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# STAR Group, LLC

Date: February 2, 2007  
 To: Members of the Coolidge Connector Community Working Group  
 From: Chris Kenny, Process Manager  
 Re: Notes from January 8, 2007 CCCWG Meeting  
**[Revised from Notes Dated January 30, 2007]**

<u>Members Present</u>	<u>Members Absent</u>
Frank Heald, Ludlow Municipal Manager	Kathy Pellett, State Representative
Richard Svec, Cavendish Town Manager	Jane Pixley, Cavendish Town Clerk
Thomas Kennedy, Southern Windsor County Regional Planning Commission	Joyce Meehl, Brookline Select Board
Jack Collins, Ludlow Electric	Bill Driscoll, AIV
Jeffrey Lewis, Brattleboro Development Credit Corp.	Rip Kirby, CVPS
Dean LaForest, VELCO	Andrew Perchlik, Renewable Energy Vermont
Jeff Predom, VELCO	Susan Spaulding, Chester Town Manager
Kim Jones, CVPS	
Bruce Bentley, CVPS	<u>Guests Present</u>
Kerrick Johnson, VELCO	John Sayder, Cavendish Planning Commission
Ralph Roam, VELCO	James Ballantine, Cavendish Selectman
	Howard Barton, Ludlow Electric
	John Stamatov, VELCO
	Leo Graham, Vermont Journal
	Ralph Pace, Vermont Journal

The Coolidge Connector Community Working Group (“CCCWG”) met at the Ludlow Town Hall on Monday, January 8 from 4 – 6:00 p.m. The group began with a brief overview of the Southern Loop public involvement process and the recommendations from the Southern Loop Community Working Group, which included a recommendation that additional public involvement be conducted with stakeholders who might be affected by the recommendation from the Southern Loop process that a new, 345 kilovolt (kV) transmission line be

constructed within VELCO's existing right of way, to connect the West Dummerston substation with the Coolidge substation located near Chester, Vermont (the new 345kV line and its ancillary equipment are being referred to as the "Coolidge Connector"). The Coolidge Connector would be approximately 34 miles in length.

Chris Kenny explained that the focus of today's meeting was to provide members with the opportunity to learn more about the Coolidge Connector. Most important, the group would have the opportunity to provide their perspective on the key issues that VELCO should consider if VELCO determines that building the Coolidge Connector is a viable option for resolving the Southern Loop Problem Statement.

Dean LaForest from VELCO presented a short slide presentation that showed the group various types of equipment used by VELCO for 345kV transmission construction (Dean explained to the group that – as was described to the Southern Loop Community Working Group – if the Coolidge Connector is built, it would be built to accommodate 345kV, with the existing 345kV line switched over to run at 115kV. As Dean described it, the existing 345kV line carries a large proportion of Vermont's electricity and, from a system reliability standpoint, it would be best to run this critical 345kV circuit on new equipment and operate the 115kV circuit on the existing, 35 year-old structure that is in operation today).

Throughout Dean's presentation the group was invited to ask questions. Among the issues raised were the following:

Q: If the distance from the center of the existing 345kV structure needs to be approximately 100 feet from the center of the new structure, approximately how many feet of additional clearance will you need in order to construct the new line?

A: Approximately 75 feet of the existing right of way would need to be cleared and maintained.

Q: How high would the poles be and how high are the existing 345kV structures?

A: The existing structures are between 70 and 80 feet tall. The new structures would be similar in height but may be required to be up to 85 feet tall.

Q: Why do you need to clear so much additional right of way?

A: The guidelines set by the National Electric Reliability Council (NERC) for tree clearances have become much more stringent in recent years. VELCO has very little, if any, discretion in following these standards.

- Q: Can you use shorter poles?
- A: There are minimum pole heights required to carry 345kV from which we cannot deviate. The big “trade off” is between the heights of the poles used for this kind of voltage versus the number of poles used. If shorter poles are used, we would be required to use more poles throughout the corridor. This has implications for the cost of the project as well as other types of aesthetic concerns. Also, using taller poles could possibly reduce the number of additional trees that need to be cleared within the right of way.
- Q: Do wood poles hold up better than steel poles? I recently heard of a situation up in Canada in which, during severe weather, wood poles fared better than steel.
- A: Wood poles do not necessarily perform better than steel poles and our experience is that steel generally performs better than wood for this type of line. In Canada, the problem was due in part to the fact that they did not properly use “dead end” poles where those poles should have been used. We will post samples of dead end poles on the Coolidge Connector web page (these images may be found by going to <http://www.velco.com/Templates/default.asp?pageId=95> and clicking on the links at the bottom of that page).
- Q: Do we need to upgrade the electric grid with a new 115kV transmission line if a proposed wood-fired power plant is built near Ludlow?
- A: It is conceivable that the wood-fired plant, if built, could be integrated to the existing utility infrastructure without requiring a new 115kV line. The plant could be connected to the local 46 kV network, tie into a new radial 4 mile 115 kV line that would terminate at the VELCO Coolidge station or could tie into the new 115 kV line proposed with the Coolidge Connector Project. However, in the absence of any of these options, VELCO would have serious reservations about tying the new plant into the grid via the existing 345kV transmission line between Vermont Yankee and Coolidge. This direct feed from the Ludlow plant onto such a key piece of Vermont’s transmission infrastructure carries many risks for the entire state that would need to be examined in great detail before it were attempted. If the connection were made between the power plant and the existing 345kV line, a new, large substation near Ludlow would need to be constructed.

VELCO's representatives were asked to identify for the group, in broad, conceptual terms, the factors and considerations that VELCO uses when considering any new transmission facility. The factors and considerations identified were (these are not listed in order of importance):

- ✓ The reliability of the transmission grid
- ✓ The need for the project, including an analysis of non-transmission alternatives
- ✓ Engineering standards and regulations
- ✓ Public and worker safety (for both construction and maintenance)
- ✓ NERC standards for right of way clearances
- ✓ Environmental issues
- ✓ Archaeology
- ✓ Health issues (including electromagnetic fields)
- ✓ Costs and ratepayer impacts
- ✓ Efficiency
- ✓ Aesthetics
- ✓ Obtaining meaningful input from potentially affected stakeholders, including (but not limited to) adjacent landowners and municipalities
- ✓ The possibility of underground construction
- ✓ Air emissions
- ✓ Noise

The group then identified the key issues and critical factors that VELCO should consider in analyzing the Coolidge Connector. The most important issues identified were (these are not listed in order of importance):

- Health issues
- Benefits of the new line (including economic or other benefits to local communities located near the line)
- Aesthetics
- How will this new line fit in with Vermont's stated long-term goal to be energy self-sufficient?
- What impact will this new line have on Vermont's ability to generate new jobs and sustain its economy? This impact needs to be understood so that it can be balanced against other important issues, such as aesthetics and environmental impacts
- Vermonters need to be able to understand and trust the process by which the Southern Loop public involvement process was conducted (which produced the Coolidge Connector recommendation) as well as the current outreach process being conducted regarding the Coolidge Connector. This includes explaining the "needs analysis" for the Coolidge Connector as well as ensuring that people have had a meaningful opportunity to be heard and to have input.

The group also identified the following issues as being important but not as critical as those listed immediately above:

- Will there be any radio frequency interference as a result of the line?
- Impact on existing or potential recreational uses of VELCO’s right of way
- Could the new or existing poles be used as cellular phone towers?
- How does the construction or failure to construct the new line fit in with the Federal Energy Regulatory Commission’s new guidelines (promulgated under the Energy Policy Act of 2005) regarding the need for new electric transmission facilities and the ability of FERC to exercise federal jurisdiction to trump local decision making regarding these new facilities?
- What are the applicable engineering standards and how will these affect the aesthetics of what would be built?
- Should we consider underground in certain key areas
- Are we being forward-looking in our planning for the state’s economic well-being?

The group was asked what they thought had gone well during today’s meeting and what they would have liked to have seen done differently. The group noted the following in this “Plus/Delta” exercise:

<u>Plus</u>	<u>Delta</u>
Meeting was productive	Not enough bottled water
The creation and discussion of the key issues for VELCO’s consideration	Not enough members attended
Good job of balancing presentation with member discussion	Perhaps we should meet at the southern end of the CC
Didn’t use <u>too</u> many acronyms or industry jargon	Utility representatives still used too many technical terms and industry jargon and did not do a sufficient job of explaining issues in lay person’s terms

The next CCCWG meeting will be held on **Monday, February 26, 2007** from 4 – 6 p.m. in the Cavendish Town Hall, which is located at 37 High Street in Cavendish (upon turning onto High Street from Main Street (Vermont Route 131) in the center of Cavendish village, the Town Hall is the first building on the left, a one story brick building with green shutters. It is near Mack Molding and the Cavendish Fire House). Staff from La Capra Associates will be on hand to present the results of their non transmission alternatives analysis for the Coolidge Connector.