

# Madison Electric Utility

**Presentation to  
Mayor and Council**

**By  
Michael Piano  
Electric Utility Superintendent**

**September 12, 2011**



# Madison Electric Utility

## The Electric Department

8 man workforce

1 Foreman

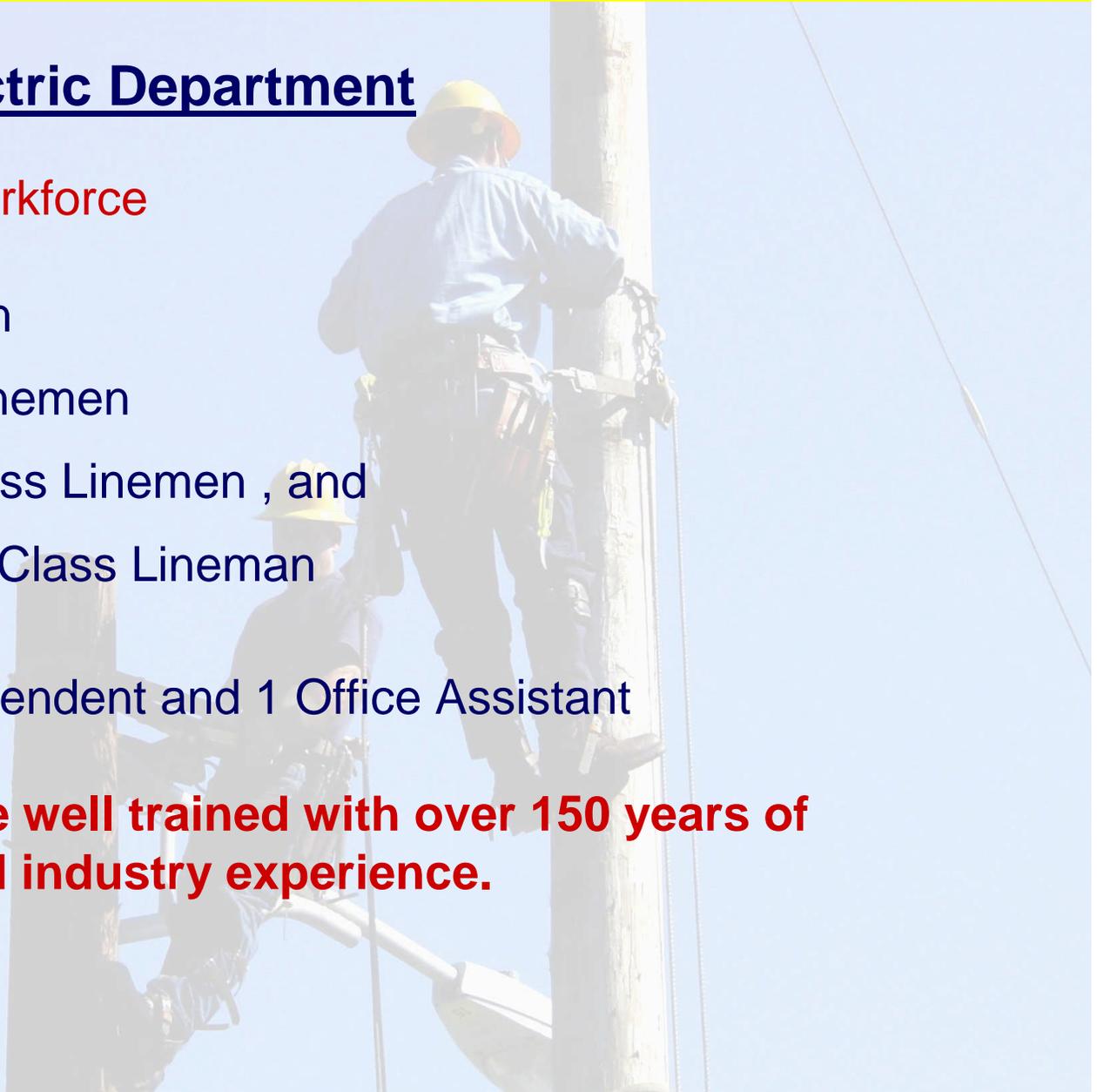
2 Chief Linemen

4 First Class Linemen , and

1 Second Class Lineman

1 Superintendent and 1 Office Assistant

**Crews are well trained with over 150 years of combined industry experience.**



# Madison Electric Utility

## Distribution System

- Serves over 6,500 customers from small residential to large corporate.
- 2 substations transforming power from 34,000 volts to 12,500 volts. We originally produced our own electricity. Now we purchase 100% of our electricity from the PJM grid and have it delivered via 2 JCP&L feeder lines.
- 8 outgoing circuits from each substation that distribute power and provide service to over 6500 customers.
- Approximately 300 miles of overhead & underground cables.

***All of the distribution system is installed, maintained and repaired by an 8 man workforce.***



# Madison Electric Utility

## Distribution System (continued)

- 1,500 pole mount transformers
- 35 underground transformers
- Approximately 100 pad-mount transformers
- 1300 street lights
- 2400 utility poles
- Annual line clearance is performed to improve safety and reliability

***All of the distribution system is installed, maintained and repaired by an 8 man workforce.***



# Madison Electric Utility

## Equipment



# Madison Electric Utility

## Equipment



# Madison Electric Utility

## Safety

- Experience is the most important safety measure and as stated before the department has over 150 years of combined experience.
- Equipment is up to date, well maintained and certified annually for di-electric integrity.
- Safety equipment is readily available and certified annually for di-electric integrity.



# Madison Electric Utility

Question: What is missing from this picture?

Answer: Utility poles



*Shops on Waverly Place*

Photograph by Joseph Mezzacca, Jr.

# Madison Electric Utility

## Equipment



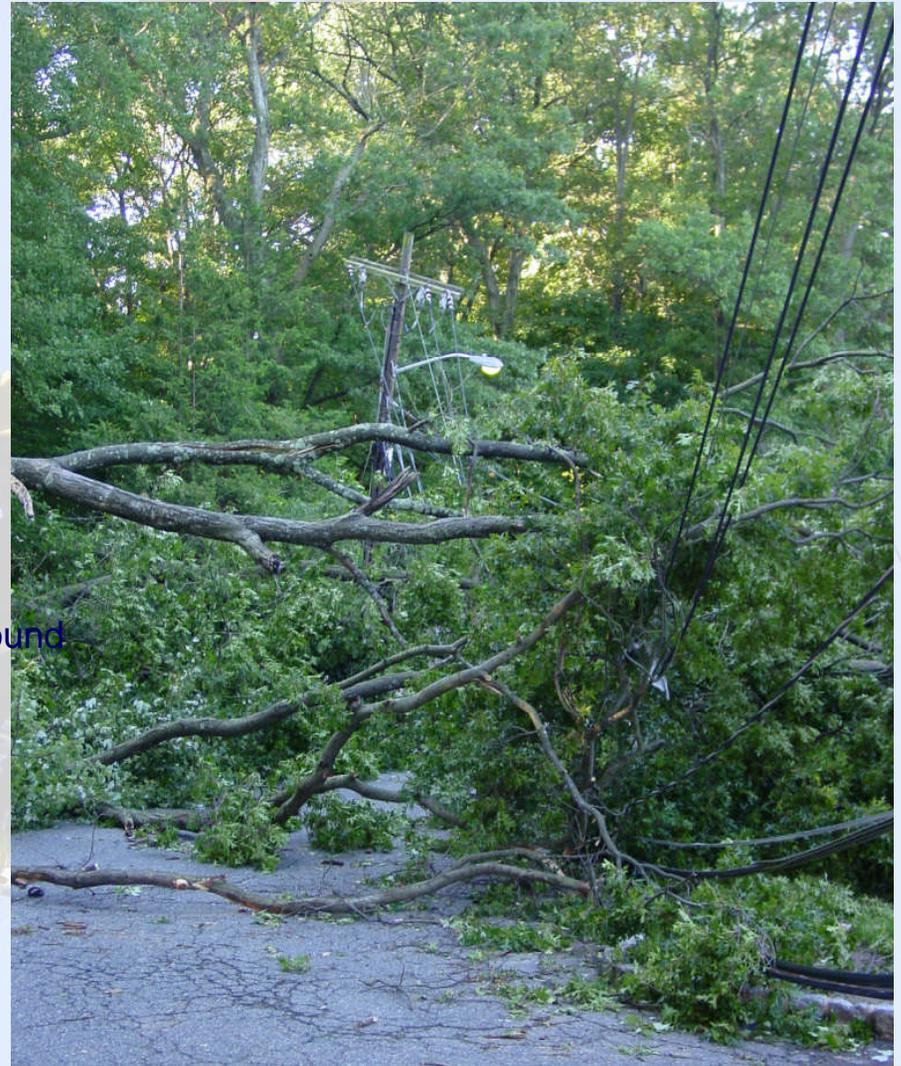
# Madison Electric Utility

## Emergency Response

### Hurricane Irene

- Crews worked from midnight Saturday thru midnight Sunday to restore power to all residential & commercial customers. (library was restored Wed morning)

- The situation was continually evolving throughout Sunday, trees were being uprooted and taking out poles and lines. The ground condition was so saturated with water that the slightest wind would cause them to topple over.

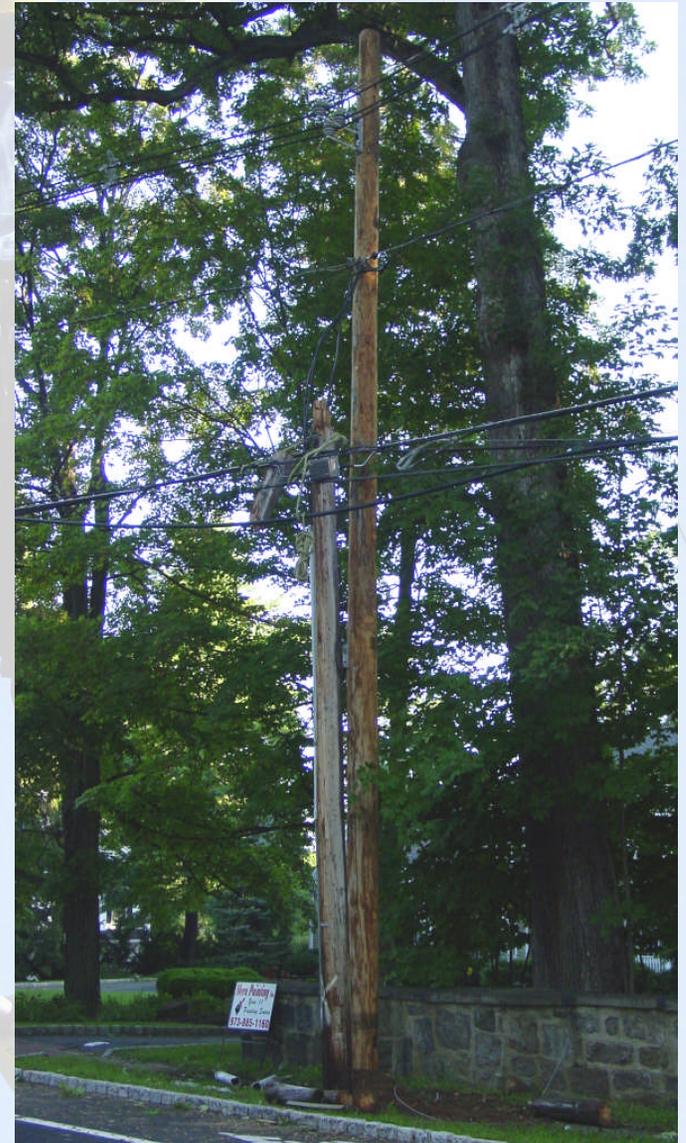


# Madison Electric Utility

## Emergency Response (continued)

### Hurricane Irene

- Line crews addressed downed poles & lines with the most dangerous being the first priority as well as large areas without power.
- Smaller areas and lines as well as individual homes were addressed as the next priority.
- With the help of local contractors, many dangerous uprooted trees were addressed before they fell onto lines and caused more outages.



# Madison Electric Utility

## Emergency Response (continued)

### Hurricane Irene

- Electric Utility and DPW Staff often work together to clear trees and roadways.
- The crews work in dangerous situations around very large, unstable trees.



# Madison Electric Utility

## Emergency Response (continued)

### Hurricane Irene

- After working midnight Saturday to midnight Sunday, the line crews returned Monday afternoon and continued to secure damaged infrastructure, working until Tuesday morning.



# Madison Electric Utility

## Emergency Response (continued)

### Hurricane Irene

Work is continuing to this day repairing storm damage.



# Madison Electric Utility

## Emergency Response (continued)

### Other Emergency Situations



# Madison Electric Utility



**Safety  
Service and  
Reliability.**

**That is our motto.**

**Thank you for your time.**

