

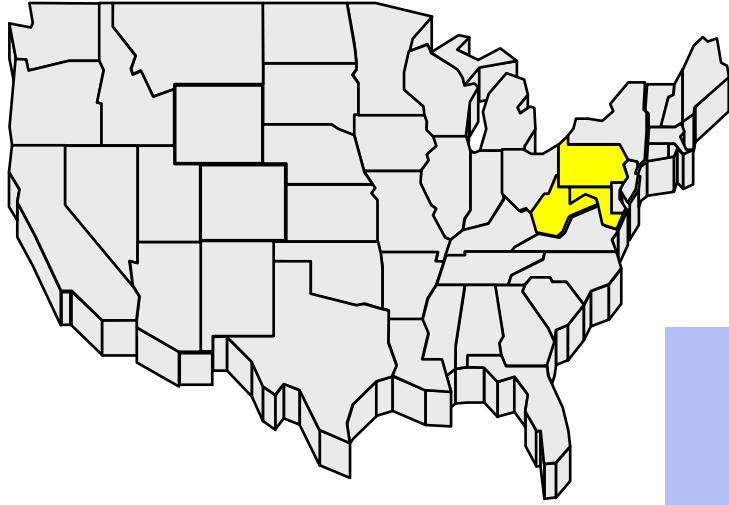
**NARUC Critical Infrastructure Committee**

**Electric Sector Responses to Hurricanes  
RMAG Approach  
Regional Mutual Assistance Group**



**John Shaner – General Manager, Transmission Restoration and  
Emergency Preparedness**

## Allegheny Energy/Allegheny Power's (AP) Territory



- **MD, PA, VA, and WV**
- **114 counties**
- **1.6 million customers**
- **Generation**
- **Transmission**
- **Distribution**

**30,000 Square Miles  
Rural Utility**



## **Regional Mutual Assistance Groups (RMAGs)**

**Group of utilities (could be any similar private sector organization such as Water, Gas, Telecommunications, etc) that**

- **Provides a forum to ensure safe, effective and a coordinated regional restoration effort of customers of member companies.**
- **Follows the established EEI guidelines and enhance them by developing relationships and additional guidelines as needed.**
- **RMAGs establishes additional guidelines that aids in the communication process, rapid mobilization and response by qualified personnel, and minimize misunderstanding before, during and after the assistance is sent.**
- **Interaction with other Regional Mutual Assistance Groups to coordinate a larger geographic response and individual company minimize risks**
- **Usually developed from a multi-state geographic foot print since storms are not limited by state boundaries**

## **Electric Sector Mutual Assistance – develops relationships and guidelines to support**

- **Support utilities during major events and/or contingency planning for preparations**
- **Supplying qualified personnel when requested**
- **Only responds when invited by a requesting company**
  - **Provides safe, effective, and rapid response**
  - **By helping others, when you are in need, there is every effort to assist you**
- **Provides scalable response**
  - **small event**
  - **small interactions**
- **Not-for-profit**



## Template for Developing Regional Mutual Assistance Group

Select utilities in a geographic area that allow for good interaction

Relationships developed – mutual respect, trust

Do not limit the scope to only restoration (Business Continuity, Security, Training, Drills)

- Share best practices, procedures, plans, information (weather reports, handbooks, safety videos, staging sites, etc)

Group is developed in conjunction with other memberships (EEI, SEE)

- Utilize existing guidelines, interact and support those groups

Group recognition verses individual - Equal partnership

Set Expectations, Guidelines, Objectives

- Commitment to support initiation of process at any time
- Structured processes

Promote and gain individual utility support internally (executives)

- Reduce risk, support others and promotes the industry

Promote the benefits to the Regulatory agencies

Test the system (Don't go long period of times without contacts, discussions)

Periodic meetings to address issues in more detail

- Address and discuss all issues within the group
- Open, Honest and Sincere Dialog

# Utilities Interaction - RMAG (Regional Mutual Assistance Groups)

NOTE - Edison Electric Institute - interacts with the RMAGS

**Great Lakes Mutual Assistance**

**Midwest Mutual Assistance**

**Mid-Atlantic Mutual Assistance**

**New York Mutual Assistance Group**

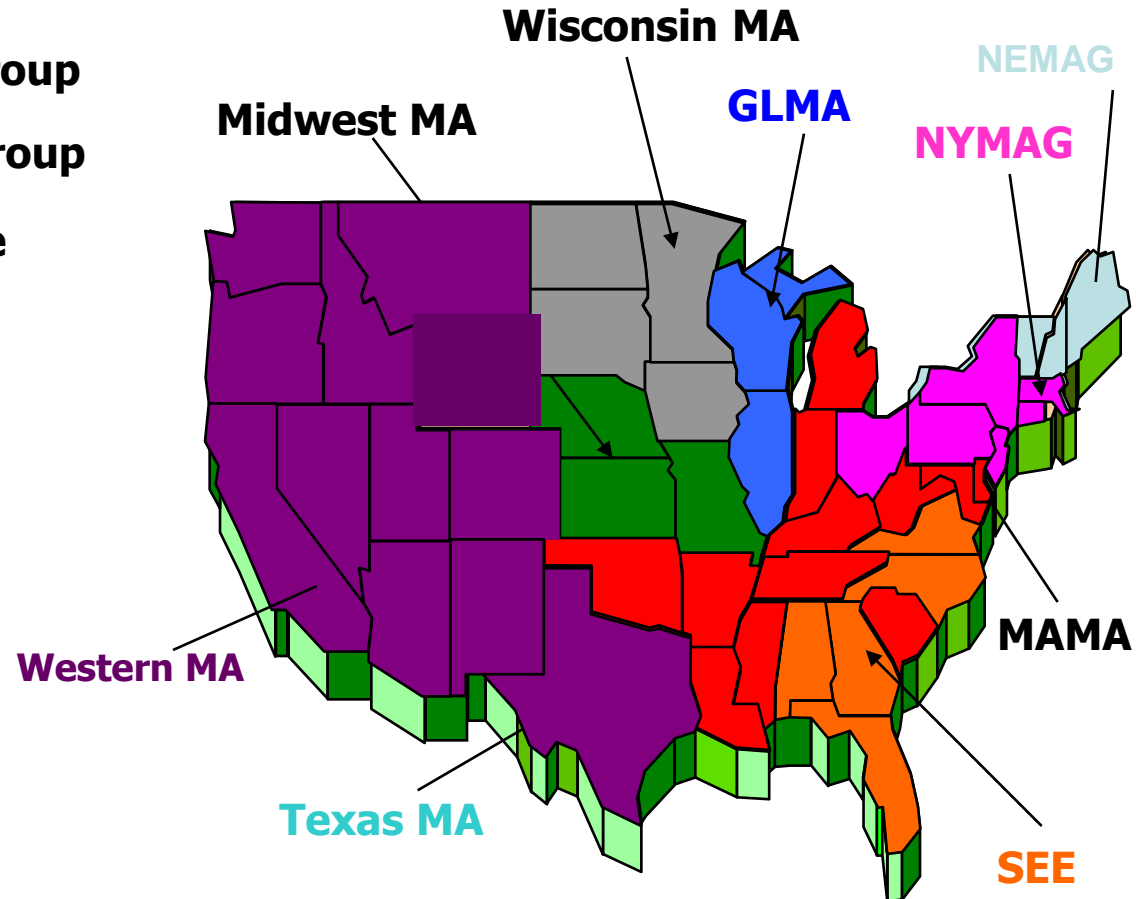
**Northeast Mutual Assistance Group**

**Southeastern Electric Exchange**

**Texas Mutual Assistance**

**Western Mutual Assistance**

**Wisconsin Mutual Assistance**



# 2008 Hurricane Season

Tropical Storm Arthur - 31 May- 1 June 2008

Hurricane Bertha - 3-20 July 2008

Tropical Storm Cristobal - 19-23 July 2008

## Hurricane Dolly - 20-25 July 2008

Tropical Storm Edouard - 3-6 August 2008

Tropical Storm Fay - August 15-26

Hurricane Gustav - 25 August – 4 September 2008

Hurricane Hanna - 28 August – 7 September 2008

Hurricane Ike - 1 - 14 September 2008

Tropical Storm Josephine - 2-6 September 2008

## Hurricane Kyle - 25-29 September 2008

Tropical Storm Laura - 29 September-1 Oct 2008

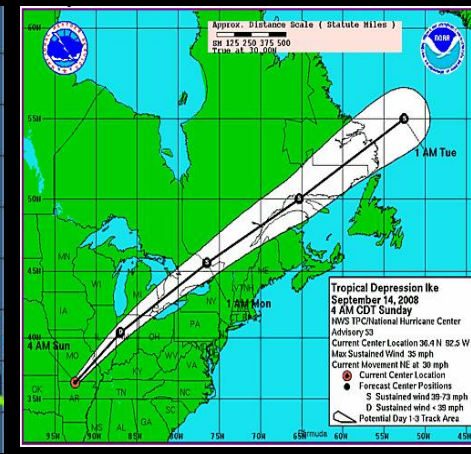
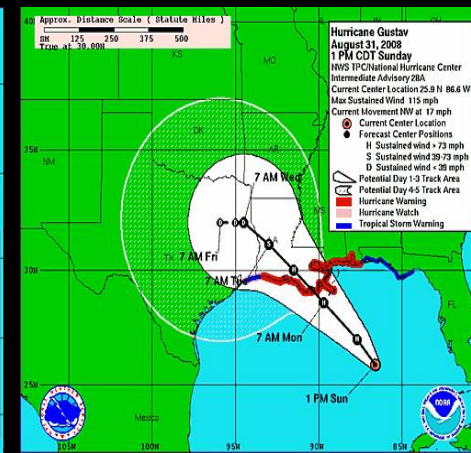
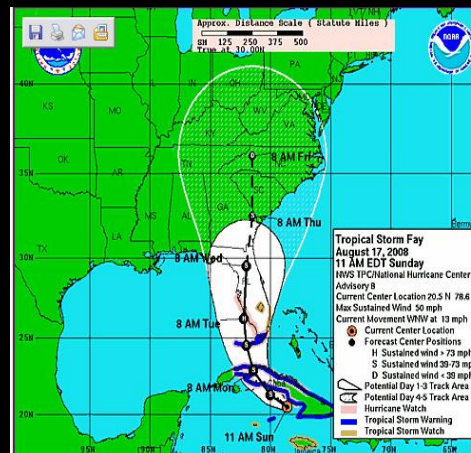
Tropical Storm Marco - 6-7 October 2008

Tropical Storm Nana - 12-14 October 2008

Hurricane Omar - 13-18 October 2008

Tropical Depression Sixteen - 14-15 October 2008

Hurricane Paloma - 5-9 November 2008



# Hurricane Dolly – July 20-25, 2008

Dolly



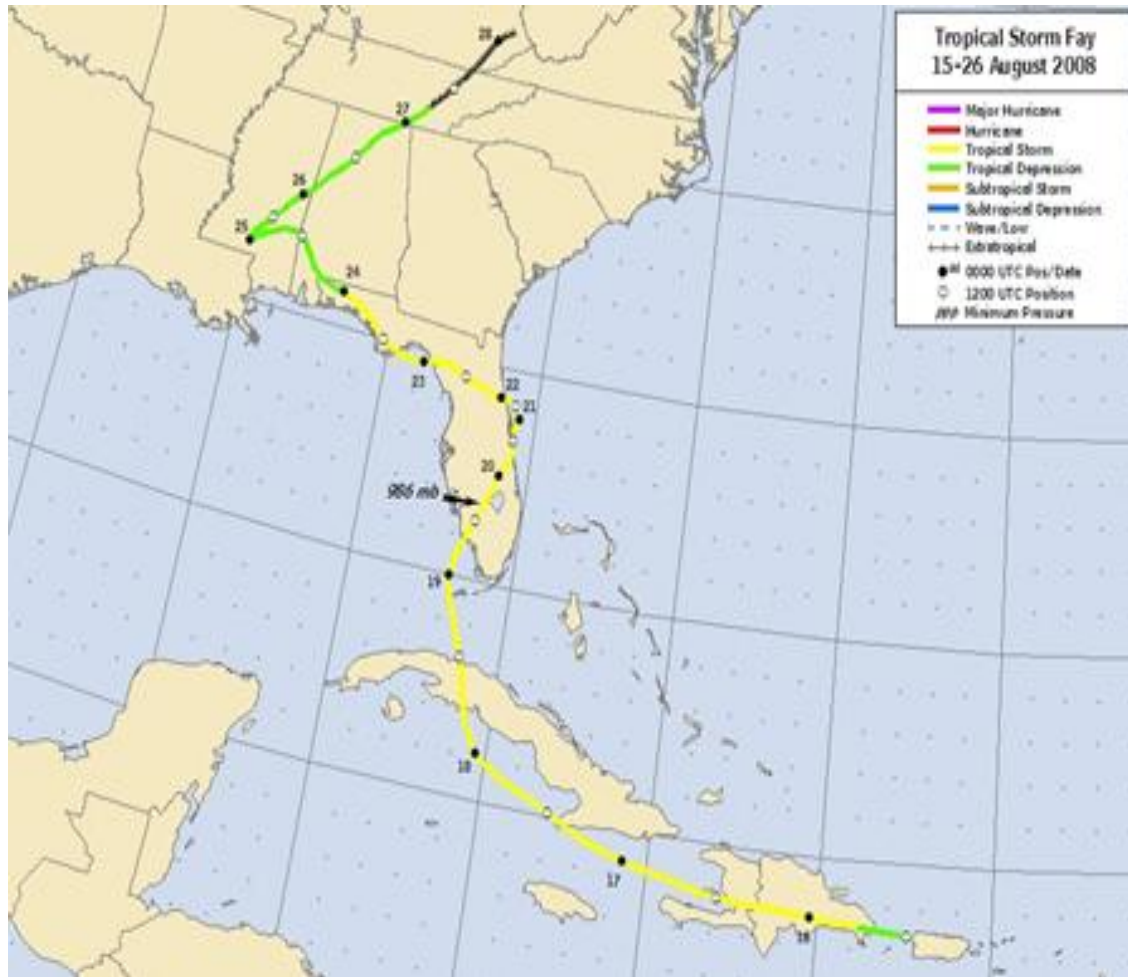
## Resource Strategy Planning Potential Affected Areas

Texas Area  
New Mexico  
Arizona

## RMAG Response

- Southeastern Electric Exchange
- Texas Mutual Assistance
- Western Mutual Assistance

# Tropical Storm Fay – August 15-26, 2008



## Resource Strategy Planning Potential Affected Areas

Florida, Alabama  
Mississippi, Georgia  
Tennessee  
South Carolina  
North Carolina

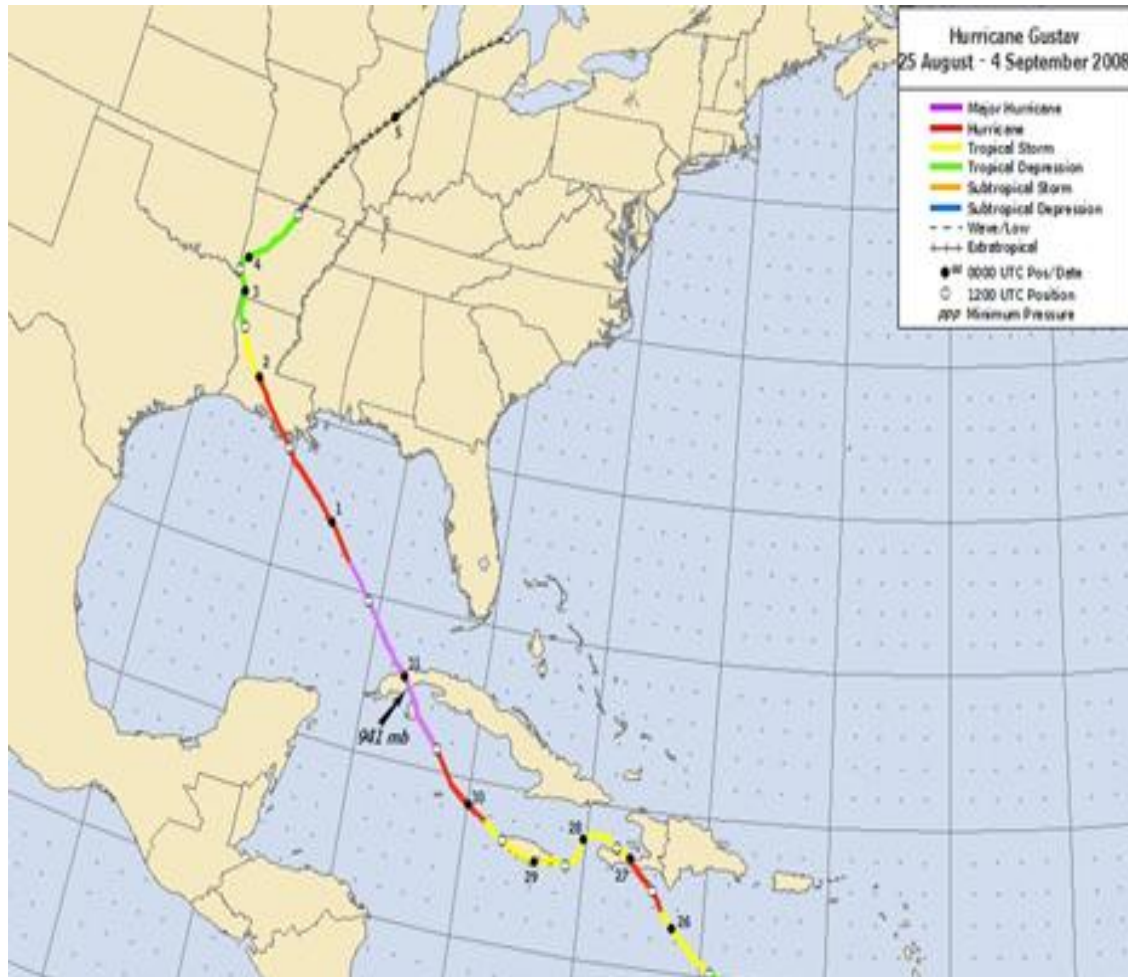
## RMAG Response

Southeastern Electric Exchange  
Great Lakes Mutual Assistance  
Mid-Atlantic Mutual Assistance  
New York Mutual Assistance Group  
Texas Mutual Assistance

# Hurricane Gustav - August 25 – September 4, 2008



## Resources already engaged in Fay restoration effort



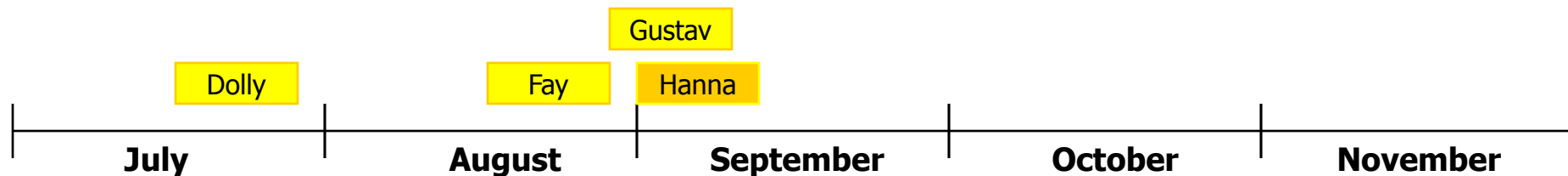
## Resource Strategy Planning Affected Areas

- Texas, Louisiana
- Oklahoma, Florida
- Alabama, Mississippi
- Georgia, Tennessee

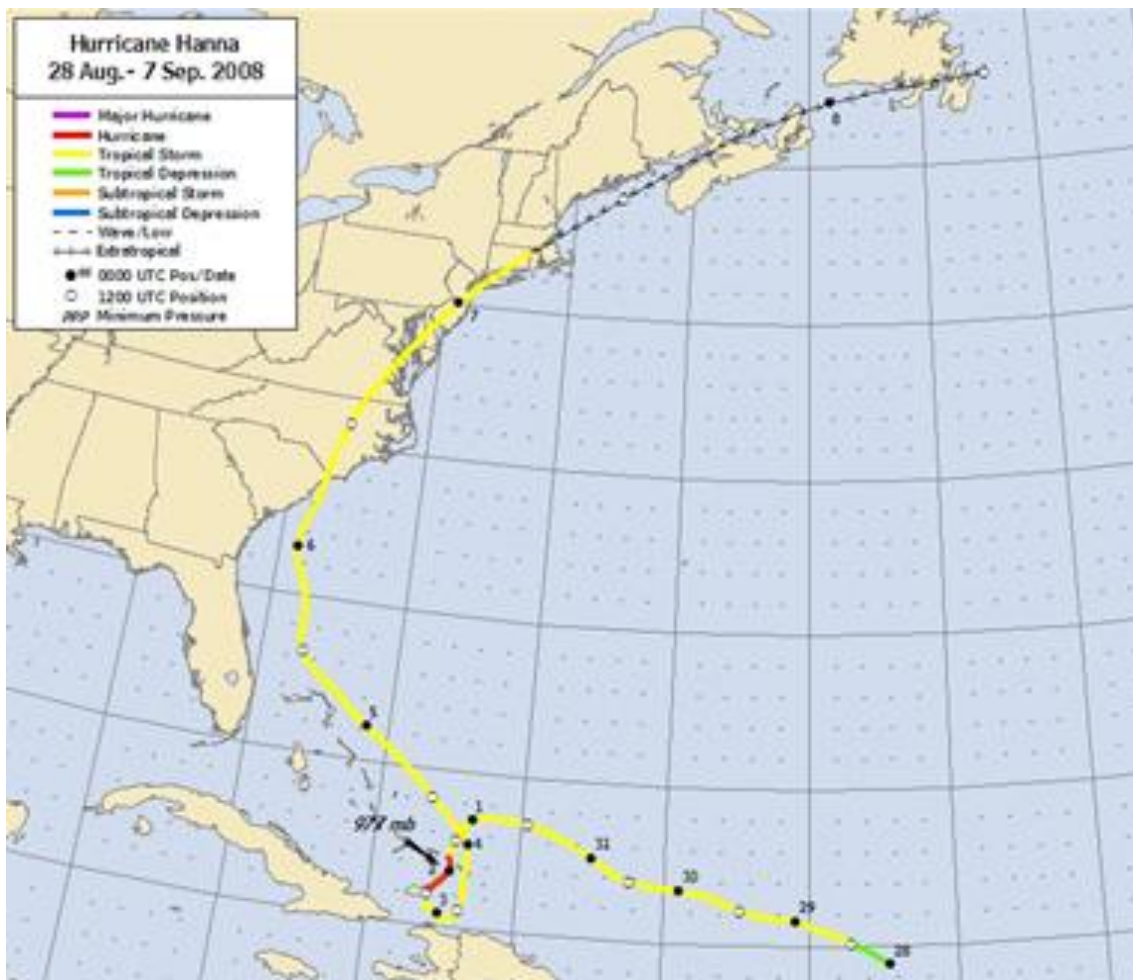
## RMAG Response

- Southeastern Electric Exchange
- Great Lakes Mutual Assistance
- Midwest Mutual Assistance
- Mid-Atlantic Mutual Assistance
- New York Mutual Assistance Group
- Northeast Mutual Assistance Group
- Texas Mutual Assistance

# Hurricane Hanna - August 28 – September 7, 2008



**Resources already engaged in Gustav restoration effort**



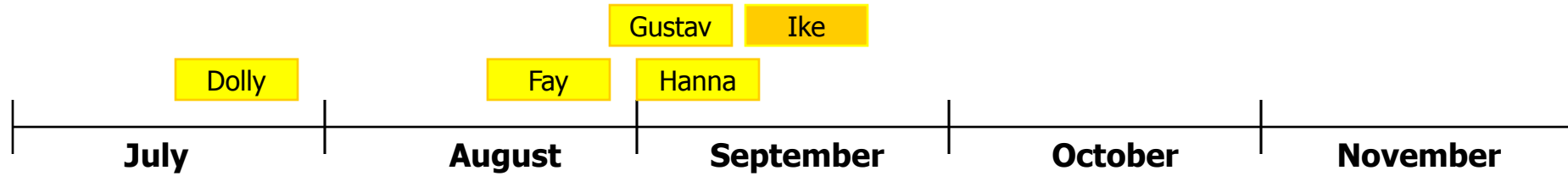
## Resource Strategy Planning Affected Areas

All East Coast States

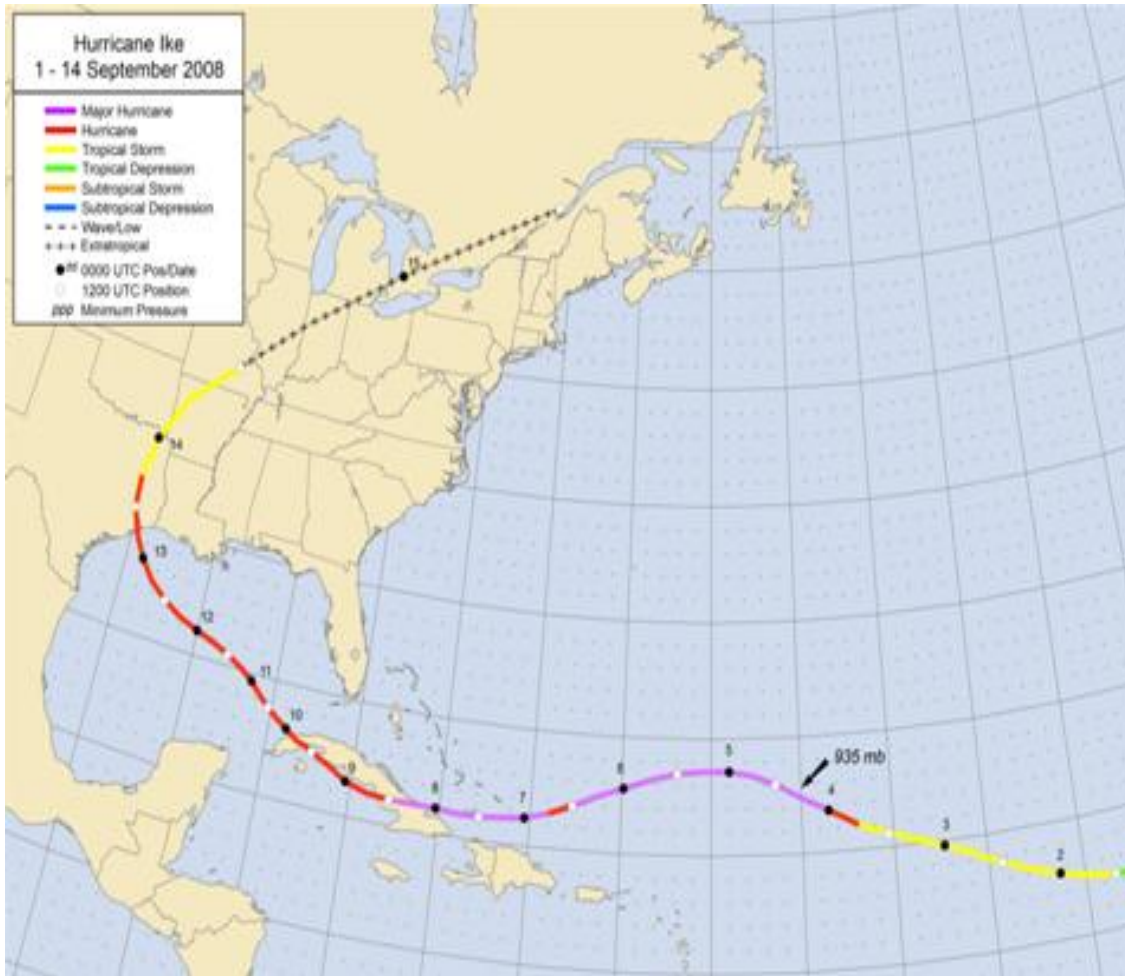
## RMAG Response

- Southeastern Electric Exchange
- Mid-Atlantic Mutual Assistance
- New York Mutual Assistance Group
- Northeast Mutual Assistance Group

# Hurricane Ike - September 1 - 14, 2008



## Resources already engaged in Gustav restoration effort



## Resource Strategy Planning Affected Areas

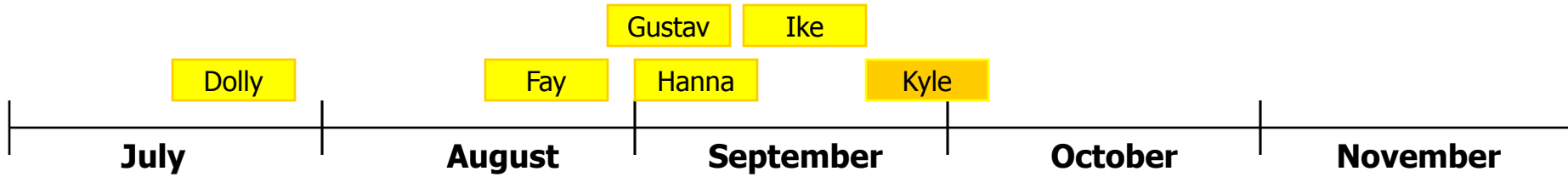
Texas, Louisiana  
Oklahoma, Alabama  
Mississippi, Arkansas

Additional States Affected  
Ohio, Pennsylvania  
Kentucky, Michigan, etc

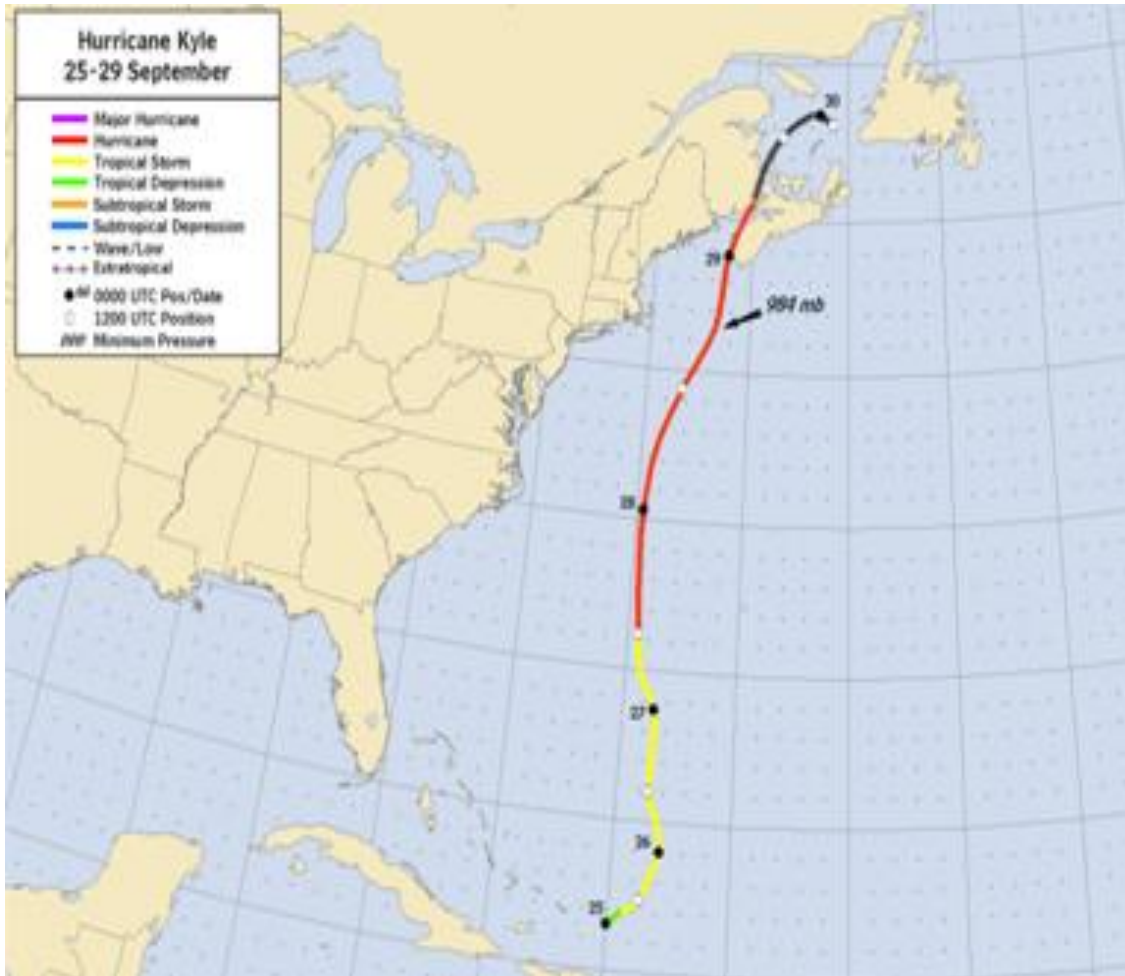
## RMAG Response

Southeastern Electric Exchange  
Great Lakes Mutual Assistance  
Midwest Mutual Assistance  
Mid-Atlantic Mutual Assistance  
New York Mutual Assistance Group  
Northeast Mutual Assistance Group  
Texas Mutual Assistance  
Western Mutual Assistance  
Wisconsin Mutual Assistance

# Hurricane Kyle - September 1 - 14, 2008



Resources already engaged in Gustav, Ike restoration effort



## Resource Strategy Planning Affected Areas

Northeast US

## RMAG Response

- Southeastern Electric Exchange
- Great Lakes Mutual Assistance
- Midwest Mutual Assistance
- Mid-Atlantic Mutual Assistance
- New York Mutual Assistance Group
- Northeast Mutual Assistance Group
- Texas Mutual Assistance
- Western Mutual Assistance
- Wisconsin Mutual Assistance

# It's Not Just Hurricanes

**February 11, 2009**

Winds reported of 90 mph on Tuesday Night and continued gusts of 50 to 65 mph occurred on Wednesday into Thursday as a cold front Moved through the regions

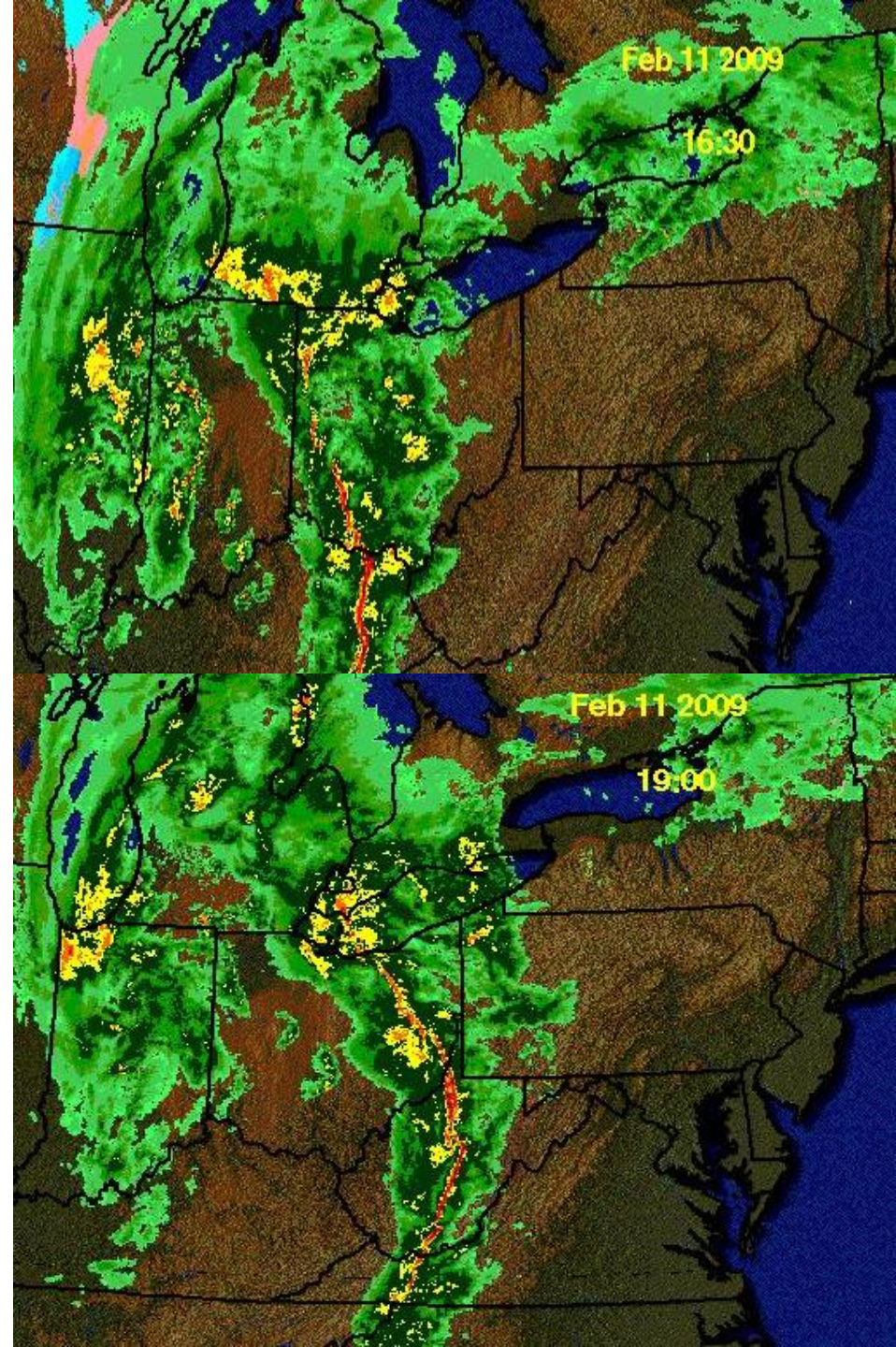
Affected will over 1,000,000 customers

## **Resource Strategy Planning Affected Areas**

North Carolina, Kentucky, Ohio  
West Virginia, Virginia, Pennsylvania, Maryland  
New York, etc

## **RMAG Response**

Southeastern Electric Exchange  
Great Lakes Mutual Assistance  
Midwest Mutual Assistance  
Mid-Atlantic Mutual Assistance  
New York Mutual Assistance Group  
Northeast Mutual Assistance Group  
Texas Mutual Assistance  
Western Mutual Assistance  
Wisconsin Mutual Assistance



## **What Else Does RMAG do other than Emergency Preparations and Response**

### Meetings (Quarterly, Semi-Annual, Annual)

- Self Assessments
- Media/Customer communications
- Regulations such as DOT HOS Credentialing Access and Control
- Community Relations
- Regulatory Relations
- Business Continuity
- System Restoration
- Security
- Work Issues
- etc.

### Share Information

- Emergency Planning, Safety (Video, Handbook)

### Training and Presentations

- Incident Management System (IMS)
- New Jersey Emergency Preparedness Conference
- SEE Conference
- EEI Conference
- Regulatory
- Non-Electric Sector Organization (i.e. PAWARN)

## Examples of Lessons learned

Travel Distances (1500 miles)

Mutual Assistance Duration and Change out (2 weeks)

Medical Preparations for Conditions (Inoculations)

Contingency Communications (cell phones, Satellite Phones, BlackBerry, Radios, etc)

Resource Tracking among RMAG

## RMAG Benefits Who?

**Customers**

**Regulatory Agencies**

**Emergency Services**

**Utilities**

**Everyone!!!**

