

An aerial night photograph of New York City, showing the dense skyline of Lower Manhattan and the surrounding areas. The city is illuminated with numerous lights, reflecting on the water of the Hudson River and East River. The title text is overlaid on the upper portion of the image.

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

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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

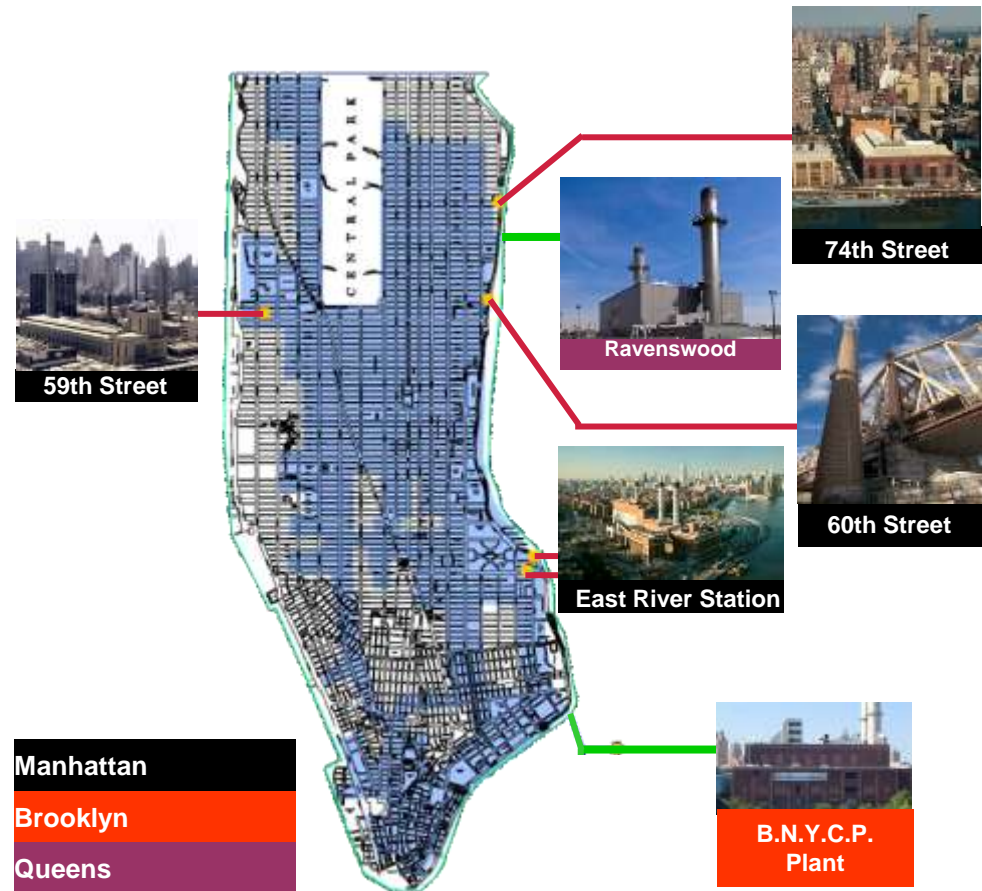
Con Edison
Solutions
(Retail)

Con Edison
Energy
(Wholesale)

Con Edison
Development
(Asset
Ownership &
Operation)

Energy Systems Overview – Steam

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



Disruptions

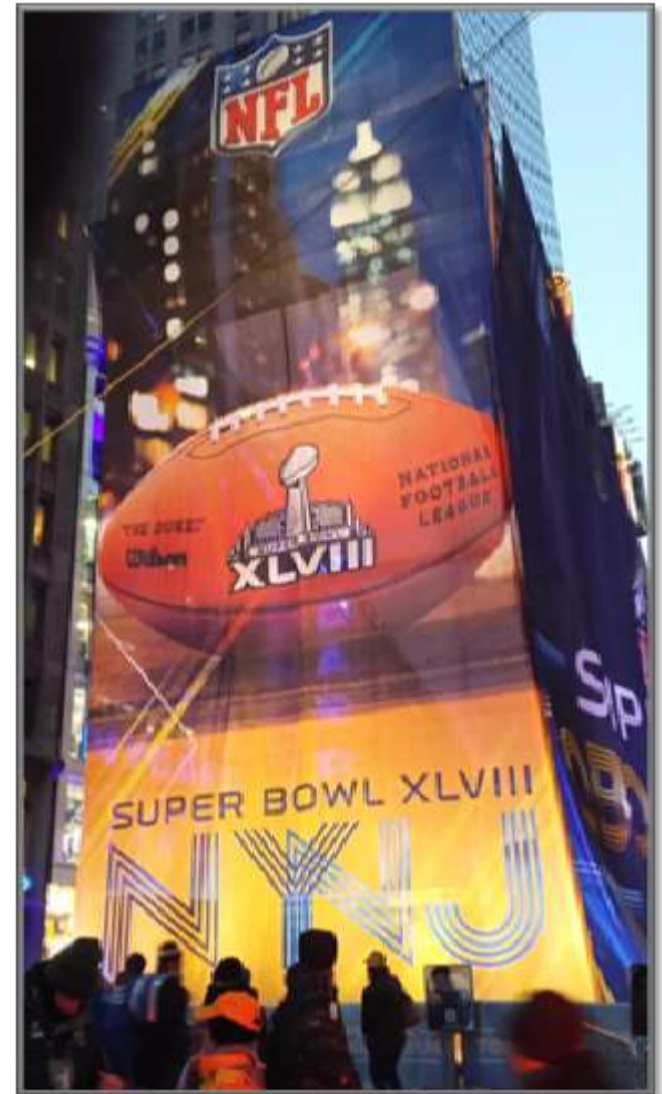


Major Events

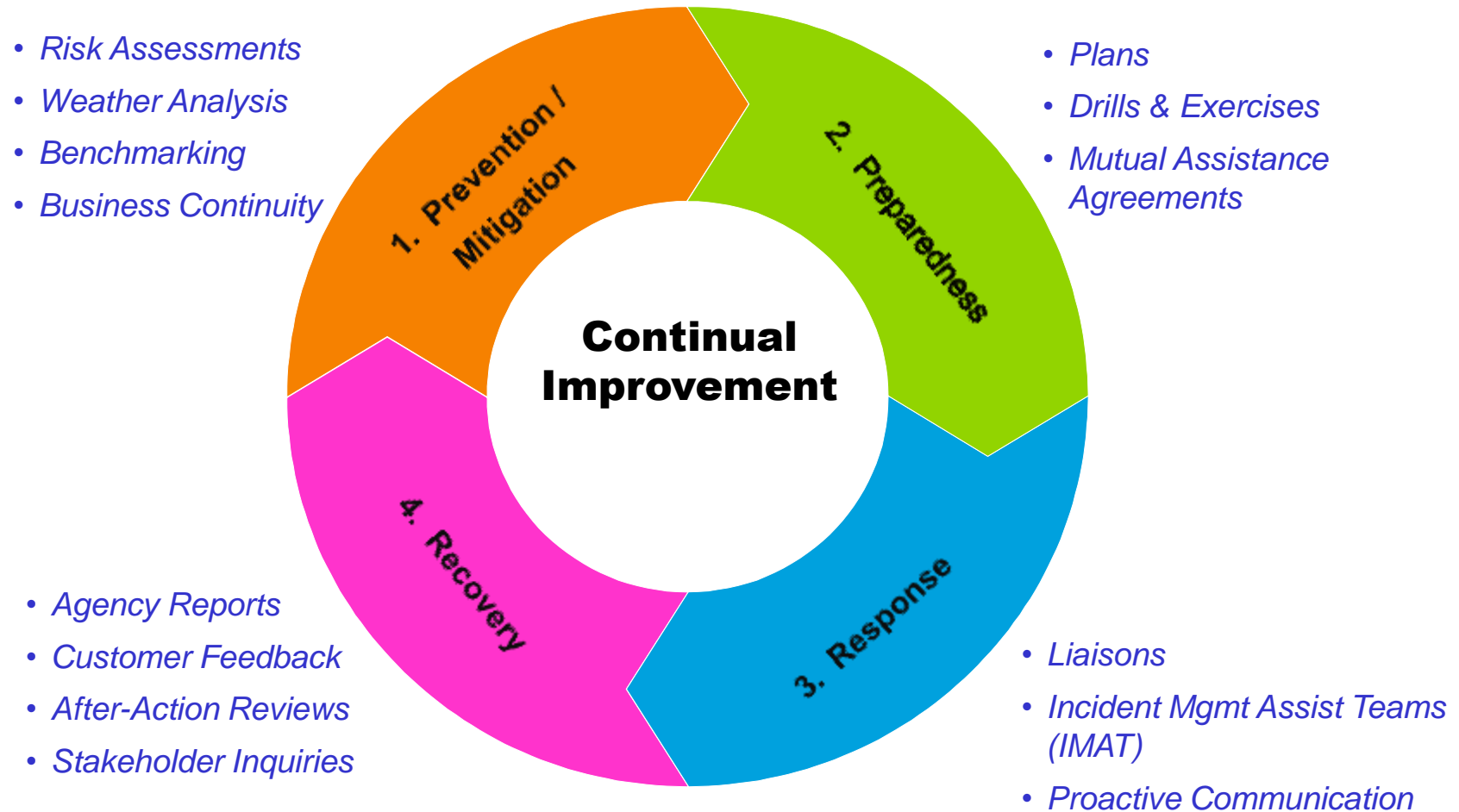


Special Events

Super Bowl Boulevard 2014



Emergency Management Cycle





Prevention/Mitigation

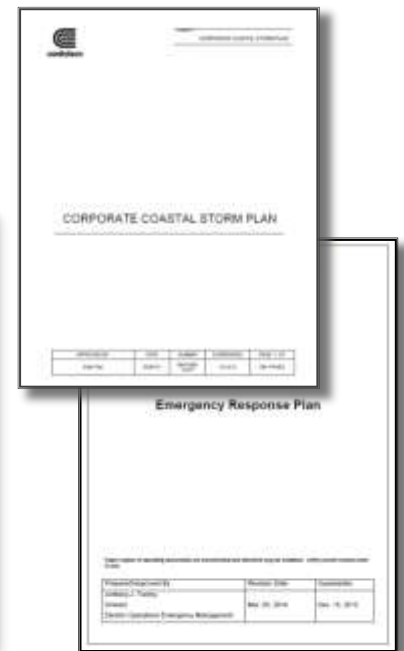
- Risk Assessments
- Weather Analysis
- Benchmarking
- System Hardening
- Business Continuity





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

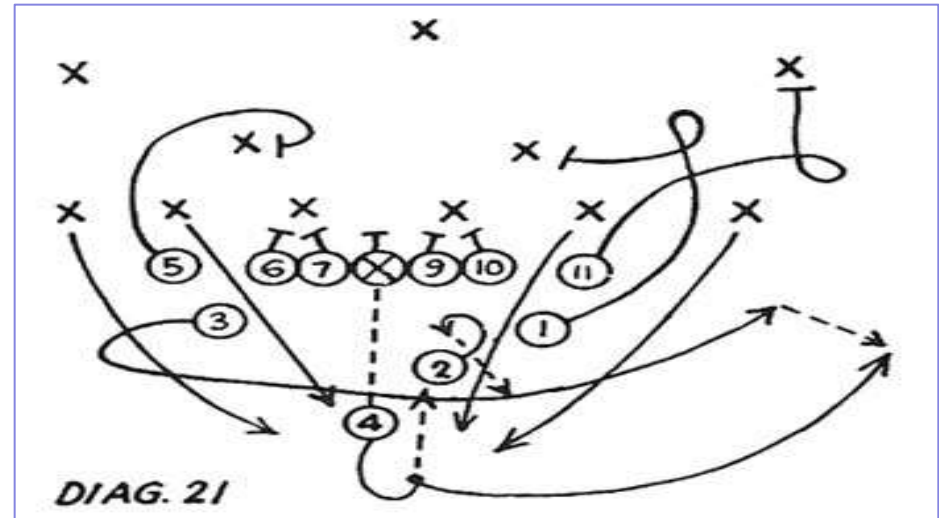


Continuing forward

- 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 2nd annual exercise on October 28, 2014
- 2015 Exercise is to be determined



conEdison