *Power contracts, Generation, Energy Efficiency Projects*
- NYS Canals transferred from the NYS Thruway Authority in 2017

Assets

16 Generating Facilities	**1,460** Circuit-Miles of Transmission Lines. – ⅓ of NY's backbone	
6,000+ MW low-cost fleet	**1,091** Power & Energy Services Customers	**83%** of generation is renewable (hydro)
100K+ Acres of Owned or Managed Land & Water	**150** Miles of the Empire State Trail	**524** Miles of Canal Waterways



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“The Grid”

4

What Comprises “The Grid”

Generation (BES)

Power plants that produce electricity using various fuel sources.

Hydro, Fossil, Nuclear, Solar, Wind, Battery Storage

Transmission (BES)

Inter/Intra State highways for electricity, connecting generation stations to substations.

Distribution

Local roads for electricity, connections substations to homes, businesses, and infrastructure.

Distributive Energy Resources (DER's)

Energy generation and storage system s that are typically located at or near th e point of consumption, such as homes and businesses.

5

The Players

Public Power

State, County, Local

NYISO

New York Independent System Operator

Investor Owned

AVANGRID, Con Edison, National Grid.

IJC

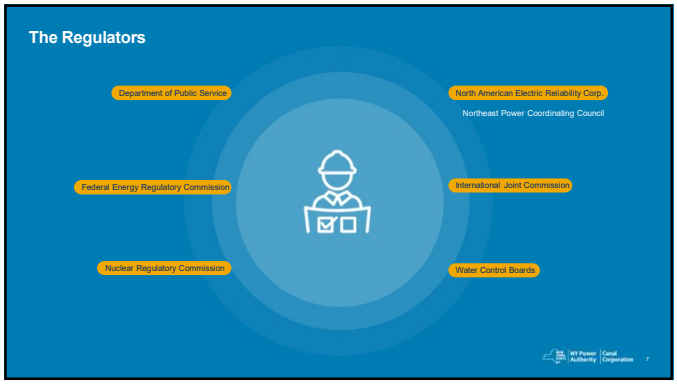
International Joint Commission

Independent

Brookfield, Reston etc.

Water Control Boards

6



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ISO 55001 – Asset Management

International standard for asset management that provides a framework for organizations to establish, implement, maintain, and improve an asset management system (AMS) to maximize asset value and minimize risks.

Supplemented by incident specific actions

9

Physical & Cyber Security

IT & OT Environments
NERC & FERC Standards
NISST Framework
Industry Best Practices
Partnerships

10

Crisis Management

Planning
Training
Drills & Exercises
Horizon Scanning
Situational Awareness
Stakeholder Management
Enterprise Incident Coordination
Mutual Assistance Coordination
Recovery Coordination

11

12

Avangrid A member of the Iberdrola Group

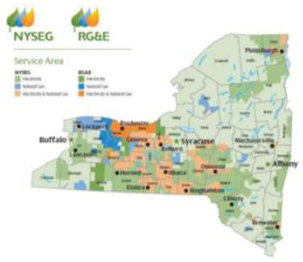
HTC Webinar- December 18, 2025

Electric Utility System Preparedness & Response

Shannon Ethier, Senior Manager- Emergency Operations, NY

13

Avangrid Service Territory

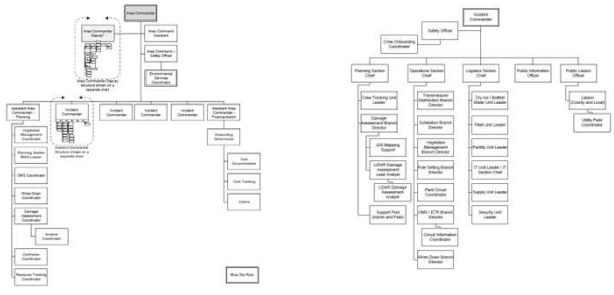


NYSEG Divisions:
- Auburn
- Binghamton
- Brewster
- Elmira
- Geneva
- Hornell
- Ithaca
- Lancaster
- Lockport
- Liberty
- Mechanicville
- Oneonta
- Plattsburgh

RG&E Divisions:
- Rochester/Central
- Fillmore/Genesee Valley
- Sodus/Lakeshore
- Canandaigua/Finger Lakes

14

Emergency Response Structure



15

Event Classification Levels

Overview of Emergency Classification Levels

Description	Class I	Class II	Class III
Restoration Duration	**Expected to Restore < 24 hours** The severity is such that complete restoration can be accomplished within a twenty-four (24) hour period utilizing Company Resources.	< 72 hours The severity is such that complete restoration is expected to be accomplished within a Seventy Two (72) hour period by Company Resources and or mutual assistance from other utilities, contractors, etc.	> 72 hours The severity is such that complete restoration cannot be accomplished in a Seventy Two (72) hour period utilizing Company Resources. Restoration requires mutual assistance from other utilities, contractors, etc.

Class I Events

Events which affect specific isolated parts of a Division and which cause damages that can be repaired in 24 hours or less. The Incident Command System structure is activated, as necessary, to coordinate all activities. Area Command is generally not activated for Class I events.

Class II Events

Emergencies that cause extensive damage throughout a Division are classified as Class II events. Service interrupted by a Class II event is anticipated to be restored within 72 hours. A Division usually activates their Incident Command Structure in a more expanded form than for a Class I event. Class II events may span multiple Divisions. Area Command may be activated to monitor or engage in response activities, coordinate the transfer of personnel from other locations, equipment, or material between Divisions if shortages are identified.

Class III Events

This classification refers to severe events that cause widespread damage within a Division and/or affects multiple Divisions. Damage caused by Class III events are anticipated to take more than 72 hours to restore. To restore service in affected areas, it is necessary to enlist support from Divisions outside the affected area. Often mutual aid from other utilities, municipalities and/or contracting companies or specialized services (such as aerial patrols) is required. During a Class III event, the Incident Command Structure is activated and generally expanded beyond what is used during a Class II event. Area Command is activated to monitor and oversee preparation and response activities, report on progress, assist the affected areas with analysis, and coordinate the transfer of personnel, equipment, or material to affected Divisions.

16

Emergency Event Preparation

Weather Forecast Monitoring
Companies use in house meteorology and contracted weather services and national weather service tools to monitor forecasted weather conditions. When forecasted conditions call for it, the AC and/or IC(s) will initiate strategic planning.

Storm Preparation Meetings:
AC will meet with potentially impacted ICs to consider resource needs, staging strategies, activation levels.

Staff Activation:
Company staff are assigned to Emergency Response Roles to support the AC and IC organizational structure in response to a storm. The AC will activate staff in support of the AC structure and ICs in impacted divisions will activate IC staff to support division level IC response.

Assessment of resource availability
Identification of internal resources and staffing needs. Communication with contractors for additional resources (line crews, tree crews, wire guards, damage assessment). Participation in NAMAG and NYP/PUMA mutual aid calls and request processes.

Staging Resources:
Coordinate lodging, food, fuel and other services as needed to support crews staged in divisions, as directed by AC/IC.

Pre-Storm Customer Communication:
Notification to Life Support and Special Needs Customers and Critical Facilities. Communication with municipal partners in potentially impacted areas. Pre-event press releases and social media posts. Partnership with telecommunication and cable companies.

All Hazard Planning includes consideration for:

- Aging infrastructure
- Supply and demand changes
- Extreme weather events
- Cyber Security

17

Response- Initial Phase

Damage Assessment
Damage assessment is performed to include complete, accurate surveys on assigned distribution circuits, identify and categorize equipment damage and specific location, identify and report emergency situations, and assess severity of wire down conditions.

Preliminary– within 24 hours of start of restoration→ Broken pole locations, leaking transformers, downed wires, blocked roads, extreme tree damage on company equipment, signifacntly damaged areas

Detailed- within 48 hours of start of restoration→ Off-road locations requiring walking patrol, floating conductors, broken, leaning poles, damaged/broken cross arms, service connections down/pulled away, road obstructions, electrical damage caused by vegetation

Wire Guards
Wire Guards as assigned to ensure downed wires are guarded, barricaded and/or made safe. WGs recognize various classifications of wire (i.e. primary distribution, secondary, telephone, CATV cable, etc.) and report information to wire down management staff. WGs remain on site until the situation is determined to be made safe.

Coordination with other Utilities
ICs communicate with telecommunication and cable personnel for situational awareness and utility specific impacts (i.e. high number of broken poles).

Establish Estimated Times of Restoration (ETRs)
Using outage information, assessment of available resources to respond, known damage issues, and historic storm knowledge, global, regional and local ETRs are established within specified timeframes.

Make Safe Activities
Line Crews are responsible for make safe activities for wires down and restoration work. This includes de-energizing and clearing damaged electrical debris as necessary. Additionally, crews replace or repair equipment and materials on the transmission distribution or secondary systems or to customers' service wires.

Coordination with other Partners
When Emergency Operations Centers are activated by municipalities, Company Liaisons may staff the EOC in person. Coordination with municipal resources to ensure activities such as opening roads or re-establishing access to Critical Facilities are included in prioritization within the make safe process.

18

Wires Down Priorities

Priority	Description
Priority 1 (Highest)	Wire down reports where it is indicated that the wire is burning, arcing and down, or immediate hazard (e.g., immediate threat to life), or wires down blocking road ingress and egress (with no alternative route). These are assigned by the Operations Section Chief or designee to make safe crews for immediate response. If the number of Priority 1 reports exceeds line resources, the Operations Section Chief will coordinate Wire Guard assignments with the Wires Down Branch Director.
Priority 2	Relief of fire departments, police departments, or other municipal agencies that are standing-by downed wires
Priority 3	Report of wire down from an Emergency Organization: • Reported to be affecting traffic flow on a major public highway • Reported to be blocking/near a pedestrian walkway or driveway • Reported to be primary conductor • Reported to be secondary conductor
Priority 4	Report of wire down from other sources: • Primary conductor is indicated • Secondary conductor is indicated
Priority 5 (Lowest)	Report of wire down where type of wire is not indicated, or where it appears the wire is not likely an electric conductor.

Internal Use

19

19

Wires Down Priorities

Priority	Description
Severity 1 (Highest)	Wire down conductor that poses a high risk to public safety due to its location in a road or pedestrian-accessible area. These situations will require the responder to remain on-site and guard the wire until they can be relieved. The Wire Guard may leave after the wire has been made safe by a qualified employee(s) or contractor(s).
Severity 2	Wire down is a primary conductor but is not on a main road or other easily accessible location. These situations will also require the wire guard to remain on-site until the conductor can be verified de-energized by a qualified employee or contractor. Once the wire is known to be de-energized, the Wire Guard will barricade the area and then can move on to their next location.
Severity 3	Wire down is a secondary conductor. Wire Guard will attempt to notify nearby customers and will barricade/tape off the area. If wire is either open wire secondary or triplex service cable that has an exposed end (wire is broken), Wire Guard will remain on-site until a qualified employee or contractor has verified the wire is not energized or otherwise made safe.
Severity 4 (Lowest)	Wire down is not an electric conductor and is not in contact with an energized conductor, but is instead phone, cable, or other communications property. If the situation is safe, the Wire Guard will inform the Wires Down Branch Director of this and move on to the next order.

Internal Use

20

20

Restoration Priorities

Restoration and repair of electric service following an event will generally proceed according to the following priority:

1. Ensure public safety by working with emergency response personnel to respond to hazardous conditions.
2. Clearing downed wires in critical areas to facilitate the prompt clearing of public hazards and opening critical transportation corridors.
3. Coordinating with municipalities to open critical roadways by clearing and/or de-energizing electric hazards that prevent restoration.
4. Repair of electric transmission lines and substations that are affecting customer's electric service.
5. Critical Facility Customers (Levels 1-3)
   - Level 1 includes→ Hospitals, Emergency Medical Facilities, Fire, Police, EMS, & Rescue
   - Level 2 includes→ Nursing Homes, Dialysis Centers, critical government functions
   - Level 3 includes→ Key services, Schools, residential establishments with vulnerable populations (identified by municipality)
6. Assign outages by order of customer count, largest to smallest.
7. Repair of electric transmission lines and substations that do not affect customers' electric service.
8. Permanent repairs to temporary conditions.
9. Tree conditions not causing service interruptions.

Restore the greatest # customers in the shortest amount of time.

Internal Use

21

21

Critical Facility Registration

Critical facilities are defined as those facilities from which essential services and functions for survival, continuation of public health and safety, and disaster recovery are performed or provided. Critical facilities plan for continuous electric service to ensure business continuity or continuity of government.

Electric service should be maintained through uninterrupted utility service or a momentary interruption followed by a transfer to backup generation.

Critical facility owners are responsible for their own backup generation and appropriate fuel.

If you are a critical facility, and have identified yourself as such to NYSEG or RG&E and provided a direct contact, the companies will:

- Provide pre-storm calls (automated or in person) to your facility before known weather events
- Communicate any appropriate actions taken by the company during an event
- Confirm restoration

Pre-storm calls:

When the companies predictive model anticipates outages may last 48 hours or longer, we will conduct pre-storm calls to critical facilities deemed to be in the path of the storm. The purpose of the automated outbound call will be to advise the facility of the potential for a storm related outage and to encourage the facility to closely monitor their local weather forecast.

Actions taken during an event:

During a significant outage event, the companies will contact critical facilities that are experiencing electricity outages to:

- Advise the facility of the expected duration of the event.
- Provide the electric emergency phone number should the facility have additional questions or need assistance.
- Determine if the facility is operating a generator.
- Inquire about any special issues or concerns the facility has and forward these on to Company operations staff.

Critical Facilities Request – NYSEG

Critical Facilities - RGE

Restoration confirmation:

After the emergency has ended, the Companies will contact each affected critical facility to confirm power has been restored.

22

Internal Use

22

Response- Final Phase

Final Phase
The final phase commences when the Companies have restored 95 percent of customers but may still be identifying customers without service, restoring power, and/or addressing individual customer concerns.

Circuit Sweeps
Circuit sweeps are performed on transmission and distribution circuits that had been damaged during the event. Any temporary repairs that were made to restore service which require a permanent repair are noted and addressed as soon as possible by the Division.

Resource Release
Resources are deactivated as they complete their particular assigned tasks in restoration. The **Area Commander** or **Incident Commander** will release **Mutual Assistance Crews** when restoration is complete unless crews can be retained as part of the agreement. The sending utility and/or contractor are informed that their support is no longer required. This is done in coordination with the NAMAG and NYP/PUMA agreements.

Partner & Customer Communication:
Notification to Life Support and Special Needs Customers and Critical Facilities to confirm restoration. Communication with municipal partners in impacted areas. Media communications/statements regarding progress.

Demobilization
Demobilization plans are written by the **Incident Commander(s)** with **Area Commander** approval. Once approved, demobilization instructions are communicated through the Incident Command Structure chain of command, including NAMAG and NYP/PUMA (with a courtesy notification to the mutual assistance group as appropriate). The demobilization plan will be executed by the Incident Commander or designee. The resources that have been demobilized will be required to sign out or notify **Logistics Section Chief** or designee once they are ready to travel home.

Due to the nature of emergency events as they expand and contract, demobilization shall be evaluated. The decision made by the **Area Commander** or **Incident Commander** to release crews is based on the status of the restoration effort and consistent with union contracts and mutual assistance agreements. At such time as mutual aid crews are no longer needed, they will be released in accordance with the applicable mutual assistance group guidelines

23

Internal Use

23

THANK YOU!

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24

Internal Use

24