

# VERMONT SYSTEM PLANNING COMMITTEE

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## COMMITTEE REPORTS PUBLIC SERVICE BOARD WORKSHOP MARCH 25, 2009

### INTRODUCTION

- The 2009 Long-Range Transmission Plan is the true beginning of the first full cycle under the MOU. In a sense, the work thus far has been organization and prelude, and the real test of the process will begin once the Plan is filed 7/1/09.
- Evaluation of the process is required in the second half of 2009. This workshop is preliminary to that deliberate review process, for which VSPC has a plan in place that reaches out via Subcommittees, Sectors and non-participating Parties to 7081.
- The greatest tangible result of the process so far has been the significant increase it has produced in communication and collaboration across stakeholder groups. Examples: Energy Efficiency & Forecasting coordination between utilities and Efficiency Vermont; formalization of VELCO Operating Committee process (VTAM) as a means of working out disputes among utilities (see <http://opcom.velco.com/default.aspx>).

### ENERGY EFFICIENCY AND FORECASTING

**Purpose:** Provide VSPC with technical guidelines and best practices for developing load forecasts Integrating DSM and DR into peak load forecasts and providing context for such forecasts.

#### **Key Activities:**

- Provided input regarding assumptions and forecast approach proposed by ITRON;
- Participated in creation of Load Zones for purpose of developing VELCO load forecast and F20; and
- Provided guidance to EVT in development of F20.
  - Note: Itron forecast was close to completion prior to F20 – limits of coordination for this iteration will be outlined.

#### **Future Activities:**

- Review and comment on completed F20
  - Include recommendations of how F20 load reductions based on ISO-NE definitions should be translated to VELCO definitions of peak;
- Set framework to further improve coordination of VELCO load forecast with F20
  - Understanding of differing methodologies; and
- Identify and/or develop key baseline assumptions with a goal of recommending guidelines to VSPC for all VT forecasting
  - Short term, long term assumptions
  - Regarding different resources/trends effect peak load FCM
    - Other DR Resources
    - CPP and AMI
    - Customer Cited Renewables
    - CHP
    - Trends that may increase load (Heat Pumps, Plug-in cars)
  - Prior to development of next ITRON forecast

## GENERATION

### **Purpose:**

1. Developing generic generation costs and market revenue estimates related to potential generation resources to be utilized in the detailed Non-Transmission Alternative (NTA) Analyses.
  - Evaluating and updating these generic assumptions as appropriate.
  
2. Developing criteria and standards to be used by VELCO and/or lead Distribution Utilities (DU's) in the completion of Detailed NTA analyses to help guide the level of effort that should be exerted in evaluating specific generation alternatives within the detailed NTA analysis.
  - Developing and maintaining lists of viable generation options within each load zone identified by VELCO.
  - Identifying fuel, size, or other restrictions to generation development in specific regions of Vermont.
  - Developing and maintaining protocols for treatment of distributed generation resources such as Combined Heat & Power (CHP), solar, residential wind, etc. within NTA analyses.
  - Reviewing and assessing the reasonableness of the generation assumptions for new and existing resources in VELCO's load flow model.
  - Evaluating treatment of existing generation to insure accurate outage rate estimates.
  - Providing guidance related to inclusion of future generation proposals.
  - Providing input into equivalence determinations.
  
3. Acting as the entity that receives "open door" proposals within the VSPC, and provides VELCO and/or Lead DU's with recommendations (based on the committee's evaluation of technical, economic, feasibility, or other considerations) related to inclusion of such proposals in future long range transmission planning assumptions and detailed NTA Analyses.
  - Acting as a sounding board and clearing house for information related to detailed NTA generation analyses on specific projects when requested.
  - Receive presentations from lead DU's on generation option analyses, and provide feedback on assumptions.
  - Provide information on potential or known generation options.

### **Key Activities:**

- Study performed by Concentric Energy Advisors and sponsored by CVPS, GMP, VPPSA, VEC, WEC (available on CVPS web site) – Charter #1 - Charter #2 (a),(b)
- Meeting in late summer 2008 with VELCO on how generation is modeled in transmission planning – Charter #2 (d), (g), and (e)
- No items yet brought before group with regard to generation proposals – Charter #3
- Cost of generation / generation assumptions have not yet been a potential deciding criteria in any projects reviewed by the VSPC to-date

### **Future Activities:**

- Continue discussions with VELCO related to generation resource modeling in the Long Range Transmission Plan analysis - Charter #2 (d), (g), and (e)
- Look into the potential of integrating responses to recent CVPS, GMP, and VEC solicitation of 100 mW of generation with CEA studies to strengthen generic generation assumptions. Confidentiality issues may exist.
- Consider a charter change, given the limited time of committee members to develop assumptions on a recurring basis, to focus the generation committee tasks on reviewing generation-related

assumptions in specific NTA analyses for reasonableness in light of then available information as an individual NTA analysis is advanced rather than on the development of standardized generation assumptions in advance of NTA analyses.

## PUBLIC PARTICIPATION

**Purpose:** The charter for the Public Participation Subcommittee describes its role as “a resource in the development, implementation and evaluation of public involvement with the Vermont System Planning Committee (VSPC).” Tasks include:

- Consulting with VELCO in planning public involvement in the Long-Range Transmission Plan;
- Consulting with utilities (including VELCO) in public involvement in the project-specific Detailed NTA Analysis and Solution Selection; and
- Monitoring VSPC-related public outreach to ensure it is designed and implemented consistent with the principles in the Docket 7081 MOU.

### **Key Activities:**

- Compliance with VSPC open meeting obligations;
- VSPC internal and external communications and meeting format options;
- The VSPC web site content and design;
- A VSPC public information packet for distribution at conferences and via the web site;
- Accuracy of content in informational materials (and the value of “apples to apples” comparison of proposals);

Early in 2008, subcommittee members provided updates on the public involvement efforts for the Gorge Area Reinforcement Project, the Southern Loop and “Vermont’s Energy Future.” From these and other experiences, the subcommittee identified barriers to effective public participation and came up with ideas for improved communication.

### **Barriers:**

- The technical language of transmission planning that makes it difficult for the general public to understand;
- Getting the public interested and involved in planning processes early and ongoing; and
- Assuring a good cross section of public opinion.

During 2008, the Public Participation Subcommittee has reviewed VELCO plans for public outreach on the Long-range Transmission Plan and has provided input on scheduling and potential communication approaches. At the February 13, 2009 subcommittee meeting Heidi Klein from the Snelling Center presented a draft of the proposed design for outreach on the VELCO plan. Several ideas were generated at this meeting and subsequent VSPC meetings—including arranging for utility representation at information kiosks.

### **Ideas for improvement:**

- Use of Web based interactive process;
- Use of newspapers, newsletters, radio, etc. to get the message out;
- Identifying contact groups: regional planning commissions and town planners, municipal boards, business groups, town energy committees and “Front Porch Forums”; and
- VSPC participation in conferences and workshops. (The VSPC had information booths at the Vermont League of Cities and Towns Fair in Killington and at the 7<sup>th</sup> Annual Renewable Energy Conference and Trade Show in Burlington—both in October of 2008.)

### **Future Activities:**

- Supporting stronger public member representation and participation on the VSPC and in subcommittees;
- Strengthening the perception of the VSPC as an independent entity by developing public outreach materials specifically for committee use;

- Creating a 2009 newsletter;
- Use of media to get information out on a regular basis rather than only when controversy erupts, by using planned op-eds and letters to the editor, radio talk shows and production of cable access TV shows; and
- Critique and evaluation of the VSPC process.

## PROCEDURES

### **Purpose/Key Activities:**

- Develop VSPC governance rules of procedure; and
- Develop draft confidential information protocols to allow sharing of competitively sensitive and proprietary information among VSPC participants.

### **Future Activities:**

- Develop road-map and flow-chart to simplify Docket 7081 MOU parties' obligations.

## TRANSMISSION

### **Purpose:**

- Provides a forum for in-depth discussions of planning studies and other transmission issues;
- Facilitates coordination of system model updates; and
- Advises the VSPC regarding transmission planning studies, analyses of non-transmission alternatives, and other matters related to transmission.

### **Key Activities:**

- Agreed on the role of the sub-committee;
- Reviewed the project list in 2006 plan including Attachment F (studies listed in the MOU);
- Discussed the Middlebury transmission planning study;
- Participated in the creation of the load zones;
- Reviewed the assumptions and load forecast approach proposed by ITRON;
- Reviewed the DSM forecast approach proposed by EVT; and
- Discussed the process for updating the system model.

### **Future Activities:**

- Subcommittee will meet as needed by VSPC.
- Some limiting factors include:
  - Preference for engaging the entire VSPC on review of NTA screenings and analysis
  - Limitations on posting detailed analyses that contain Critical Energy Infrastructure Information.

## TECHNICAL COORDINATING

### **Purpose:**

- Act as a bridge among the various other subcommittees and to explore crosscutting and overlapping issues that may come before the other subcommittees and the full committee.
- Filter for the work of other committees, assisting in framing issues for consideration by the VSPC.
- Provide guidance on all cross-cutting, detailed technical assumptions.
- Help to set work priorities of the other subgroups to fit the needs of other subcommittees.
- Serve as a bridge between the individual utilities and the subgroups on issues.
- Review the assignments/responsibilities of the other standing subcommittees for overlap.
- Frame for VSPC consideration issues of general concern such as equivalence and cost.
- Recommend additional subcommittee study groups.

**Deliverables:**

- The agenda, meeting plan and materials for each meeting of the full VSPC.
- Take action between meetings as needed with ratification by the full VSPC at next meeting.

**Accomplishments to date:**

- Clarified and refined the process for VSPC consideration of the LRTP.
- Managed process for reviews of NTA screening for St. Johnsbury and Middlebury reliability issues.
- Coordinated filings with PSB required by MOU.
- Prepared agendas and materials for all VSPC meetings.
- Letter to ISO-NE regarding funding parity for NTAs. Follow-up meeting planned for September 2009.

**Next steps/emerging issues.**

- After filing of LRTP, preparation of Project Priority list, which will drive the 7081 process for identified reliability deficiencies.
- Preparation for 2009 evaluation of 7081 MOU.
- Determine how to handle the requirement for an updated evaluation of DSM potential in 2010.
- **Further discussion of the NTA screening and analysis process and its underlying assumptions.**

**VSPC ADMINISTRATION**

- VELCO is providing staff support through Kim Pritchard and Deena Frankel.
- Direct costs have been limited so far. Mainly the costs of the meetings.
- Website serves as the communications hub. Outside VELCO's firewall on a third-party server.
- Process and tools well in place: effective phones system for telephone participation in meetings; refinement of rules of procedure to facilitate proxies and more nimble agenda; two-year schedule of dates and rotation of locations established.

Schedule of public outreach meetings on the 2009 Vermont Long-Range Transmission Plan – Public Review Draft.

- **Monday, April 27 at 5:30 pm**  
Holiday Inn, Rutland
- **Wednesday, April 29 at 5:30 pm**  
Lake Morey Resort, Fairlee
- **Tuesday, May 5 at 5:30 pm**  
Sheraton Hotel, Burlington
- **Thursday, May 7 at 5:30 pm**  
Catamount Arts Academy, St. Johnsbury
- **Wednesday, May 13 at 5:30 pm**  
Marlboro Tech Center, Brattleboro
- **Monday, May 18 at 1:30 pm**  
VT College of Fine Arts, Montpelier

# VERMONT SYSTEM PLANNING COMMITTEE

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## PUBLIC SERVICE BOARD WORKSHOP RESPONSES TO QUESTIONS FROM THE BOARD MARCH 25, 2009

### Question 1:

The progress, if any, in addressing issues related to the funding of non-transmission alternatives.

### Response:

#### **Regional funding**

ISO-NE has a regional transmission organization (RTO) open access transmission tariff (OATT) covering the bulk facilities (high voltage network and some ties) and lower voltage facilities. The bulk facilities, Pool Transmission Facilities (PTF) and Highgate, are bundled into a single revenue requirements pot for rate purposes under the Regional Network Service (RNS). The other non-PTF transmission facilities are covered in Local Network Service (LNS) Tariffs including the Vermont sub-transmission owned by CVPS, GMP and VEC.

New facilities for regional reliability are generally included in the RNS rate. During the stakeholders' formation of the RTO OATT, a coalition of Vermont regulators and utilities offered a "Vt Strawman." That model proposed a regionalized cost system (all costs in a single pot) that included cost recovery of any resource including NTAs that solved the network reliability problem whether the resource was transmission, generation, energy efficiency, or some combination, *i.e.*, resource parity. That proposal was rejected by the majority of participants in the stakeholder process and was not included in the RTO proposal which the FERC subsequently approved.

Much later the power supply market system, originally designed with a locational marginal energy price (LMP) composed of losses and production costs, was revised to include production capacity charges. The Forward Capacity Market (FCM) was set up with a transitional price curve leading to a capacity auction system to set capacity prices. The Vermont regulators were successful in requesting resource parity for production capacity so that demand resources (DR) could participate in the FCM auctions. (Some critics want to reconstitute loads after 2012 so that DR doesn't reduce load FCM payment obligations while also garnering FCM payments.)

So in terms of regional cost support reliability related transmission is funded by all loads through RNS rates. Generation receives market support including LMP, capacity and ancillary services. Demand resources provide reductions in local market products by reducing needed generation costs and local losses, and currently they also receive FCM payments if verified.

Last Fall the VSPC requested a discussion with ISO-NE to reconsider the subject of regional cost support for regional network reliability NTAs and ISO-NE has offered to have Stephen Rourke represent them in this discussion. The expected next step is a meeting with Vermont stakeholders and Mr. Rourke. No other stakeholder in New England appears to be pursuing this topic at this time. The VSPC is planning for this effort and will engage the Public Service Board to see if they would like to participate.

## **Vermont DU Cost Allocation**

The Docket 7081 MOU put principles in place to allocate NTA costs among beneficiaries in a manner similar to the way transmission costs are allocated under the VTA. Non-transmission reliability costs (*i.e.*, total costs less avoided costs and other benefits or payments) were deemed allocated in a similar way, unless some other mutually agreed cost allocation was implemented. A few transmission-only projects have been allocated via settlement agreements, but no non-NTA costs have yet to be allocated under the Docket 7081 rubric. There is a Coolidge Connector demand response program being implemented along with other DR programs. While CVPS thinks that DR is part of the Coolidge Connector project and is implementing OP4 DR for that purpose, there is not general agreement among the DUs that DR for the Coolidge Connector is an NTA; which DUs are affected utilities; and there is no agreement to define cost allocation. If this issue remains unresolved, the affected utilities may seek resolution by the PSB.

## **NTA Incentives for Distributed Generation Developers**

NTAs can and are deferring some transmission projects. For example the upgrade of the CVPS Sothern Loop from Newfane to Bennington is being avoided by the support provided by CVPS's investment in a new \$11 million synchronous condenser, the establishment of an effort to seek local CHP investments, geo-targeted energy efficiency programs, and price induced conservation along with the deferral of growth plans in response to the recession. The Docket 7081 MOU establishes procedures for these types of strategies to be considered in the resolution of reliability deficiencies and defines cost allocation and recovery processes for attendant costs. *See* Docket 7081 MOU at ¶¶ 57(b), 106 and 113(hh). If and when distributed generation is necessary to help garner benefits via project deferral, specific strategies will need to be developed and approved under these Docket 7081 policies including Board review to help clarify the recovery of the cost for any needed reliability payments. Reliance on DG and other NTAs to resolve reliability deficiencies can require problem specific strategies and the VSPC, its participants and the Board will need to remain flexible in order to fashion and approve project specific strategies that best fit the circumstances and structures of any recommended solutions.

## **Question 2:**

Discuss the potential use of federal stimulus funds for transmission projects and non-transmission alternatives.

## **Response:**

### **Transmission Project Support –**

The American Recovery and Investment Act of 2009 has several provisions which could impact Transmission and Non-Transmission Alternatives (“NTA”s). The Act provides 4.5 billion to the Office of Electricity Delivery and Energy Storage for grid modernization and related technologies, such as electricity storage. It also makes funds available for the smart grid and grid modernization provisions of EISA (Title 13).

Title 13 authorized the Secretary of Energy to carry out a program to develop advanced measurement techniques for peak load reduction and savings from smart metering, demand response, distributed generation. Also it allowed for the development of a Smart Grid regional demonstration initiative.

The 4.5 billion of stimulus funds are to be awarded in competitive grants. The Vermont utilities and VELCO are meeting to develop a grant proposal to submit to DOE, which will target these funds as well as some telecom stimulus dollars. This proposal is being developed with the VTA to be submitted through the State stimulus office by April 15.

ARRA also provides \$6.0 billion for a “temporary program for rapid deployment of renewable energy and electric power transmission.” The appropriations are expected to leverage more than \$60 billion in loan guarantees for transmission grid construction that supports renewable energy projects. This provision complements the \$4.5 billion provided for smart grid research and planning, noted above. This new loan guarantee program expands the existing innovative technology loan guarantee program created by EPAct2005 (Title 17). While the program set up in EPAct2005 is limited to supporting “pre-commercial” innovative technology, the new program can also support commercial technology used for transmission and renewable electricity projects. Qualifying projects must be capable of starting construction no later than September 30, 2011.

#### **NTA Support –**

Opportunities for support for NTA generation are available through the Clean Energy Development fund. This fund is managed by the Department and the current plan is to flow most of the “formula grant” stimulus funds through the CEDF. The current plan is to increase the size eligibility guidelines for systems eligible for funding. If the stars align, a first award of grants could be made this week. One of the criteria used by the CEDF selection committee in evaluating projects is location on the electric grid. The final disposition of the formula grant funds has not been finalized and pressure from a number of areas may result in changes to this allocation. In any event, the CEDF will have its annual budget of about \$4 million to support projects.

ARRA provides for nonprofit entities, \$1.6 billion of new clean renewable energy bonds would be authorized to finance facilities that generate electricity from wind, closed-loop biomass, openloop biomass, geothermal, small irrigation, hydropower, landfill gas, marine renewable, and municipal waste (trash) combustion facilities. Of the \$1.6 billion authorization for such projects, one-third would be available to state and local governments, one-third to public power providers, and one-third to electric cooperatives.

# VERMONT SYSTEM PLANNING COMMITTEE

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## SUBCOMMITTEE MEMBERS

### Energy Efficiency & Forecasting:

James Gibbons, BED –Chair  
Janet Bombardier, IBM  
Doug Smith, GMP

### Generation:

James Gibbons, BED – Chair  
Janet Bombardier, IBM  
John Spencer, VEPPI  
Doug Smith, GMP  
Eileen Simolardes, VGS  
Dave Lamont, VT DPS  
Ron Gagnon, Barton  
Patty Richards, VPPSA

### Public Participation

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Mary Sullivan, BED  
James Moore, VPIRG  
Jack Collins, Ludlow Electric  
Steve Costello, CVPS  
Kim Jones CVPS  
Deena Frankel, VELCO  
Hantz Pr sum , VELCO  
Molly Hooker Hatfield, Efficiency Vermont  
Dottie Schnure, GMP

### Procedures

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Morris Silver, CVPS  
Dean LaForest, VELCO

### Transmission

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Doug Smith, GMP  
Terry Cecchini, GMP  
Munir Kasti, BED  
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### Technical Coordinating

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Munir Kasti, BED  
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