

## Reliability





## Resilience



November 9, 1965

Ontario, CT, MA, NH, NJ, NY, RI, PA, VT 30 million people

July 13-14, 1977

New York City Westchester County

#### **Transmission Reliability Issues**

August 14-16, 2003

Ohio, Ontario, NY, NYC, NJ, MD, CT, MA, MI 50 million people

### **Transmission Resilience Issue**



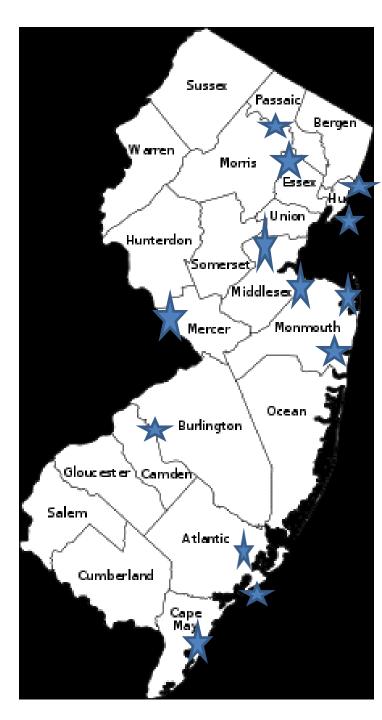


## January 5-10, 1998 Ontario Quebec Newfoundland



# Microgrids





Atlantic City (Atlantic) – CHP, thermal Camden County - waste-to-energy, thermal loops, water exchange **Cape May County** – Syngas, biogas, natural gasfueled CHP **Galloway Township** (Atlantic) – TC DER, solar, battery storage, CHP, thermal loops, water exchange Highland Park (Middlesex) – TC DER, energy storage, solar, CHP, fuel cells **Hoboken** (Hudson) – DER, energy storage, solar, CHP, thermal loops, biodiesel Hudson County -- CHP, fuel cells, solar Middletown (Monmouth) – DER **Montclair** (Essex) – DER, CHP, battery storage **Neptune** (Monmouth) CHP, solar **Paterson** (Passaic) – Hydro-electric generation, CHP, storage State of NJ. Trenton (Mercer) – Thermal load, solar, CHP Woodbridge (Middlesex) – Fuel cells, solar, CHP