

Recommendations to Prevent and Reduce Long Term Power Outages

Two Perspectives

- NGrid Focused Actions
- Westford Focused Actions

NGrid Focused Actions

- NGrid outlined a number of planned improvements.
- Benefit the entire service area.
- Driven by Tropical Storm Irene and the October 29th Storm.

NGrid Focused Actions

- Instituting and expanding the Community Liaison Program.
- Improving the Outage Central website.
- Installing GPS in contractor and mutual aid crew vehicles.
- Training “Cut & Clear” crews.
- Inspecting 300 distribution feeders impacted by the October 29th storm.
- Conducting high level damage assessment during the first 8 hours.

NGrid Focused Actions

- All reasonable steps.
- Would these steps have been taken if not pushed by the DPU investigation and public outcry?
- NGrid is not obligated to Westford concerning progress updates.

Recommendation 1

Westford should request progress information from NGrid and the DPU concerning the DPU's investigation and resulting outcomes, including progress on improvements.

Westford Focused Actions

- Communication
- Engineering
- Operations
- Forestry

Communication

Recommendation 2

Verify with NGrid the list of critical facilities. This should include type of facility, address, and a primary contact for each facility.

Recommendation 3

Westford public safety officials should coordinate information concerning residents having life-sustaining equipment in their home with NGrid if possible.

Recommendation 4

A clear understanding of the protocols and procedures concerning the Community Liaison interaction should be developed with NGrid. This should be a written agreement and include items such as:

The protocol for communication and action **before, during, and after** a major outage event.

Recommendation 5

A public education awareness program targeted at Westford residents should be developed. This could contain items such as:

- Emergency preparedness.
- How to get information during a storm event.
- How to report downed wires.
- Safety around downed wires and trees.
- Safe operation of generators.
- Rights and responsibilities concerning tree trimming and service wires.

Engineering

Engineering

- Explored the condition of the electrical distribution equipment in town.
- NGrid assured us the condition of the equipment was “good”.
- Yet 19% of reported outages in Westford over the past 5 years were due to **deterioration, device failure, and insulation failure.**

Engineering

- NGrid referenced a number of diagnostic and maintenance procedures:
 - Infrared scanning (thermal imaging)
 - Transformer maintenance
 - Cutout replacement
 - Overhead line construction review

Recommendation 6

Westford should request reports and review information concerning these actions on an annual basis.

Operations

Recommendation 7

Westford and NGrid should develop “wire down” protocols to insure public safety is the top priority.

Recommendation 8

Clear protocols should be developed outlining the interaction of Westford public safety personnel and “Cut & Clear” crews.

Recommendation 9

A clear understanding of Westford's role and responsibility in the damage assessment phase, including input on prioritization of public safety issues should be developed with NGrid.

Recommendation 10

NGrid and Westford should share and integrate town GIS information with NGrid's distribution and transmission facilities within the town.

Forestry

Forestry

- 25% of outages in Westford over the past 5 years were due to trees on “blue sky days”.
- 50 miles of power lines in Westford were in the process of maintenance pruning.

Recommendation 11

Continue the good working relationship between NGrid head of Forestry (Jim MacArthur) and Westford Tree Warden (Chip Barrett).