

**State of Connecticut
Hearing on Tropical Storm Irene**

**Tropical Storm Irene Hearing Questions
Response of Comcast of Connecticut**

Utility Companies

- Preparation
 - What are the best practices for readiness?

Comcast Response:

Comcast recognizes the importance of its services to its customers. Our customers depend on us for obtaining information from and communicating with the outside world.

In Comcast's view, best practices include thorough advanced planning and establishing and implementing practices and processes for responding to emergencies and communicating during emergencies.

Comcast's 2011 Emergency Response Plan filed with the PURA provides a guide for all Comcast managers and employees during and after an emergency, and maps out the process for resuming normal business operations after an emergency. The plan spells out the roles and responsibilities of Comcast's Emergency Management Team members involved in the emergency management process. It contains procedures for contacting team members, vendors, suppliers and those with whom special disaster contracts and agreements are in effect. The plan includes a procedure for communicating with key employees, customers and state and local governments. The plan also provides a flexible framework for effective business continuity and management that can be applied to events both major and minor in nature. Comcast also has disaster recovery plans for each of its facilities.

- How did you fare for readiness?

Comcast Response:

Without meaning to minimize or understate the damage and suffering this storm caused to our customers and neighbors, Comcast believes that it was fully prepared for Tropical Storm Irene, and we feel Comcast performed well in preparing for and responding to the storm. In most instances, Comcast customers had service when their commercial power was restored.

Some of the important actions Comcast took were:

- Steadily tracked the progress of Tropical Storm Irene in advance of its arrival, and completed the preparedness checklists in our plans.
- Conducted internal storm calls multiple times daily from Comcast's emergency operations center in CT to identify the impact of the storm and plan immediate responses by all necessary Comcast teams during and after the storm until "business as usual" conditions were restored. The internal calls involved all parts of Comcast's business.
- Monitored our network from our XOC (Operations Center).
- Communicated with State and Federal emergency operations agencies concerning service outages and our service restoration efforts during and after the storm.
- Ensured full generator back-up at all essential Comcast locations throughout Connecticut before, during and after the storm until commercial power was restored.
- Performed our own "ride outs" to ascertain damage to our network, and to identify downed drops where road access was possible.
- Shipped fiber to key locations in the state so it could be on-site quickly.
- Worked very closely with power companies to quickly ascertain areas where power had been or would soon be restored in order to identify any areas needing timely cable plant restoration. The coordination with power companies included placement of a Comcast representative in the power companies' storm operations centers.
- Arranged the necessary level of field and administrative staffing to respond to the emergency situation, including arranging for additional Comcast crews from other states and for contractors. Promptly dispatched construction and technical operations crews to repair damaged plant and downed drops.
- Maintained call center operations and adequate staffing during and after the storm to ensure timely response to customer inquiries.

At the same time, Comcast recognizes that it can learn from this event and will use its experiences to try to improve its emergency response planning in the future.

- What was the damage from Tropical Storm Irene? How many lines were affected? How many customers were affected?

Comcast Response: Tropical Storm Irene caused extensive damage, including downed trees, and electric power outages that affected Comcast's facilities and network. Comcast lost commercial power at a number of its facilities which ran on back-up generation until commercial power was restored. Due to redundancy in our fiber network, any disruption to customer service was minimal and traffic was able to route over alternate paths while the fiber was being restored. Comcast also sustained damage to our facilities and drops to customers' homes and business premises from fallen trees. Approximately 20% of Comcast customers were impacted and did not have service on August 29th, just after the peak of the storm, mostly due to electric

power outages. As reported to the State's Communications Task Force, this number improved dramatically in the hours and days immediately after the storm.

- What was the extent of your disaster preparedness plan? Please provide details.

Comcast Response:

As mentioned above, Comcast has an Emergency Response Plan that was filed with the PURA and also provide to each municipality which Comcast serves. Comcast's Emergency Plan is comprehensive and detailed. Comcast also has disaster recovery plans for each of its facilities, a plan for its emergency operations center, and internal crisis communications plans. Comcast's Emergency Plan covers:

- Annual Emergency/Storm Preparation that includes checklists of preparedness activities and responsibilities. Also, Emergency/Storm Preparedness for individual events
- An Emergency Management Team
- Establishment of an Emergency Operations Center
- Field Responsibilities for Emergency Response
- Established a Storm Mutual Aid Response Team (SMART) that arranges for Mutual Aid from different Field Management Areas
- Communications with Employees and Customers

- Were we prepared for a category 1 hurricane?

Comcast Response: Yes, Comcast's Emergency Response Plan and associated disaster recovery plans cover hurricane situations.

- What damage could have been done?

Comcast Response: Tropical Storm Irene caused significant damage, which could have been even worse with higher winds and more rain.

- Where/how could we have done better?

Comcast Response: Comcast believes it was well prepared for the storm, and took numerous measures ahead of time to help lessen the impact for our customers. We also learned valuable lessons of how the sophisticated technology we utilize in our network can likely enhance our abilities to restore services quicker in the event of a widespread power outage next time. Comcast and the electric companies cooperated well, including having Comcast personnel in the electric companies' command centers. Comcast and the electric companies will address how their cooperative efforts can be improved. Comcast also is in the process of forming a management level team to conduct a detailed review of Comcast's storm response.

- What lessons did you learn?
Comcast Response: While we are still evaluating many aspects of our Irene response, this experience will result in Comcast building on the valuable working relationships forged with the electric distribution companies (EDCs), cities, towns, and state during the storm. In particular, sharing outage information with the EDC's and the towns coupled with the use of different software and technology Comcast currently utilizes – proved to be very helpful in restoring services to CT customers after the storm. We believe we can build on those successful lessons to achieve even greater coordination and effective restoration of services in the wake of similar wide-spread electricity outages next time.
 - What are your standards in regards to tree trimming? Have these standards changed over the past 10 years?
Comcast Response: Comcast does not own utility poles and therefore does not perform tree trimming.
- Staffing/Labor
 - How many line crews were deployed during peak restoration?
Comcast Response: Comcast deployed over 225 crews.
 - How many line crews were brought in from other places, if any?
Comcast Response: Approximately 15% of the crews we utilized in our restoration efforts were from other places including NH, MA, NJ and Michigan.
 - How many line crews are employed by your company now vs. 2000?
Comcast Response: Comcast has undergone several mergers and acquisitions in the last decade and, therefore our employee levels between 2000 and the present cannot be accurately compared. However, within the last 5 years, Comcast has increased the number of front line workers in CT by at least 20%.
 - What are your policies/standards regarding hours of work (hours/shift)?
Comcast Response: Comcast has policies in place to assure adequate front line employee coverage during storm events. We increased staffing, incented employees to work overtime, set-up call in numbers for employees to insure they would have a safe work environment, made plans for some employees to perform their work from home, and made plans for hotel rooms and meals for employees as well where necessary.

- Communication

- How was the communication between your company and municipalities?

- What worked?

Comcast Response: The Communications Task Force set up by the state and its regular conference calls worked extremely well in keeping Comcast informed of specific issues with municipalities after the storm. In addition, the local relationships that we have cultivated over many years with city and town officials allowed key representatives from those communities to have specific Comcast representatives to contact if necessary. For example, Comcast contacted Cable Advisory Councils in the towns we serve to advise them of outages and our restoration efforts.

- What didn't?

Comcast Response: Comcast would be interested in receiving feedback from the municipalities on this question and working with them to address any issues in this regard.

- How could this communication be improved?

Comcast Response: If there were municipal outages identified in some way by either the electric distribution companies or the state, it would be helpful to have an e-mail or conference call option to communicate that information to the company.

- How was the communication between your company and your customers? What worked?

Comcast Response: Overall, communication was effective between the company and our customers. During the storm, we provided high-level updates on the front page of comcast.com and had a link to a broader educational section on "Hurricane season and your service" for customers. In addition, we provided regular automated messages for customers calling in for updates on the storm's impact. Lastly, we also took out full-page ads in the areas most affected by the loss of commercial power, specifically The New London Day and the New Haven Register.

Comcast is constantly evolving the customer experience in an effort to improve the products and services we offer in CT. This includes the use of twitter in responding to customers.

- What didn't?

Comcast is still evaluating its performance in this area.

- How could this communication be improved? Comcast is still evaluating its performance in this area. However, we have already started to explore ways to better communicate with customers via comcast.com including:
 - Providing more detailed information on our site.
 - Optimizing web content for use from handhelds given that customers will be using them when they have no home power.
 - Additional uses of social media.