Norwich Public Utilities Response

Tropical Storm Irene Hearing Questions

Utility Companies

- Preparation
  - What are the best practices for readiness? Response?
    - *The first step to prepare for an event like Irene is to have a good plan in place before the storm arrives. We have emergency plans in place for major events that are constantly being evaluated and adjusted. We conduct mock emergency exercises both internally and with other city and community agencies.*
    - *Next, you must make sure to follow the plan while allowing for sufficient flexibility to make adjustments when the situation dictates.*
    - *Finally, after every major event we conduct an after-action program evaluation with a company-wide SWOT analysis to improve our planning and to discover any gaps that might exist.*
  - How did you fare for readiness? Response?
    - *Our plan was put together well in advance of the storm. We had the right resources in the right place to deal with any potential issues that might arise.*
  - What was the damage from Tropical Storm Irene? How many lines were affected? How many customers were affected?
    - *The assessment of total damage that occurred in Norwich is on-going.*
    - *Total cost of the recovery is estimated to be $2.54 million.*
    - *We experienced the following:*
      - *Downed trees and power lines, broken poles, and tripped transformers due to sustained high winds*
      - *108 streets closed due to downed wires and trees*
      - *11,600 customers without power was our peak outage (out of roughly 22,000 electric customers) 3.5 hours after we reached this peak, we were able to restore power to approximately 6,000 customers and were left with only 5,600 .*
      - *99% of our customers were restored within 3 days and 100% of our customers were restored within 4 days.*
  - What was the extent of your disaster preparedness plan? Please provide details.
    - *Major components of our recovery plan include:*
      - *Plan called for preparation for the storm to take place up to 5 days before the event.*

- *The placement of assets and resources were in place before the storm*
- *The utilization of Incident Command Structure (ICS) to deploy assets and resources for recovery. Using ICS allows us to:*
    - *Place the right personnel in the right place. Day-to-day job duties were put aside and every employee was reassigned to recovery duty. Each employees' duties were matched with their knowledge, skills, and abilities to assist in the recovery effort.*
    - *Flattening out of the organizational chart. Every employee knew his or her role in the recovery effort. We empowered our employees to make decisions within the framework of our recovery plan. While communication between our crews and the control room was constant, some decisions were made based on an in-the-field damage assessment. This process was made easier because our staff knows Norwich and our electric system inside and out.*
- *For safety reasons, we recognized the need to pay attention to the wellbeing of our staff. Our staffing plans included adequate rest and we provided hot meals for every employee throughout the event.*
- *We staffed our customer service center 24/7 during the height of the storm and the recovery. When our customers called us during this time, they were able to speak to a live human to get information and report any potential problems. This helped us educate our customers, provide real-time information to our control room, and stay ahead of any potential issues.*
- *We dispatched electrical contractors specifically to reconnect customers' service lines to our system. We performed this service free of charge. Normally, a customer would be responsible for hiring a contractor to handle this work.*

- Were we prepared for a category 1 hurricane?
    - *Yes*
- What damage could have been done?
    - *Major structural issues to the electrical system and flooding would have been a worst case scenario.*
- Where/how could we have done better?
    - *Initial damage assessment can be improved and could have been more efficient.*
    - *Some outages still would have probably lasted 3-4 days, but we might have been able to restore some customers a little faster than we did.*

- What lessons did you learn?
  - *We are prepared for a major storm. Up until Irene, our plans were only tested and drilled. As they were put into action we realized that all of that preparation was worth it.*
  - *Human needs matter. We paid attention to the needs of our crews and made sure they were properly rested and fed so that they could continue the recovery effort.*
  - *Every employee at NPU was critical in the restoration effort. We employed an "all hand on deck" philosophy. Working together made this restoration effort more efficient.*
  - *We called in some of our retired employees to help with this effort. These former employees know the system and the city. This plan worked very well and we plan to utilize it in the future.*
  - *Prioritization of restoration matters. We prioritized hospitals, healthcare institutions, and emergency shelters first. We then concentrated on the major commercial centers so that the citizens of Norwich had access to basic needs like groceries and gasoline. We then targeted the largest number of customers we could restore in the least amount of time.*
  - *Supplies and assets must be in place before the any major event. We secured food, supplies, lodging, contractors and other resources in advance of the storm. They may not be available during or after the emergency. Gasoline is an excellent example of this. We filled all of our gas tanks before Irene hit the area, but as time went on, we needed more fuel. Because we were able to restore electricity to them, Norwich gas stations were flooded with customers from other areas that did not have power. This caused a mini gas shortage for our area and took an important asset away from our effort.*
  - *In today's digital world, our Information Technology (IT) and GIS departments were invaluable in the recovery effort. We plan on expanding and improving these department's role in future efforts.*

- What are your standards in regards to tree trimming? Have these standards changed over the past 10 years?
  - *Our tree trimming efforts have significantly increased in last 10 years. We have added one extra crew and we partner with the City of Norwich Public Works Department PW to remove problem trees and branches on an on-going basis.*

- Staffing/Labor

- How many line crews were deployed during peak restoration?
  - *12 line crews working to restore power and repair the electric system and 4 electrical contractors working on repairing*

- How many line crews were brought in from other places, if any?
  - *6 mutual aid crews from other public power systems throughout New England.*

- How many line crews are employed by your company now vs. 2000?
  - *In the year 2000 we had 3 full time line crews. Today we also have 3 line crews on at any given time but with cross training and strategic human resources management we can expand to 5 fully staffed crews*

- What are your policies/standards regarding hours of work (hours/shift)?
  - *For safety reasons we schedule 16 hours on followed by 8 hours of rest time. This schedule empowers our crew flexibility to complete whatever task is necessary in the field without having to worry about time constraints.*

- Communication
  - How was the communication between your company and municipalities?
    - What worked? What didn't?
      - *The City of Norwich Emergency Operations Center (EOC) was located at our administration building. This made communication with other city departments seamless. We interacted with every city agency and community organization in the same building that we were that our utility control room is located.*
      - *Radio communication was coordinated with all city entities.*
      - *We supported the EOC with our GIS, IT, and administrative assets. This allowed real-time information to be shared by everyone.*
      - *Norwich EOC and City Manager held daily briefing with all city and community agencies including:*
        - *All city agencies (Police, Fire, Public Works, Human Services, Board of Education, etc.)*
        - *Backus Hospital*
        - *American Ambulance*
        - *Uncas Health District*
        - *Red Cross*
    - How could this communication be improved?
      - *Some additional training of other city and community agencies in our GIS system may be appropriate.*
      - *More frequent emergency exercises throughout the year (tabletops) would help us plan better. Right now, we conduct these exercises once a year.*

        - *Have all of the other city agencies trained in the National Incident Management System (NIMS).*
- How was the communication between your company and your customers?
    - What worked?
        - *We utilized "Social Media" to communicate directly with our customers. Customers were able to submit questions to us directly through Twitter (on smart-phones if they didn't have internet up and running). Those questions were answered by a dedicated staff member.*
        - *Local radio station WICH (1310 am) set up a broadcasting location in our building. This helped us get information out to our customers in quickly.*
        - *Norwich Public Utilities communications staff contacted all local, regional, and state-wide media in order to set up and maintain communication channels with them. Constant updating of these media organizations helped keep our customers informed and safe.*
        - *We staffed our Customer Service Center 24 hours a day during the height of the storm and the recovery. Customers could always speak to a live NPU employee if there were any problems.*
    - What didn't?
        - *Our website, which is hosted in New London, went down during the storm. This took a communication tool away from us when we needed it the most.*
    - How could this communication be improved?
        - *Change our internet hosting company to include redundant servers (being worked on right now)*