

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Docket No. 7081

**Investigation into Least-Cost Integrated Resource §
Planning for Vermont Electric Power Company, Inc.'s §
Transmission System §**

REBUTTAL TESTIMONY

OF

PAUL R. PETERSON

ON BEHALF OF

CONSERVATION LAW FOUNDATION

November 28, 2006

1 **Q. Mr. Peterson, please state your name and business address.**

2 A. My name is Paul R. Peterson. I am a Senior Associate at Synapse Energy
3 Economics, Inc., 22 Pearl Street, Cambridge, MA 02139.

4 **Q. On whose behalf are you testifying in this case?**

5 A. I am testifying on behalf of the Conservation Law Foundation.

6 **Q. Mr. Peterson, have you testified in this proceeding?**

7 A. Yes. I filed direct testimony on October 26, 2006. In that testimony I
8 summarized my professional experience and provided a copy of my current
9 resume.

10 **Q. What is the purpose of your rebuttal testimony?**

11 A. I am responding to the prefiled testimony of Mr. Bruce Bentley, on behalf of
12 Central Vermont Public Service Corporation (CVPS), Mr. Dean LaForest, on
13 behalf of Vermont Electric Power Company, Inc. (VELCO), Mr. Riley Allen, on
14 behalf of the Vermont Department of Public Service (DPS), and Mr. Duncan
15 Hastings on behalf of the Village of Johnson Water & Light Department. My
16 rebuttal testimony responds to issues raised in their testimony and shows how the
17 MOU fails to meet the goals set out by the Board for this docket, how their
18 testimony confirms this failure, and how doing nothing as recommended by the
19 Village of Johnson does not meet the goals set out for this proceeding. I conclude
20 with a recommendation that the Board not adopt the MOU as it will not meet the
21 needs of Vermont to have a process that will ensure fair evaluation of
22 transmission and non transmission alternatives and ensure that electricity
23 reliability needs will be met at least cost as required by Vermont law. Instead, the
24 Board should require parties to present a revised process that will address the
25 deficiencies identified in the MOU.

1 **Q. What concerns do you have with Mr. Bentley's testimony?**

2 A. Mr. Bentley's testimony simply summarizes the Planning Steps 7, 8, and 9 of the
3 MOU. It lacks analysis or explanation of why these planning steps create a
4 process that will evaluate non-transmission alternatives (NTAs) on a comparable
5 basis with transmission facilities to ensure that Vermont's electricity is reliably
6 transmitted at least cost. The testimony provides no information for the Board to
7 substantively evaluate the MOU and it fails to provide any basis for the Board to
8 accept the MOU or determine that it presents a process that meets the objectives
9 of this proceeding. It merely concludes that the process in the MOU will be more
10 "transparent" and more "efficient" but it fails to articulate how these changes will
11 provide a better result instead of simply adding more process that will continue
12 the current flawed analysis. In fact, Mr. Bentley's testimony does not even refer
13 to the adoption of least-cost solutions.

14 **Q. What concerns do you have with Mr. LaForest's testimony?**

15 A. Similar to Mr. Bentley's testimony, Mr. LaForest's testimony also provides only a
16 description of the MOU process with no analysis of how the process will achieve
17 the objective of selecting least-cost solutions. It fails to provide any basis for the
18 Board to accept the MOU. It simply states there will be a more comprehensive
19 planning process that will consider NTAs and that there will be a transparent and
20 meaningful level of public involvement in the process (prefiled at p.2). However,
21 the testimony fails entirely to address how the planning process described will be
22 more comprehensive or how the public involvement will be meaningful. As with
23 Mr. Bentley's testimony, it is worth noting that except for the docket caption, Mr.
24 LaForest's testimony also fails to contain the phrase "least-cost."

25 **Q. Please describe your concerns with Mr. Allen's testimony.**

26 A. Mr. Allen's testimony also fails to provide a basis for the Board to approve the
27 MOU, or show how the MOU will meet the Board's objectives in this
28 investigation. Although it provides slightly more analysis than Mr. Bentley's or

1 Mr. LaForest's testimony, its focus is on the process's providing more effective
2 coordination and improved information sharing, as well as the greater cooperation
3 among utilities and transparency that the VSPC is supposedly designed to provide
4 (Allen prefiled at p.5). While these may be worthwhile improvements to the
5 current transmission planning process, they do not advance the fundamental goal
6 of the Board's investigation: that transmission and non-transmission alternatives
7 are fairly and comparably evaluated in order to select an optimal, least-cost
8 solution. Absent analysis or explanation of how the changes will allow least cost
9 solutions to be effectively evaluated and implemented, the testimony fails provide
10 a basis to approve the MOU.

11 **Q. Are there specific portions of Mr. Allen's testimony that you dispute? If so,**
12 **what are they?**

13 A. Yes. I disagree with Mr. Allen's characterization of and recommendation
14 regarding the evaluative test for selecting least-cost alternatives; his assessment of
15 the ability of the VSPC to evaluate and select alternatives; his dismissal of the
16 importance of equivalent funding for NTAs; and his rejection of integrated
17 resource plans in the absence of an effective structure for evaluating and
18 implementing least cost solutions.

19 **Q. What are your concerns about the evaluative test for selecting least-cost**
20 **alternatives?**

21 A. As Mr. Allen recognizes, the societal test is "the principle touchstone in project
22 evaluation and selection" in Vermont, and that it is "critical that total costs . . . be
23 included in the evaluation of the alternatives" (Allen prefiled at p.8). His
24 testimony supporting the use of other tests to evaluate resource selection runs
25 afoul of this principle and cannot be accepted without abandoning the requirement
26 of providing energy services at least cost. As I stated in my prefiled testimony,
27 the societal test is well-established in Board precedent as the standard for meeting
28 least-cost planning requirements. Shortly after the Board articulated the societal

1 test as the primary standard for evaluating utility investment in demand side
2 measures in its April 1991 Order in Docket No. 5270, the legislature codified that
3 standard in 30 VSA 218c(a)(1).

4 The MOU departs from using the societal test to evaluate resource options and
5 instead identifies several alternative considerations in paragraph 40. Other than
6 40 (c), which I will discuss below, these other tests and evaluations may provide
7 additional insight on subsidiary matters, but they are not determinative as to
8 which alternative is the “least cost” solution or investment. A test, such as the
9 societal test, that considers all costs (or “total costs” as Mr. Allen states it) cannot
10 be subordinated to tests that look only at particular costs. If other tests were used
11 instead of the societal test, which considers all costs, then there would be no
12 assurance that the alternative selected is the “least-cost” option within the
13 meaning of Vermont statute and Board case law.

14 **Q. What is your concern with regard to sub- paragraph 40 (c) of the MOU?**

15 A. Sub-paragraph 40 (c) states that when comparing alternatives, the ability to
16 implement an alternative in a timely manner should be considered. While timely
17 implementation may be an import issue, it is not appropriate to include it in an
18 initial comparative evaluation between alternatives. Implementation issues
19 should be considered in a separate process after the comparative analysis of the
20 alternatives has been completed. Considering the timeliness of implementation at
21 this stage would invite either intentional or unintentional delay to subvert
22 acquiring a least cost option. It could also take out of consideration options that
23 other parties or the Board might find ways to accelerate so that they were timely,
24 after all.

25 **Q. What is your recommendation to the Board in light of Mr. Allen’s testimony**
26 **on the societal test?**

27 A. I recommend that the Board reaffirm that the relevant evaluative standard for
28 choosing among transmission and non-transmission alternatives is the societal

1 test. The language in paragraph 40 of the MOU should state that the analysis
2 specified under 30 VSA section 218c(a)(1) is the societal test and that this test
3 cannot be supplanted by other analyses. Once this change is made to paragraph
4 40, then the language in paragraphs 41 and 42 that transfer the language of
5 paragraph 40 to the Docket 5980 and Docket 6290 MOUs can stand. If the Board
6 does not change the language to paragraph 40 to make it clear that the societal test
7 is the evaluative standard, then the language in paragraphs 41 and 42 will weaken
8 the evaluations conducted pursuant to those other MOUs. It certainly would be an
9 unfortunate irony if this proceeding, intended to incorporate the principles of least
10 cost planning to solutions for transmission problems, results in eroding the least
11 cost standard in other settled dockets. The fact that the MOU attempts to do this
12 is further evidence of the MOU's failure to meet the Board's objectives for
13 transmission planning and must be rejected.

14 **Q. What are your concerns regarding the ability of the VSPC to evaluate and**
15 **select alternatives?**

16 A. Mr. Allen states that the VSPC's fundamental design is to bridge gaps and
17 facilitate better cooperation and coordination among distribution utilities and
18 VELCO. (Allen prefiled at p.15) However, Mr. Allen fails entirely to
19 demonstrate that the VSPC, as set forth in the MOU, will result in fairer or more
20 effective evaluation and implementation of least cost transmission alternatives.
21 As structured in the MOU, the VSPC will not meet the objectives set forth for this
22 proceeding and should be rejected.

23 The MOU sets forth a very narrow and limited view of what a VSPC or similar
24 independent entity should be designed to achieve. To meet the objectives of this
25 proceeding, the VSPC should be designed to develop and evaluate alternatives to
26 traditional transmission solutions. This is broader and more substantive than the
27 "coordination and cooperation" function set forth in the MOU. With a

1 substantive function and properly structured, such a body could actually advance
2 the objectives of this docket.

3 However, apart from the substantive function of the VSPC, the proposed structure
4 of the VSPC also shows that it will fail to meet the objectives of this proceeding.
5 Mr. Allen's testimony fails to demonstrate that the VSPC structure will provide
6 for better transmission planning and better evaluation and implementation of non-
7 transmission alternatives. First, there is no showing that the three public members
8 of the VSPC will in any way be able to improve the evaluation and
9 implementation of least cost alternatives. They will always be a small minority
10 and as such unlikely to have any significant impact on the VSPC evaluation and
11 selection process. Second, the VSPC itself lacks any independence that would
12 enable it to enhance the evaluation and selection process. The structure merely
13 advances the existing utility interests which are already represented, and
14 controlling, in the existing process. There are no provisions in the MOU for the
15 VSPC (including the three public members) to have access to independent
16 analyses or to contract with outside entities to enhance the VSPC's understanding
17 of problems and possible alternatives. In my view, the proposed VSPC structure
18 will continue the existing structure that advances traditional utility solutions for
19 transmission problems. The public members of the VSPC, who serve essentially
20 as uncompensated volunteers, will be severely disadvantaged in evaluating and
21 advocating for appropriate non transmission alternatives in meetings and
22 deliberations dominated by professional utility transmission planners that are
23 being compensated by their respective companies. While the proposed VSPC
24 might or might not succeed in lessening "turf" battles between VELCO and the
25 distribution utilities, there is no showing that the VSPC will change the current
26 inability of Vermont utilities to evaluate least cost solutions that incorporate
27 NTAs in a timely manner. The Northwest Reliability Project is the most recent
28 example of the inability to effectively evaluate and implement least cost
29 transmission solutions. The structure of the VSPC as proposed in the MOU does

1 nothing to address this historic and significant shortcoming that leads to
2 traditional transmission solutions being favored even when they are not the least
3 cost solution.

4 **Q. What is your recommendation to the Board regarding the VSPC?**

5 A. As explained more fully in my direct testimony, I recommend that the Board
6 either re-structure the VSPC into a three member board with greater authority, or
7 create a separate independent entity that has explicit authority to evaluate and
8 select least cost options that become recommendations for VELCO and the
9 distribution utilities implement. An independent entity with responsibility to
10 ensure a fair evaluation of non transmission alternatives should have its own
11 budget, the authority to bill costs to the Vermont utilities, the authority to engage
12 outside consultants to provide analysis and evaluations, the power to compel
13 people to appear and to provide information, and the ability to utilize the planning
14 resources of VELCO and the DUs to model alternative scenarios. These are
15 minimum requirements for the successful development, review, and selection of
16 least cost solutions as they would ensure an independent evaluation and the
17 information needed to inform that.

18 **Q. Apart from restructuring the VSPC, are there other means that could**
19 **improve the evaluation and implementation of NTAs?**

20 A. Yes. If the Board is to use the proposed structure of the MOU, the efficiency
21 utility should have an expanded role in evaluating and implementing NTAs. In
22 particular, the efficiency utility should be responsible for evaluating all
23 alternatives on the customer side of the meter that would potentially avoid or
24 delay transmission projects. As the entity responsible for evaluating and
25 implementing cost-effective energy efficiency measures throughout the state, the
26 efficiency utility is well positioned to evaluate all customer based alternatives
27 (efficiency, load management, and generation) that would be available. The
28 efficiency utility can expand upon its current experience in evaluating how best to

1 meet customer energy needs to include a broader range of efficiency measures
2 than are currently provided as well as customer load management and generation
3 options. This is a logical extension of its existing expertise and experience.
4 Moreover, this is precisely what many Efficiency Service Companies (ESCOs)
5 already do. Since Vermont already has an efficiency utility, its expertise should
6 be used to improve the evaluation and implementation of NTAs throughout
7 Vermont. This can be achieved by expanding the role of the efficiency utility to
8 one that includes a broader evaluation of energy efficiency, load management,
9 and generation options on the customer side of the meter for all potential
10 reliability deficiencies.

11 **Q. What are your concerns about the importance of equivalent funding for**
12 **NTAs?**

13 A. Mr. Allen notes that for some Vermont transmission projects, region-wide
14 funding is available and that this option is not available for NTAs. He then states
15 that this is an issue beyond the scope of the MOU. (Allen prefiled at 18-19) Mr.
16 Allen ignores the language in Act 61 that specifically requires the Department and
17 Vermont utilities to advocate for regional cost support for least cost solutions.
18 Act 61 Sec. 8. This is not an issue that can be left outside the scope of the MOU
19 because it is so basic to the comparative analysis of alternative options. Even if
20 the legislature had not specifically identified the importance of this issue, its
21 inclusion in the MOU would be necessary. Creative solutions to the current
22 unequal funding situation need to be developed before any new process can meet
23 the goal that Mr. Allen claims the Board established when it opened this
24 investigation: “that cost-effective non-transmission alternatives are given full,
25 fair, and timely consideration relative to potential transmission projects”. (Allen
26 prefiled at p.4). The MOU’s failure to provide for equivalent funding for NTAs
27 demonstrates the MOU’s fundamental failure to provide a process that will allow
28 fair evaluation and implementation of least cost solutions, and precludes the
29 Board from approving the MOU.

1 **Q. What are your concerns regarding the lack of integrated resource planning**
2 **for transmission projects?**

3 A. Integrated resource planning is one means to evaluate a wide variety of resource
4 options and select the one that provides the least cost solution. It is used for
5 resource planning by distribution utilities in Vermont as required by Vermont
6 statute. It has been specifically excluded from the MOU. Although an IRP is not
7 the only means to evaluate and select least cost solutions, absent an effective
8 process that will ensure fair evaluation and selection of least cost solutions, it
9 remains an existing process that is designed to achieve this result. Since the
10 MOU fails to provide an effective transmission planning process, the Board
11 should either modify the process in the MOU to make it effective, or require IRPs
12 for transmission projects.

13 **Q. What concerns do you have with Duncan Hastings testimony?**

14 A. While I agree with Mr. Hastings's conclusion that the MOU should not be
15 approved as proposed, I disagree that no changes to the current transmission
16 planning structure are needed. Mr. Hastings reaches a conclusion similar to mine
17 when he states: "The MOU being considered by the Public Service Board creates
18 a burdensome new layer of bureaucracy that will do little to address the issues of
19 providing reliable cost effective electricity to Vermont ratepayers and may in fact
20 impede that goal." (Hastings prefiled at 3). While I would agree with this
21 statement, I strongly disagree that the solution is to do nothing. As stated in my
22 prefiled testimony, the existing system is very flawed and leads to an ineffective
23 evaluation and implementation of least cost solutions for transmission. This was
24 noted by the Board in the NRP proceeding. Doing nothing will not rectify the
25 problems identified by the Board that led to this docket being initiated. Instead, a
26 process as outlined in my prefiled testimony should be adopted.

27 Second, I also disagree that improved public input should be rejected. While I
28 agree that utilities have an obligation to serve load, this also includes the

1 obligation to do so at the least cost and in a manner that promotes the general
2 good of the state. The fact that some utilities view public input as something that
3 delays, bogs down and increases the expense of a project as reflected in Mr.
4 Hastings testimony is precisely the problem. Utilities should meet the public's
5 needs and should encourage and provide the means for the public to meaningfully
6 participate and provide input. It is the utilities' rejection of public input,
7 accompanied by an attitude of "we know best," that leads to ill conceived projects
8 being advanced, project delays and increased overall expense. Projects that go
9 forward without public opposition cost less and can be built more quickly. To do
10 this utilities need to know what the public concerns are and responsibly address
11 them. Simply cutting the public out of the process is counter-productive and
12 should be rejected by the Board.

13 **Q. Do you have specific recommendations regarding actions the Board should**
14 **take regarding the proposed MOU?**

15 A. Yes. The Board should not accept the MOU as proposed. It fails to meet the
16 objectives set forth for this proceeding. The Board should either (1) recommend
17 specific changes to the MOU to address the concerns raised by CLF and allow the
18 signatories to the MOU an opportunity to accept such changes, or (2) issue an
19 order setting forth a process for transmission planning that provides for
20 developing and implementing integrated resource plans (IRPs) for all
21 transmission projects.

22 **Q. Does this conclude your rebuttal testimony?**

23 A. Yes.