
New York's Investigative Work and Case Studies

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Safety Standards

- ⌚ **Implemented as a result of fatality in New York City**
- ⌚ **Stray voltage testing requirement**
 - All utility's facilities and streetlight annually
 - Immediate corrective actions if voltage found
- ⌚ **Inspect all facilities on a five year cycle**
- ⌚ **Additional requirements**
 - Annual report and officer certification
 - Quality assurance program
 - Must adhere to National Electric Safety Code
 - Substantial revenue adjustments for failing to comply

August 14, 2003 Blackout

Wide-scale impact

- 50 million people affected in the United States & Canada
- 83% of New York State (6.3 million customers)
- Lasted more than 24 hours in certain locations

Many reviews with recommendations

- Joint United States-Canada Task Force
- North American Electric Reliability Council (NERC)
- Various Independent System Operators (ISOs)

New York wants mandatory reliability standards Nationwide – currently in the works

Notification Requirements

Electric Service Issues

- Transmission line outages
- Outages affecting over 5,000 for more than 30 minutes
- Load shedding, voltage reductions, or other emergency procedures

Shock incidents and personal injuries

Vehicular Accidents involving utility facilities

Unusual and Media Attention Events

- Substation fires and manhole explosions
- Outage affecting high profile customer (hospital, mall, etc.)

Customer Complaints

- ⌚ **Customers first try to resolve problem with utility directly**
- ⌚ **If unsatisfied, the customers can file complaints with PSC by telephone, internet, letter or in person**
- ⌚ **Unresolved complaints are investigated and findings reported back to customer**
- ⌚ **Electric staff investigates:**
 - **Safety issues**
 - **Reliability**
 - **Power quality complaints**

Case Study #1

- ⌚ **Heat wave resulted in higher than predicted loads**
- ⌚ **Network failure approximately 70,000 customer outages**
- ⌚ **Recommendations:**
 - Additional monitoring of secondary networks
 - Improve cable rating methods to account for heat
 - Accelerate the removal of paper/lead cable
 - Eliminating joints known to have high failure rates
 - Perform basic impulse level testing on transformers
 - Updates to emergency plans/communications

Case Study #2

- ⌚ **Residential customer complaint** (*continuing low voltage condition*)
- ⌚ **Utility used recording equipment to monitor voltage levels over time**
- ⌚ **PSC supervised additional data recording to provide independent assessment**
- ⌚ **Determined problem was caused by customer wiring and not by utility service**

Case Study #3

Safety Complaint

- Sagging utility wires
 - ❖ *(most common safety complaint)*
- Utility must comply with National Electrical Safety Code
- Directed utility to correct immediately
- If evidence of similar conditions
 - ❖ *May direct inspection of like facilities*

Case Study #4

Residential Subdivision

- Multiple complaints of poor reliability

Staff Investigation confirmed service outages were above norm for like areas

Staff recommended in consultation with utility

- Enhanced tree trimming
- Recloser reconfiguration
- Fuse coordination study