An aerial night view of a city skyline, likely New York City, with numerous skyscrapers illuminated and lights reflecting on the water. The title text is overlaid on the upper portion of the image.

# **Emergency Preparedness: How to Bounce Back from a Major Service Interruption**

**Richard Boscarino  
Department Manager  
Emergency Management**

# Agenda

- Corporate Overview
- The Emergency Management Cycle
- Challenges
- MADE Overview



# Corporate Overview

## Con Edison, Inc.

Assets: \$44 billion; 2014 Operating Revenue: \$12.9 billion; 2014 Net Income: \$1.1 billion

### Regulated Utilities

#### Con Edison Company of NY

- Electric
- Gas
- Steam

(New York City & Westchester County)

#### Orange and Rockland

- Electric
- Gas

(7 counties in NY, Northern NJ, Northeastern PA)

### Competitive Energy Businesses

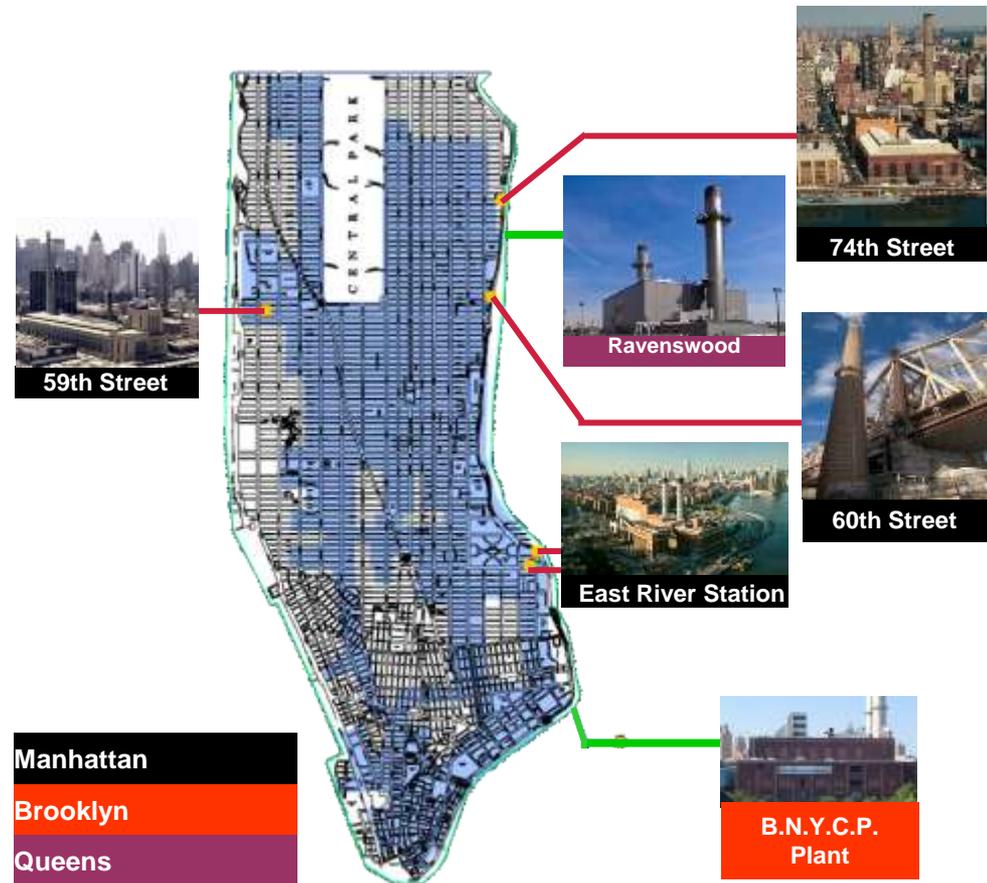
Con Edison Solutions  
(Retail)

Con Edison Energy  
(Wholesale)

Con Edison Development  
(Asset Ownership & Operation)

# Energy Systems Overview – Steam

- 1,735 customers
- Manhattan only, below 96<sup>th</sup> Street
- 105 miles steam pipe
- 22 billion pounds of steam
  - heat
  - hot water
  - air conditioning
  - sterilization
  - cooking
  - humidification
  - commercial process heat



# Disruptions

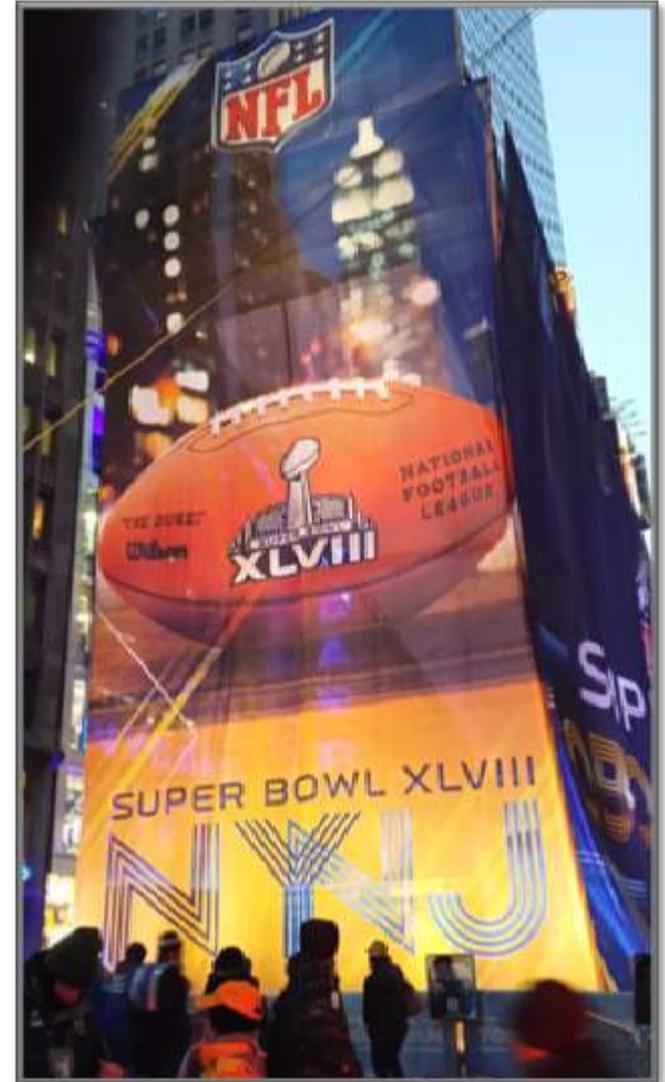


# Major Events



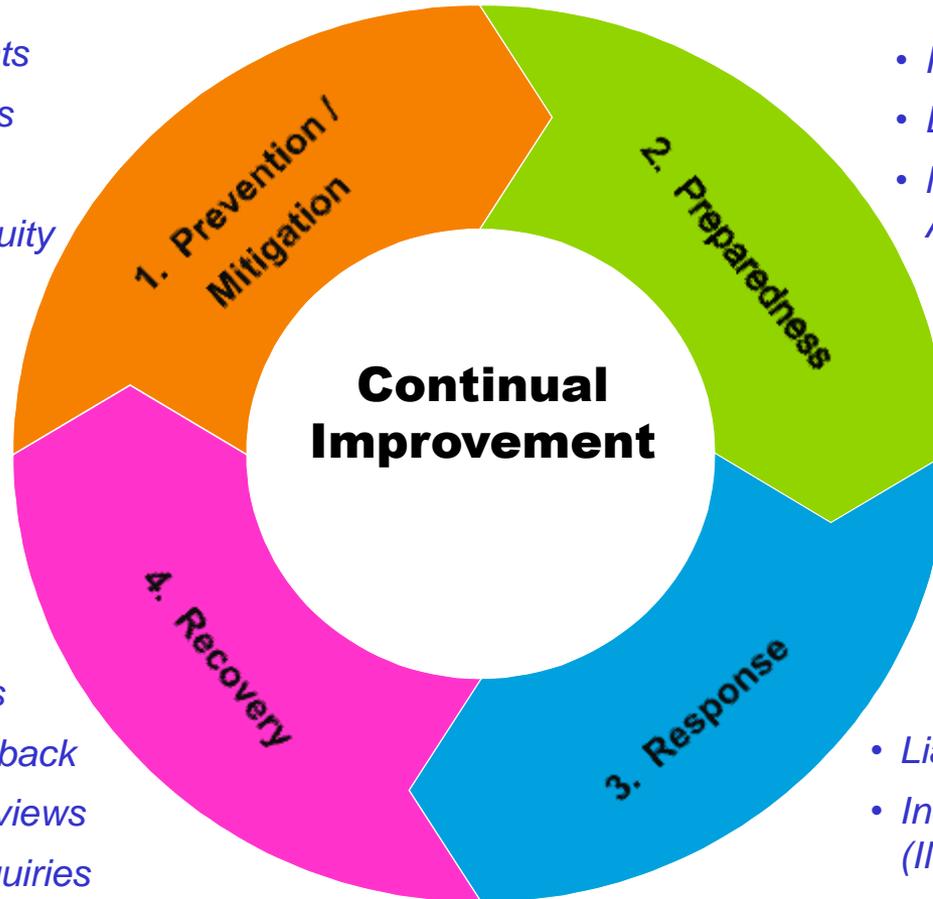
# Special Events

## Super Bowl Boulevard 2014



# Emergency Management Cycle

- *Risk Assessments*
- *Weather Analysis*
- *Benchmarking*
- *Business Continuity*



- *Plans*
- *Drills & Exercises*
- *Mutual Assistance Agreements*

- *Agency Reports*
- *Customer Feedback*
- *After-Action Reviews*
- *Stakeholder Inquiries*

- *Liaisons*
- *Incident Mgmt Assist Teams (IMAT)*
- *Proactive Communication*



# Prevention/Mitigation

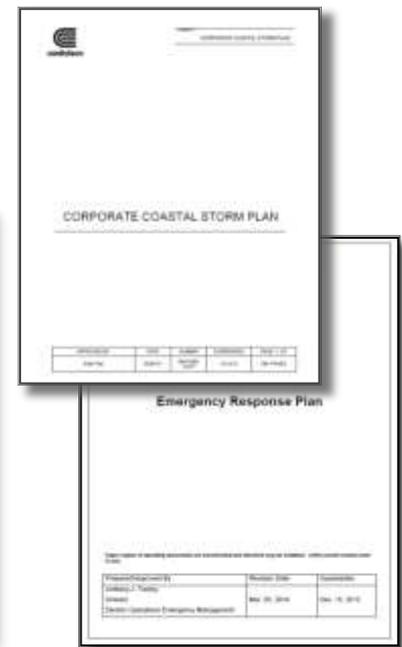
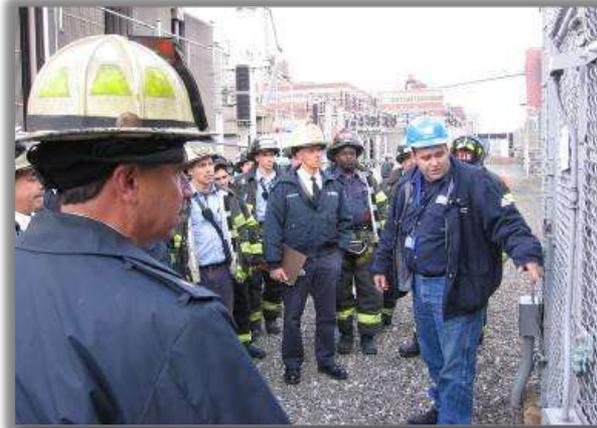
- Risk Assessments
- Weather Analysis
- Benchmarking
- System Hardening
- Business Continuity





# Preparedness

- Plans & Procedures
- Training
- Drills & Exercises
- Driving for proficiency





# Plans

- Emergency Response Plan (ERP)
- Coastal Storm Plan
- Black Start Procedures
- Drill and Exercise Program
- Mutual Assistance for District Energy (MADE)



# Training

- “Smart” training
  - Celebrate Success gathering
  - Targeted group invites
  - Use pre-emptive activations as training
- Sustainable training
  - Vary training methods to be engaging
    - in class
    - field
    - eLearning
    - instructor led





# Drills and Exercises

- Purpose
  - Educate, proficiency, vetting out new plans and processes
- Types
  - Seminars, tabletops, notification, field, full scale





# Drills and Exercises

- Local field exercises
- Dispatcher relocation
- MADE annual Table Top Exercise (TTX)
- Oil Pollution Act of 1990 (OPA90)
- Corporate Emergency Response Center (CERC)



# Response

- Liaisons
- Incident Management Assist Teams (IMAT)
- Emergency Assignments
- Proactive Communication





# Recovery

- Agency Reports
- Customer Feedback
- Stakeholder Inquiries
- After-Action Reviews
- Document and Track

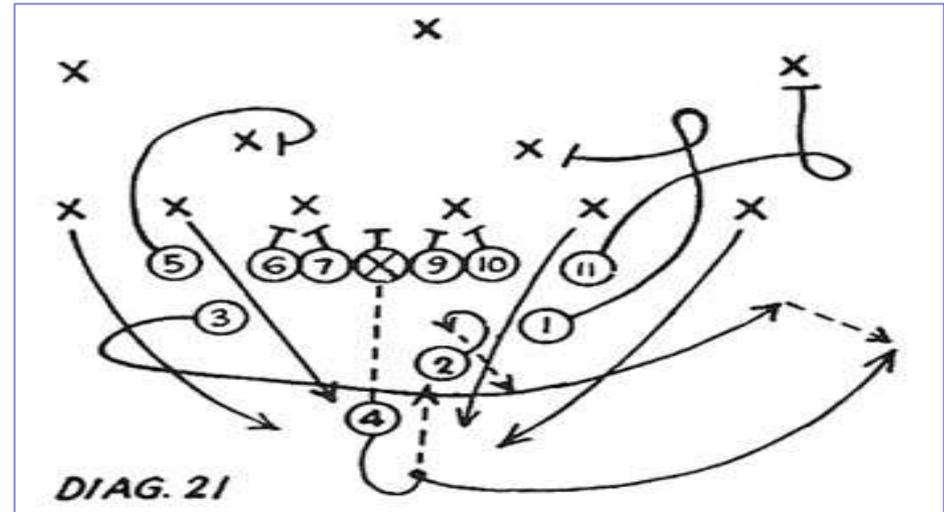


# Continuing forward

- Continuous improvement to sustain capability
  - Better training and drills
  - Secure sustainable funding
- New risks, new contingency roles
  - Cyber
  - Physical security
- Continue to learn from others
- Partner with others to develop innovations

# Challenges – Response Execution

- Complex incidents require a comprehensive response
- Incident Commander can be overwhelmed by intense demands
- Easy to become myopic
- Often many years between catastrophic events
- Maintain Corporate Principles
- Facilitating knowledge transfer



## [Six Principles of the Way We Work](#)

- **Plan the Work and Work the Plan**
- Seek and Accept Responsibility
- Communicate Openly
- Work in Teams
- Improve Continuously
- Celebrate Success

# Challenges

- Infinite Risks
- Finite Resources
- Creating Sustainable Programs
- Staying Focused Between Disruptions





DISASTER RESPONSE GUIDEBOOK:  
**MUTUAL  
ASSISTANCE FOR  
DISTRICT  
ENERGY**



# History of Mutual Assistance

- Mutual assistance plans have been used successfully by electric and gas utilities for many years
- The IDEA developed the MADE program to provide a voluntary system for sharing trained personnel resources and emergency equipment among IDEA Member Organizations in the event of disasters and other emergencies
  - <http://www.districtenergy.org/assets/MADE/MADE-Guidebook-Revision-7-10-12.pdf>
- Committee established to develop plan

# MADE Executive Committee

- Rob Thornton      IDEA
- Vincent Badali      Burns & MCDonnell
- Rich Boscarino      Consolidated Edison Company of NY
- Pat Davin      Veolia Energy N.A.
- Tim Merrill      NRG Energy Center Pittsburgh, LLC
- Len Phillips      IDEA

# Plan Benefits

- Access to subject matter experts (SME)
- Sharing of information and procedures
- Direct assistance with crews and equipment in emergency
- Networking with other District Energy entities
- No actual or implied obligation!

# Role of the Requesting Organization

- Identify need for assistance
- Initiate conference call with other plan participants
- Notify IDEA of request
- Specify resources being requested
- Cooperatively execute agreement with responding agency

# Role of the Responding Organization

- Participate in conference call
- Determine if assistance can be provided
- Cooperatively execute agreement with requesting agency

# Role of IDEA

- Facilitate communications among participating agencies
- Coordinate maintenance of plan and execution of annual tabletop exercise
- Maintain and update contact information in plan

# Current Plan Participants

- Citizens Thermal
- Con Edison Company of New York
- NRG Energy Center Omaha
- Thermal Energy Corporation (TECO)
- Veolia Energy North America

**We are seeking additional companies to join the plan and increase the numbers of potentially available resources.**

# Annual Exercise

- The MADE plan specifies that a tabletop exercise (TTX) will be conducted annually
- Veolia hosted the 2<sup>nd</sup> annual exercise on October 28, 2014
- 2015 Exercise is to be determined



**conEdison**