

NSTAR Electric's Transmission Maintenance Needham Update

Clear Lines, Reliable Power

Courtesy Notification

To ensure electric service reliability and to help avoid service interruptions, NSTAR and its contractors will be conducting vegetation maintenance on its critical electric transmission right of way located nearby.

- Managing growth and removing trees near electric transmission lines helps eliminate safety hazards for the public and our employees, especially during severe storms.
- NSTAR vegetation standards require our crews and contractors to adhere to high industry standards as well as all State and Federal regulations.
- Strict Federal standards mandate utilities manage vegetation along transmission corridors to eliminate the potential for interruptions in electric service for your community as well as many other communities served by these lines.

**Right of Way
(ROW)**

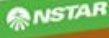


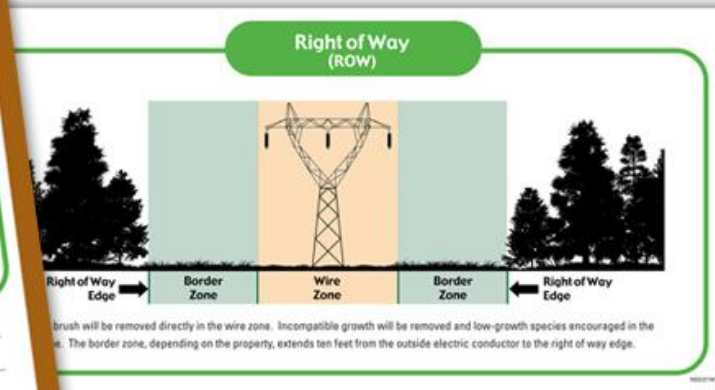
ROW# _____ Contact: _____

Date: _____ Phone: _____

Comments: _____

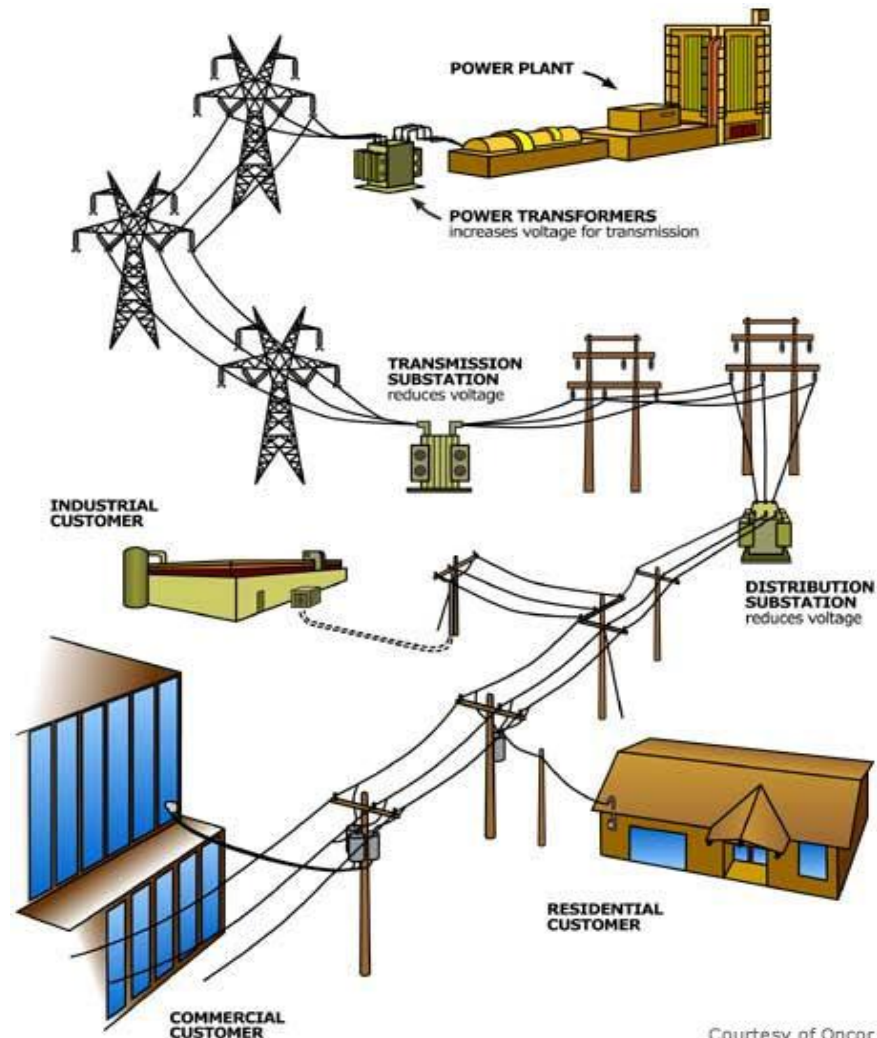
www.nstar.com





Electric Delivery System

1. Generation: Creates the electricity
2. Transmission: Transports high voltage electricity to an area
3. Substation: Converts high voltage to lower voltage
4. Distribution: Delivers electricity to the customer



Courtesy of Oncor

Right of Way (ROW) Vegetation Management

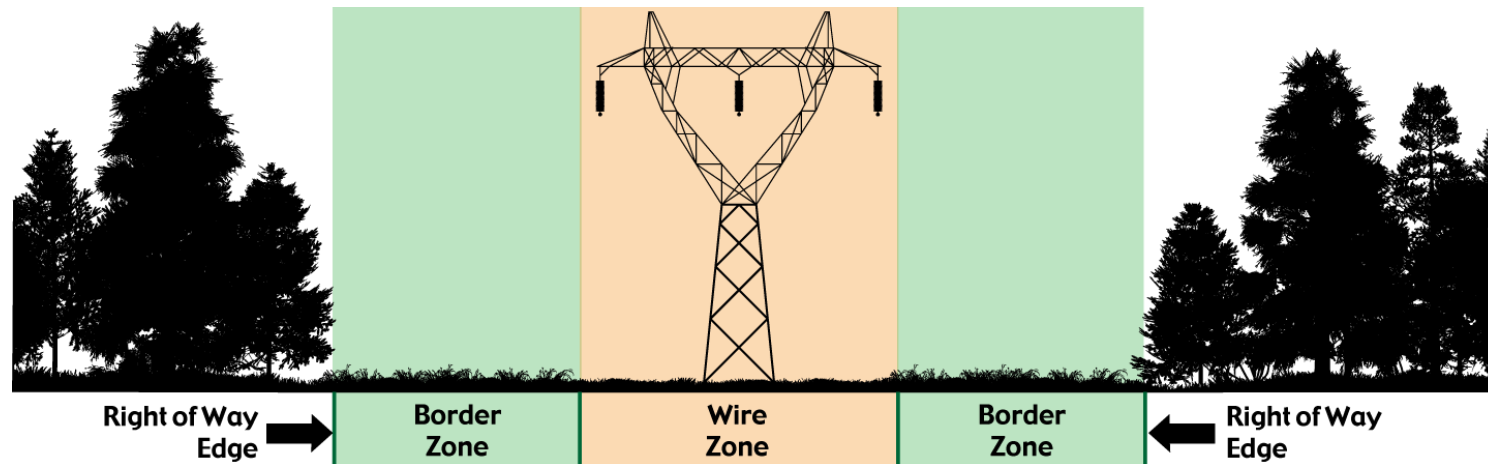


- Trees that have potential to contact transmission lines creates hazardous situation for millions of customers



- Achieving a desired state, with transmission clearing and appropriate low growth vegetation, supports the delivery of reliable power

Right of Way (ROW) Vegetation Management

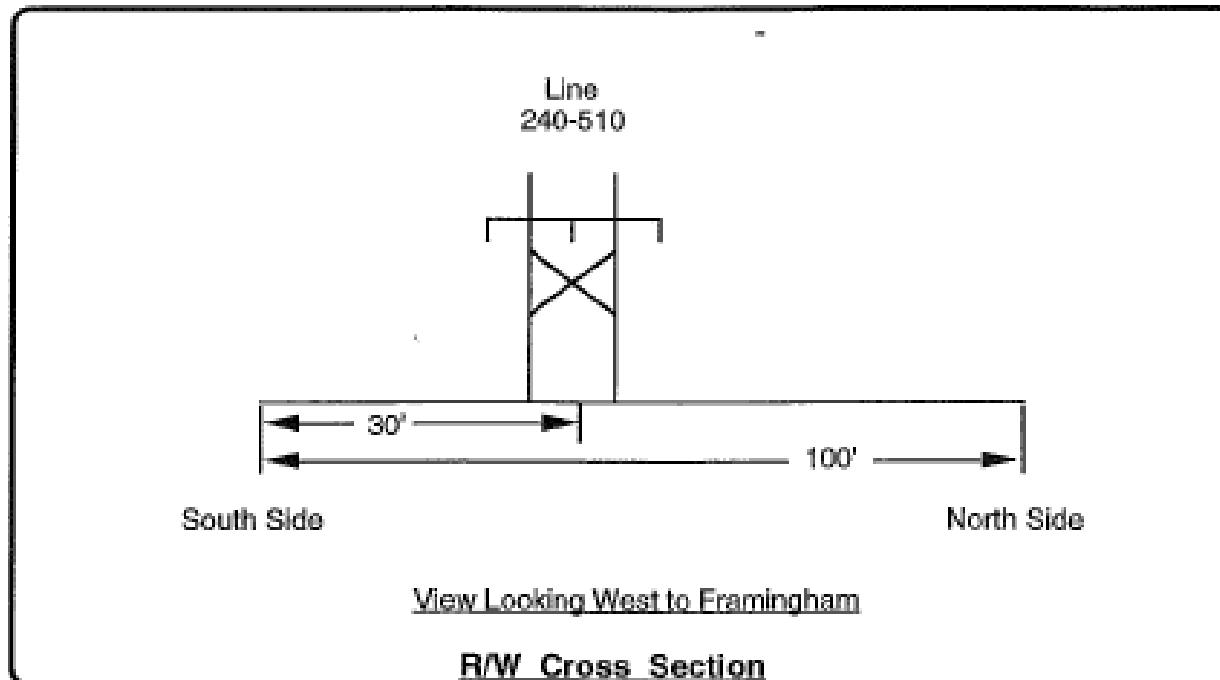


- NSTAR Electric manages 400 miles of high voltage transmission ROW
- Since 2010, NSTAR Electric has been actively working to ensure the reliability of the transmission system by removing incompatible vegetation from the ROW while promoting low growing early successional habitat.
 - Incompatible species being:
 - Vegetation with a mature height of greater than 3ft in the “wire zone”
 - Vegetation with a mature height of greater than 15ft in the “border zone”
 - *Some examples: Aspen, Beech, Birch, Hemlock, Oak, Maple and Pine*

Needham ROW Vegetation Management

- Needham maintenance work is on NSTAR ROW 3

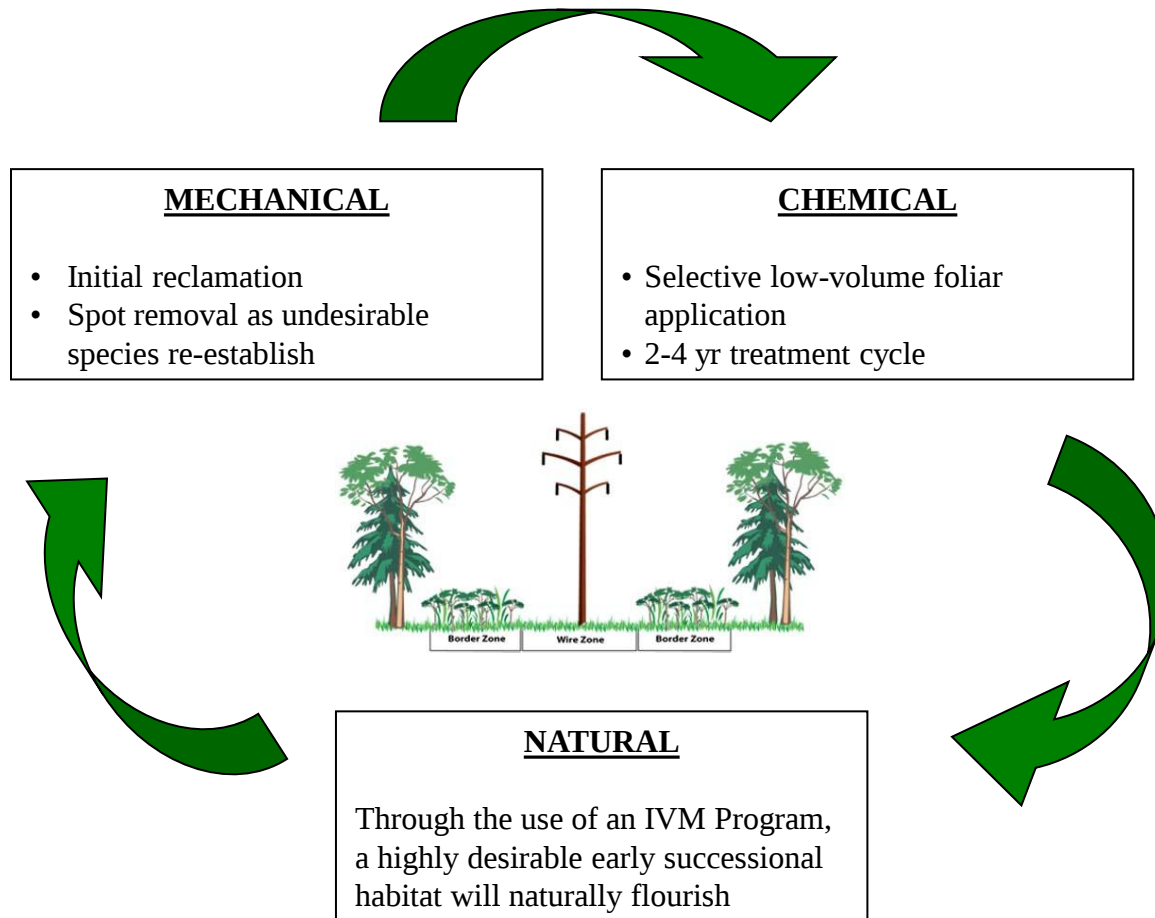
Towns Needham, Dover, Natick, Sherborn



Typical ROW 3 Cross Section

IVM PROGRAM

(Integrated Vegetation Management)



Needham Maintenance Work

- Current Conditions ROW 3
 - Significant tree contact potential



Needham Maintenance Work

- Current Conditions ROW 3
 - Significant tree contact potential



Needham ROW Vegetation Management

Sequence of Maintenance Activities:

- Incompatible vegetation is mowed
- Incompatible trees are removed
- Cut trees are moved to staging area
- Cut trees are chipped
- Bucket crews then remove any leaders or incidental vegetation along the edge of the ROW.



Mitigation Options for Impacted Properties

- Following completion of maintenance, NSTAR representatives will meet with affected customers to review mitigation options
- Options may include:
 - Grinding stumps which are in landscaped areas.
 - Disturbed grass or landscaped areas will be loamed, seeded or graded as necessary.
 - Incidental plantings may be offered for low growing trees or bushes to be planted in the “border zone” only.

All requests for mitigation should be made to :

Anne Marie Walsh

Email: Annemarie.Walsh@nstar.com

Phone: 617-369-6356

