

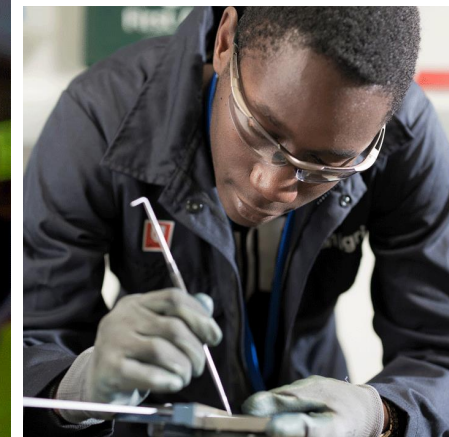
Utility Climate Adaptation

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Utility Climate Adaptation



Climate Adaption Forum
University of Massachusetts Club

November 30,2018

Key issues for electric utilities

Severe weather

- Wind, rain, snow, ice
- Construction standards, veg management, storm response

Flooding

- Coastal – sea level rise
- Riparian – from increased rain & snow

Higher temperatures

- Electric loads increase – more air-conditioning
- Equipment ratings decrease – less cooling

Equipment life

- Equipment & lines last 30-50 years

Severe weather & flooding

- Construction practices
- Build now for the future



Plum Island 2017



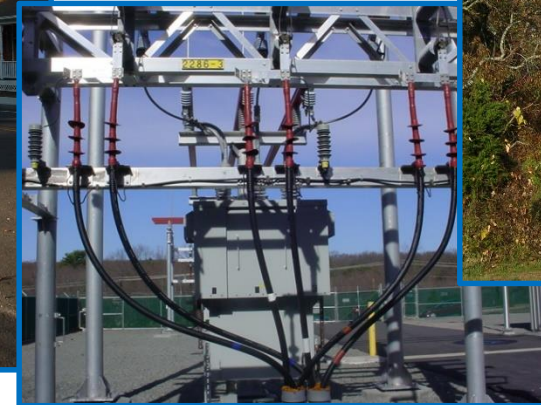
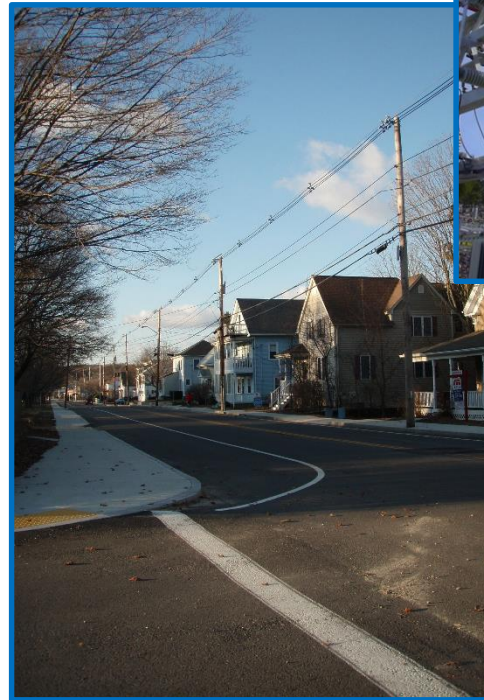
Brockton 2018



Ipswich 2018

Higher temperatures

- Air-conditioning becomes critical
 - Particularly in urban areas
 - Electric service reliability and costs become even more important
- The challenge
 - Keep power on while
 - Loads increase
 - Equipment capability decreases
 - Keep it affordable



Key issues for electric utilities

Severe weather

- Construction standards, veg management, storm response
- Storm hardening & automation (smart grid)

Flooding

- Move it, put barriers around it, or waterproof it

Higher temperatures

- Replace equipment sooner
- Construction impacts neighbors

Equipment life

- Equipment & lines last 30-50 years
- Smarter grid for rapid detection, isolation, and service restoration
- Building for the future now, but it's a work in progress

national**grid**