

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 5825

Investigation into Village of)
Ludlow Electric Light Department's) Hearing at
Integrated Resource Plan filed) Montpelier, Vermont
on June 17, 1994) September 18, 1995

Order entered:

PRESENT: John Bentley, Esq., Hearing Officer

APPEARANCES: William B. Piper, Esq.
Primmer & Piper, P.C.
for Village of Ludlow Electric Light Department

Andrew N. Raubvogel, Esq.
for the Vermont Department of Public Service

I. INTRODUCTION	3
A. Summary	3
B. Background	3
II. FINDINGS OF FACT	4
A. Transmission and Distribution	4
B. Load Forecast	4
C. Supply Resources	5
D. Demand-Side Management	5
E. Other Findings	6
III. DISCUSSION	6
IV. ORDER	8

I. INTRODUCTION

A. Summary

This Proposal for Decision ("Pfd") recommends that the Public Service Board ("Board") approve the integrated resource plan ("IRP") of the Village of Ludlow Electric Light Department ("Ludlow") pursuant to a stipulation in this Docket filed by Ludlow and the Department of Public Service ("Department" or "DPS"). As filed and modified by the parties' stipulation, Ludlow anticipates that the energy efficiency programs implemented through this IRP will produce peak demand savings of 781 kilowatts ("KW") and energy savings of 2,120 megawatt hours ("MWH") through the year 1998. The net societal benefits of these programs is estimated at \$309,104. The parties agree that Ludlow's IRP, as modified by the stipulation, meets the requirements of 30 V.S.A. § 218c and complies with the Board's Orders in Docket No. 5270 and the DPS's Twenty-Year Plan. I recommend that the Board approve this IRP.

B. Background

Ludlow filed this IRP on June 17, 1994. Revisions were filed to this IRP over the next several months as the DPS and Ludlow had informal discussions regarding Ludlow's IRP.

On June 20, 1995, a duly noticed prehearing conference was held at which time a schedule for reviewing Ludlow's IRP was set. That schedule anticipated discovery, prefiled testimony, rebuttal and a technical hearing.

The parties filed testimony on several issues. On September 1, 1995, Ludlow filed a motion *in limine* to exclude the DPS's testimony on external environmental costs. On September 11, 1995, the DPS filed a response to Ludlow's motion. In a procedural order issued September 14, 1995, I granted Ludlow's request and excluded testimony on issues related to external environmental costs in this Docket.

On September 18, 1995, the parties filed a stipulation resolving all outstanding issues regarding Ludlow's IRP. An evidentiary hearing on the stipulation was held that same day. On October 2, 1995, Ludlow filed a proposal for decision ("PFD") and waived its right to comment on the PFD pursuant to 3 V.S.A. § 811; the DPS filed a letter in support of Ludlow's PFD and also waived its right to comment on the PFD.

Over the next several months, Ludlow made several compliance filings pursuant to the terms of the parties' stipulation. Those filings are detailed below.

II. FINDINGS OF FACT

A. Transmission and Distribution

1. Ludlow has agreed to use a standardized procedure to insure that all future re-conductoring and new conductor installations use conductor that is least-cost by the net present value of life cycle societal test. Stip. at ¶ 2; Attachment 1.

2. Ludlow agrees to use a standardized procedure to insure that all future distribution transformer installations use a transformer determined to be the least-cost by the net present value of the life cycle societal test. Stip. at ¶ 3; Attachment 2.

3. Ludlow has agreed to use a standardized procedure to insure that all future capacitor installations use the capacitor determined to be least-cost by the net present value of life cycle societal test. Stip. at ¶ 4.

4. Ludlow has agreed to work with its industrial customers to bring their power factors closer to unity. Stip. at ¶ 5.

5. Ludlow has agreed to test conservation voltage regulation ("CVR") on all of its lines and, should CVR prove to be cost effective and reliable, to implement CVR.

Stip. at

¶ 6.

6. Ludlow agrees to make a compliance filing by November 15, 1995, that addresses all the issues identified in Findings 1-5, above.¹ In addition, Ludlow agrees to make a compliance filing by June 1, 1996, that describes the steps that were taken to improve industrial customers' power factors and lists those customers' power factors for the past two years. Stip. at 1-3.

B. Load Forecast

7. Based on its 1994 filed IRP, Ludlow projects a peak load of 11,390 KW and energy consumption of 49,873 MWHs in 1998. Exh. Ludlow-A at 1.1.1 and 1.1.3.

8. While acknowledging that the ultimate conclusions embodied in Ludlow's load forecast may be reasonable, the Department does not agree with Ludlow's forecasting methodology. Stip. at ¶ 7.

9. Ludlow has agreed not to rely on the load forecast in the IRP for future supply acquisitions that require approval under 30 V.S.A. § 248. However, Ludlow may rely on the load forecast for identifying avoided costs in order to determine cost effective transmission and distribution improvements and DSM measures and programs. Stip. at ¶ 8.

10. Ludlow has agreed to revise its load forecast to reflect appliance efficiency standards in residential and small commercial classes, and to include any demographic

1. Ludlow made this filing on November 15, 1995. The DPS filed comments on Ludlow's filing on November 28, 1995.

information provided by the DPS where applicable. Ludlow has also agreed to complete a survey of its customers by April 1, 1996, and to use the end use information obtained from this survey to improve its load forecast. Stip. at ¶ 11; Attachment 3.

11. Ludlow has agreed to submit a revised load forecast by July 1, 1996, that takes into account the issues identified by the DPS in ¶ 9 of the Stipulation. Stip. at ¶ 12.

C. Supply Resources

12. The Department believes that Ludlow's IRP contains certain deficiencies in considering alternative supply and long-term pricing assumptions. Ludlow disagrees with the Department's criticisms but has agreed to use settlement screening values as specified in the Stipulation to address the Department's concerns. Stip. at ¶ 13 and ¶ 14; Attachment 4.

13. Ludlow has agreed not to use the supply plan in its IRP for any future energy capacity purchases that exceed five years and that represent more than 1% of Ludlow's historic peak. Stip. at ¶ 15.

14. Ludlow has agreed to make a compliance filing by November 30, 1995, which will contain a specific plan and schedule detailing how Ludlow will address the Department's concerns regarding supply planning in future IRPs.² Stip. at ¶ 17.

D. Demand-Side Management

15. Ludlow anticipates spending approximately \$487,503 on DSM programs and measures over the five-year period covered by this IRP. Stip. at ¶ 19 and Attachment 5.

16. Ludlow estimates that cost-effective DSM programs will result in savings to the system of 781.2 KW and 2,120 MWHs in 1998, or 6.86 percent of anticipated peak load and 4.25 percent of anticipated energy requirements. Finding 7, above; exh. Ludlow-A at Attachment 3.1.

17. Ludlow projects a societal benefit from all cost-effective DSM program activities of \$1,253,106 with an attendant societal cost of \$944,003 on a net present value basis. This will result in an estimated net societal benefit of \$309,104 and a benefit cost ratio of 1.33 to 1. Ludlow Exh.-1, Attachment 3.1.

2. Ludlow made this filing on November 30, 1995.

18. The Department and Ludlow have agreed to make some changes to Ludlow's filed DSM programs and those changes will be filed by October 31, 1995.³ Stip. at ¶ 18.

19. The Department and Ludlow agree that there is a reasonable likelihood that any new DSM measures which may screen as cost-effective due to the use of the settlement screening values would fit within the DSM program budget estimates. Stip. at ¶ 20.

E. Other Findings

20. Ludlow's IRP, as modified by the stipulation, meets the requirements of 30 V.S.A. § 218c and complies with the Board's Orders in Docket No. 5270. Tr. 9/18/95 at 15, 31.

21. The Department and Ludlow have agreed that Ludlow should file its next IRP on February 1, 1998. Stip. at ¶ 21.

III. DISCUSSION

Ludlow is the first VPPSA utility to complete hearings on its second-round IRP. Ludlow's first IRP was approved by the Board on December 3, 1992. Since that time, Ludlow has been implementing energy efficiency programs for the benefit of its ratepayers. Based on its 1995 DSM Annual Report, Ludlow has achieved lifetime energy savings of over 26,500 MWHs and reduced its annual peak by 681 KW through cost-effective energy efficiency programs.⁴ Ludlow's current IRP anticipates building upon those achievements, although at a slower pace of implementation.⁵ The DPS states that Ludlow has an exemplary record in energy efficiency, system planning, and IRP planning in general. That record contributed to the settlement agreements achieved in this Docket. Tr. 9/18/95 at 27-28.

The Department and Ludlow have agreed on certain modifications to Ludlow's IRP and state that with those modifications, Ludlow's IRP should be approved by the Board as meeting the statutory criteria of 30 V.S.A. § 218c. The parties' stipulation

3. Ludlow made the compliance filing on October 31, 1995.

4. See Ludlow 1995 DSM Annual Report summary, filed 5/6/96.

5. The slower pace of implementation is due to several factors, including: participation levels for some measures will be less due to successful penetration from past efforts; past efforts have targeted some of Ludlow's customers with the biggest opportunities for savings, remaining customers have fewer cost-effective opportunities; and reductions in avoided cost estimates have reduced the number of cost-effective measures available to Ludlow's customers.

also includes several compliance filing deadlines. To date, Ludlow has met those deadlines in a timely fashion and has already implemented most of the DSM programs. I recommend that the Board require Ludlow to meet all future compliance filing requirements. I conclude based on the evidence in this Docket that Ludlow's IRP is a least-cost plan that will acquire all cost effective DSM pursuant to 30 V.S.A. § 218c and the Board's Order in Docket No. 5270.

I recommend that the Board approve Ludlow's IRP as modified by the parties' stipulation.

The foregoing is hereby reported to the Public Service Board in accordance with the provisions of 30 V.S.A. § 8. The parties have waived their right to comment on this Proposal for Decision in accordance with 3 V.S.A. § 811.

DATED at Montpelier, Vermont, this 13th day of May, 1996.

s/John Bentley
John Bentley, Esq.
Hearing Officer

V. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The Findings, recommendations, and conclusions of the Hearing Officer are hereby adopted.
2. Ludlow's IRP is approved as modified by the parties' Stipulation.
3. Within two weeks of the date of this Order, Ludlow shall file a status report on its customer survey as described in Attachment 3 of the parties' Stipulation.
4. By June 1, 1996, Ludlow shall file a report that describes the steps that were taken to improve industrial customers' power factors and that lists industrial customers' measured power factors for the previous two years.
5. Ludlow shall file a revised load forecast by July 1, 1996.
6. Ludlow shall continue to file annual DSM reports each year. Beginning in 1996, those reports shall be due on April first of each year.
7. Ludlow shall file its next IRP on or before February 1, 1998.

DATED at Montpelier, Vermont, this 13th day of May, 1996.

<u>s/Richard H. Cowart</u>)	
)	PUBLIC SERVICE
<u>s/Suzanne D. Rude</u>)	BOARD
)	OF VERMONT
<u>s/David C. Coen</u>)	

OFFICE OF THE CLERK

FILED: MAY 14, 1996

ATTEST: s/Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board of any technical errors, in order that any necessary corrections may be made.

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.