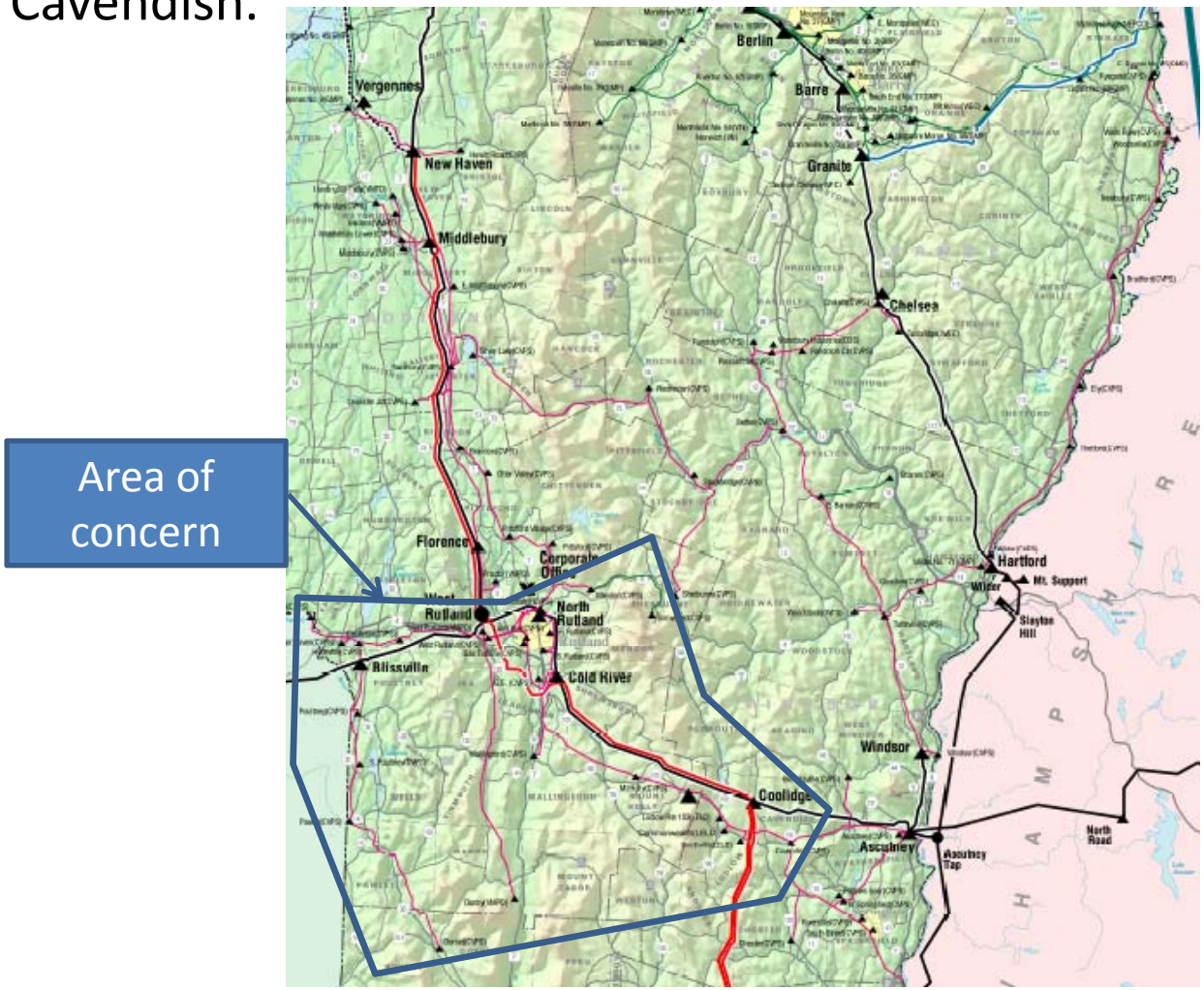
Rutland / Cold River Area Study Summary

Rev 5 - November 2012

Orientation

The area of concern includes the Blissville, Rutland, and Cold River areas as well as the subtransmission corridor that extends out to Cavendish.



Problems

The area's problems are complex, multi-dimensional, and interdependent. They include:

- A deficiency in the number and total thermal capability of area 115/46 kV transformer interconnections.
- The anticipated integration of the recently acquired, relatively weak, and radially-fed VMPD system.
- An aged combustion turbine intended for peak load support that is no longer reliable.
- A rather large matrix of area subtransmission lines, many of which are thermally inadequate.

Solution Alternatives

Possible solutions appear to be (in order of ascending cost):

- New 115/46 kV West Rutland interconnection utilizing the *existing* open 115 kV bay at VELCO's West Rutland substation. **Rough estimated capital cost: $20M**

- NTA/TA hybrid that includes 30 Mw of new CTs at Lalor Avenue in Rutland and significant area reconductoring. **Rough estimated capital cost: $31M** (excludes generation redundancy requirements, and also excludes estimated $6M in present value for FCM revenue benefit)

- New 115/46 kV West Rutland interconnection requiring a *new* 115 kV bay at VELCO's West Rutland substation. **Rough estimated capital cost: $35M**

- New 115/46 kV South Rutland interconnection substation. **Rough estimated capital cost: $42M**

- 2nd North Rutland autotransformer with substation expansion. **Rough estimated capital cost: $47M**

Next Steps…

1. Determine availability of open 115 kV bay at West Rutland substation.
2. Finalize cost analysis of all possible solution alternatives.
3. Update analysis to reflect “Solar Capital” resources, Standard Offer program resources, other policy initiatives, and potential market-based revenue from new generation.
4. Reevaluate need based on most recent load forecast.
5. Choose and implement solution alternative.