

Arkansas Ice Storm 2009

Lessons Learned

Ice Storm Facts

• The 2009 Arkansas ice storm was the worst event in the Arkansas Electric Cooperatives' history. Over 34,000 poles were destroyed. Covering more than 1/3 of the state, it downed distribution lines, froze switches, and left more than 215,000 Coop members without power. Total repair cost is estimated at \$214 million. 12 of 17 distribution cooperatives were affected.





Recovery Plan

- Safety
- Repair Efforts
- Field Assessments
- Supplies & Materials
- Transportation & Communication
- Customers
- Worker Needs
- Media Involvement
- Final Remarks



Safety

- Field safety coordinators
- Job briefings
- Safety incidents (none serious)



Repair Efforts

- Develop good strategies. Avoid duplicate efforts.
- Assemble assessment teams quickly
- System maps and GPS software
- Shifting internal personnel & schedules
- Prioritize critical loads
- Scheduling 3600 outside crewmen
- Make fuel provisions
- Get the right equipment for conditions
- Follow RUS construction guidelines
- FEMA and the paperwork



Field Assessments

- Details are crucial
- Have enough staking engineers
- Aerial patrols are valuable
- Ground patrols gather best details
- Wall maps & tracking progress
- GIS/GPS software





Outside Workers

- Develop in-house team leaders
- Locate field offices & yards
- Rates, terms, & conditions
- Time & material sheets
- Supervisor approvals
- Roster lists of crews & equipment verify
- Language barriers
- Retirees & contracts (association)
- States involved:

Arkansas, Colorado, Iowa, Kentucky, Lousiana, Michigan, Missouri, Oklahoma, S. Carolina, Texas



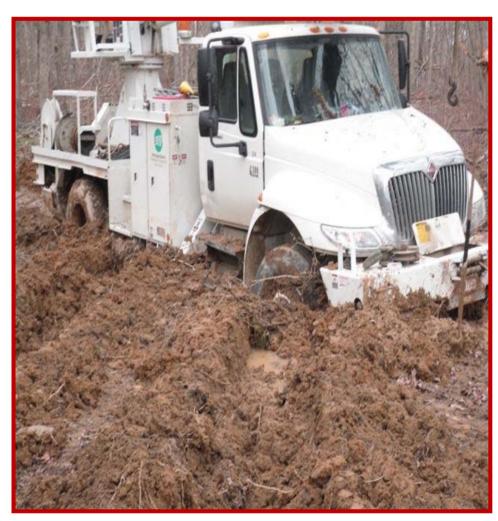
Supplies & Materials

- Avoiding duplicate orders
- Remote warehouses
- 2nd shift warehouse operations
- Assign a "Pole Manager"
- Call in orders at days' end
- Staging areas for poles & wire
- Torches for defrosting switches
- Substation batteries
- Safety equipment
- Fuel provisions
- Potable water
- Portable energy sources



Transportation & Communication

- 4WD Vehicles, ATV's
- "Go anywhere" trucks
- Parking at hotels & restaurants
- Shuttling
- Helicopters
- Material on & off loading
- Communication system failures
- Extra cell phones
- BlackBerrys & I-Phones
- Satellite phones
- Multi-frequency two way radios
- Solar charging



Working with Mr. Customer

- Designated public relations team
- The importance of facts
- Addressing angry customers
- Security for office workers
- Use postal delivery for updates
- Delayed billing
- Handling the non-outage customers



Taking Care of the Workers

- Meals
- "Mini stores"
- Medications
- Laundry Services
- Local Lodging
- Church camps
- Time share resorts
- Internet Access
- Entertainment



Community Appreciation

- Local charities & civic organizations
- Business involvement
- Schools
- Displays of appreciation



Media Involvement

- Know the facts
- Stay on message
- Don't inject personal opinions
- Provide updates often
- Website is powerful
- Video production of event



Final Remarks

Thickest measure ice accumulation:

4.5 inches

Longest outage:28 days

 Little Debbie snack vendor: paid for his house

"Commit to Stay Fit" programs:
Yeah, like that's going to happen

 One coop with 12,000 meters: had 6 in service after storm

 One outlaw purposely cut a line because: their neighbor had power





