# **Eversource Energy Center**

## INNOVATIVE

## PROGRESSIVE

## PROACTIVE

A unique university – energy company partnership

Promoting research excellence and leading the industry to develop new technologies and science-based solutions for delivering reliable power and advanced risk management in extreme weather Advancing the next generation of storm damage modeling to shorten outages

**Applying** best practices for sustainable and storm-resistant forest design

**Implementing** electric grid operating efficiency and storm resiliency improvements



# **Storm Damage Forecasting**

## **RELIABLE ENERGY**

## SUPERIOR SERVICE

The UConn Storm Damage Prediction Model generates a dynamic picture of anticipated storm and system impact

#### Determining the

number of crews needed with strategic deployment before a storm arrives

#### Identifying

distribution system design improvements for greater resiliency

Avoiding and shortening outages

**Ensuring** faster storm response and accelerating restorations



Our Center, with leading-edge forecasting, will establish Eversource and UConn as frontrunners in storm resiliency and hazards mitigation



## Forest Management Stormwise Program

## SUSTAINABLE

## **STORM RESISTANT**

With 90 percent of power outages during storms caused by trees, Stormwise links forest management and community outreach for stronger, wind-firm trees

**Using** tree sway research and laser technology to show the benefits of tree trimming

**Reducing** outages—in both number and duration

**Retaining** the beauty of scenic roads and reducing roadside maintenance costs

**Identifying** best practices readily shared with communities, tree wardens and forest managers

**Supporting** Connecticut's local wood industry



We are working with towns to implement a 'right tree, right place' planting approach for planning before planting and preventing damage to the electric grid



# Electric Grid Reinforcements

## RESILIENT

## LEADING EDGE

We are increasing the resiliency of critical facilities and infrastructure to withstand storm impacts

**Identifying** strategic areas for stronger electric grid design and reliability

**Using** advanced laser imaging for a 3-D measure of tree threats to overhead lines

**Simulating** grid conditions to evaluate reinforcement benefits

**Assessing** the benefits of distributed and emergency generation for increased reliability and shorter outages

**Enhancing** grid protection with an emphasis on cyber security best practices





Together, Eversource and UConn are leading the industry with state-of-the-art research for delivering reliable power and managing extreme weather events

