

# East Avenue Loop Project

Key Stakeholder Meeting

September 21<sup>st</sup> 2006



# Agenda

- Welcome
- Outline Key Stakeholder Process
- Outline Area Specific Collaborative Process (ASC)
- Present Project Alternatives
- Present Conceptual Project
- Q&A, Wrap Up, Next Steps



# Key Stakeholder Process

- **Key Stakeholder Meetings**
  1. Today
  2. Thursday, October 26
  3. Thursday, November 30
- **Public Open Houses**
  - Multiple days and locations during weeks of November 6 and November 13
  - Chance for the public to speak directly to project planners
- **Desired outcome** of the public process:
  - The best solution is selected for permitting
  - Trust is fostered within the community



# Area Specific Collaborative Process (ASC)

- Created by the Public Service Board (PSB), the Department of Public Service (DPS) and Vermont's Distribution Utilities to resolve distribution and subtransmission system problems
- For Burlington area problem, involved DPS and the affected utilities over the past two years
- Examined transmission and non-transmission alternatives
  - Solution chosen based on resolving system problems with least cost

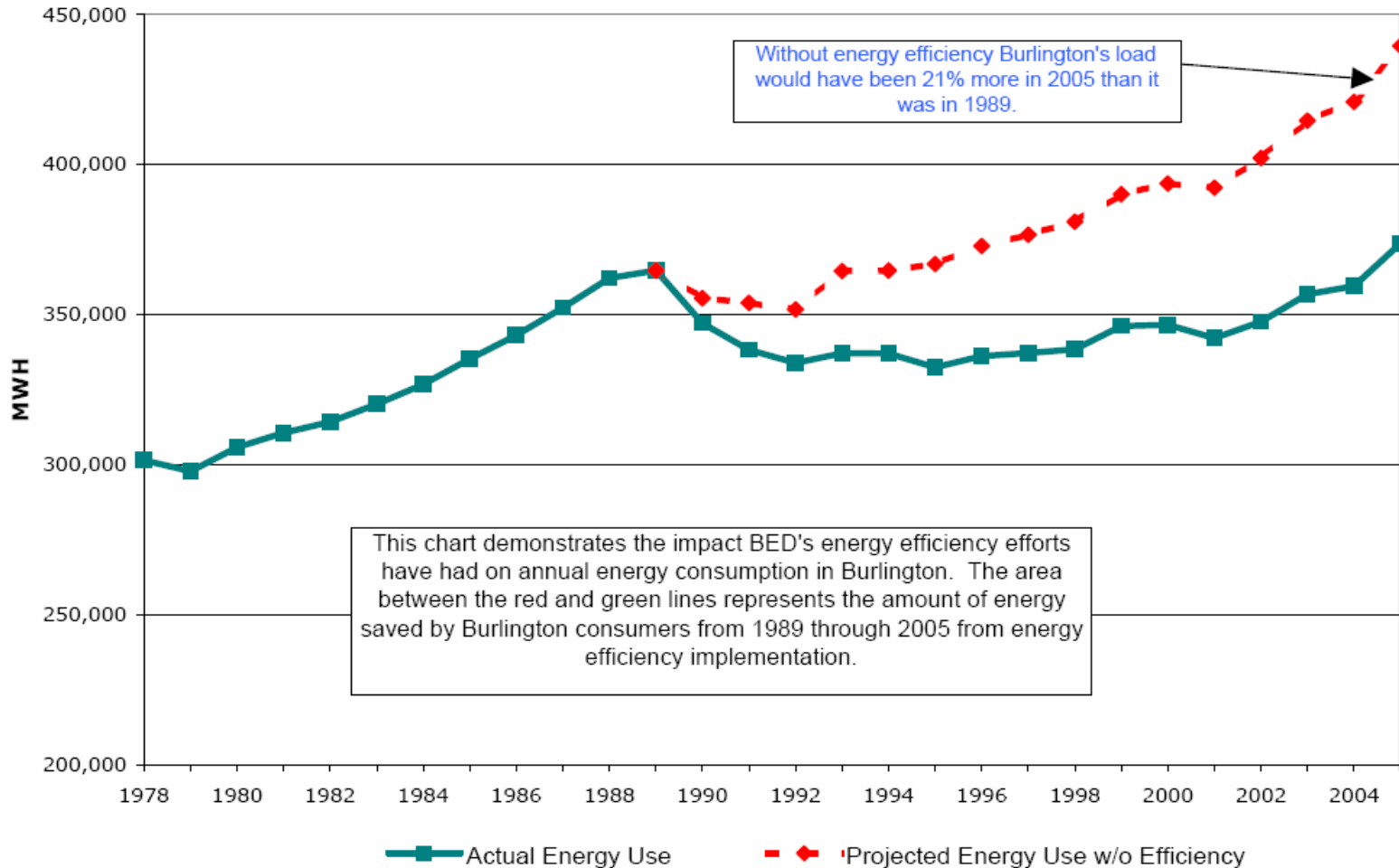


# Non-Transmission Efforts

- BED's energy efficiency investments have eliminated growth in the City's electrical usage from 1989 to 2004
  - \$14M invested by BED, matched by the same amount of consumer investment in efficiency projects
  - Saved almost 70,000 MWh and 11 MW of winter peak load (over 6 MW in the summer)
  - Has deferred the need for the project for many years
- BED has helped commission several small cogeneration and net metering projects during the above period
- Between 2003 and 2005, GMP customers in Chittenden County, through Efficiency Vermont, invested \$11 million in efficiency measure, saving 35,000 MWh a year



## Total Energy Use (MWH) for the City of Burlington



# Project Alternatives

- At least 20 different transmission options investigated from a technical perspective
- Narrowed down to 4 low cost candidates all with equal reliability
- Leading option selected based on cost and environmental/legal concerns.
  - Provides adequate reliability for all situations
  - Designed recognizing regional cost-sharing
  - Maximize use of existing Rights Of Way (ROW) and avoiding acquisition of new ROW



# Project Alternatives

- Additional energy efficiency was found insufficient to meet the reliability need
  - To avoid the new 115 kV transmission line, need about 18 MW of peak load reduction, where only 1.4 MW is available
  - To avoid the new 34.5 kV transmission line, need about 29 MW of peak load reduction, where only about 8 MW is available
- Additional utility generation (total of 25 MW) studied
  - More costly than applicable portion of transmission project
  - Portions of the project could not be avoided with generation



# Conceptual Project

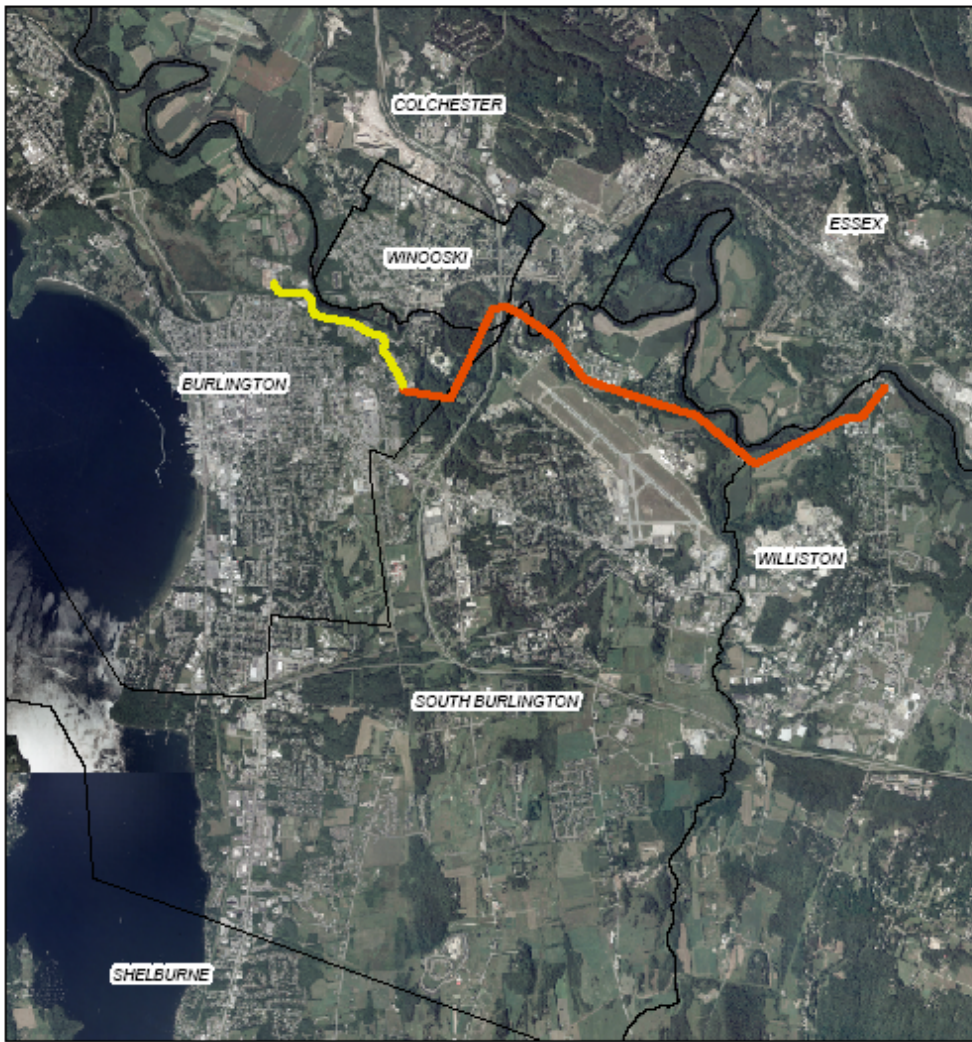
- Add two new 115 kV lines on single poles in 4.6 miles of right of way where today one line exists
- Build a new 1.4 mile 34.5 kV line with both underground and overhead portions
- Expand an existing VELCO substation (East Avenue) to accommodate the new lines
- Expand an existing 34.5 kV substation (McNeil) to accommodate the new 34.5 kV line and relocated BED facilities from the lake front



# Benefits of the Project

- Eliminates significant reliability concerns for BED and GMP in the area
- Utilizes existing transmission corridors and substation locations to minimize environmental impact
- Achieves reliability goals at lowest cost to Vermont





- 2 New 115kV Transmission Lines in Existing Right-of-Way
- New 34.5kV Sub-Transmission Line



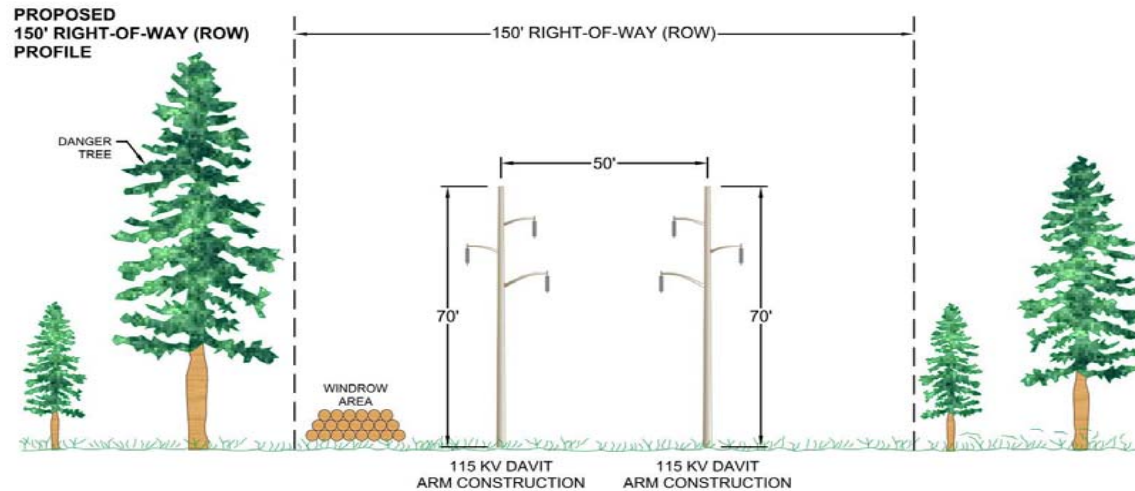
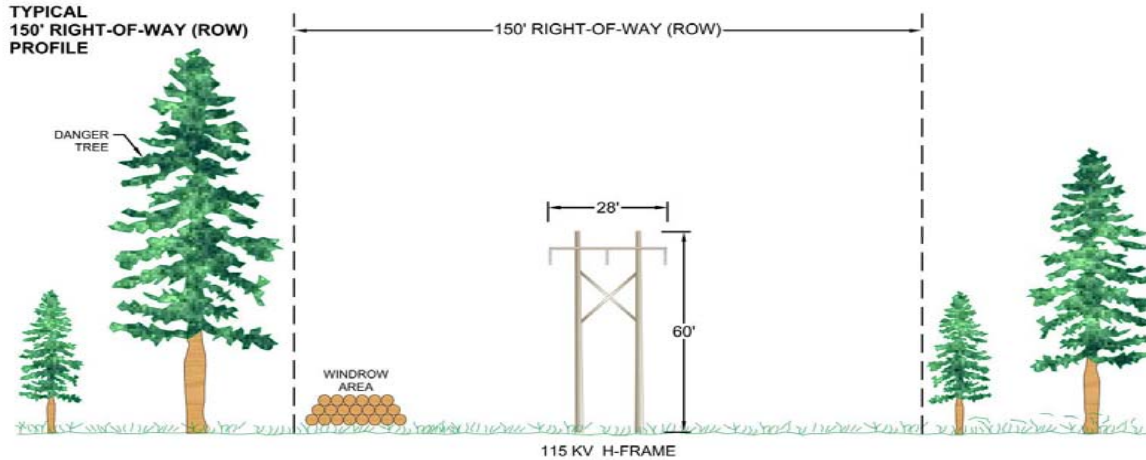
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## East Avenue Loop Project - Proposed Routes



# Old and new 115 kV line construction



# Expected Project Phases & Possible Timing

## 2006

- Examination of section 248 criteria, preliminary engineering and alternatives
  - wetlands, plants, wildlife, historic, archaeological, noise, safety, aesthetics
- Begin public involvement, address any right of way concerns and finalize the design

## 2007

- Vermont Public Service Board filing & post certification, other environmental permits & continued public involvement
- Project to begin after PSB approval
- Expected completion in about 1 year



## Next Steps

- Handout – Things to think about for project criteria
- Educate folks in your area of interest about the project
- Next meeting Thursday, October 26 at Holiday Inn, South Burlington - Ballroom
- Contact project team with questions in the meantime

