Prefiled Testimony
of
William Steinhurst

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is William Steinhurst, and I am a Senior Consultant with Synapse Energy Economics (Synapse). My business address is 45 State Street, #394, Montpelier, Vermont 05602.

Q. ON WHOSE BEHALF DID YOU PREPARE THIS PREFILED TESTIMONY?

A: I prepared this testimony on behalf of the Conservation Law Foundation. I have submitted separate testimony in this proceeding on behalf of AARP.

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS?

A: I have twenty-five years' experience in utility regulation and energy policy, including work on renewable portfolio standards and portfolio management practices for default service providers and regulated utilities, green marketing, distributed resource issues, economic impact studies, and rate design. Prior to joining Synapse, I served as Planning Econometrician and Director for Regulated Utility Planning at the Vermont Department of Public Service, the State's Public Advocate and energy policy agency. I have written or co-authored numerous papers and reports on utility regulation, energy policy, statistics, and modeling and provided consulting services to the Illinois Energy Office, the

Massachusetts Executive Office of Energy Resources, the Natural Resources Defense Council, the Regulatory Assistance Project, the Delaware Public Service Commission, the Nova Scotia Utility and Review Board, the Connecticut Office of Consumer Counsel, the Maine Office of the Public Advocate, AARP, the Conservation Law Foundation, the Vermont Auditor of Accounts, the James River Corporation, and the Newfoundland Department of Natural Resources.

I have testified as an expert witness in approximately 30 cases on topics including utility rates and ratemaking policy, prudence reviews, integrated resource planning, demand side management policy and program design, utility financings, regulatory enforcement, green marketing, power purchases, statistical analysis, and decision analysis. I have been a frequent witness in legislative hearings and represented the State of Vermont in numerous collaboratives addressing energy efficiency, resource planning and distributed resources.

I was the lead author or co-author of Vermont's long-term energy plans for 1983, 1988, and 1991, as well as the 1998 report *Fueling Vermont's Future: Comprehensive Energy Plan and Greenhouse Gas Action Plan,* as well as Synapse's study *Portfolio Management: How to Procure Electricity Resources to Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail Customers*.

I hold a B.A. in Physics from Wesleyan University, and an M.S. in Statistics and Ph.D. in Mechanical Engineering from the University of Vermont.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. My testimony will address the Alternative Regulation Plan ("Plan") filed in the proceeding by Green Mountain Power ("GMP," "the Company"). I will begin by reviewing Vermont's statutory criteria for approval of alternative regulation. My testimony then considers how well the proposed Plan comports with those statutory standards, concluding that the proposed Plan fails to meet those criteria in significant ways. My testimony then addresses two specific shortcomings of the Plan: first, the scope of risks that it transfers from the Company to ratepayers and how that relates to the establishment of clear incentives for provision of least cost service, and, second, the way in which the proposed Plan retains a distinct link between the Company's financial success and increased sales to end use customers. My testimony ends with a conceptual recommendation on how those shortcomings could be addressed.

II. The Plan does not comply with each of the statutory criteria for approval.

Q. WHAT ARE THE STATUTORY CRITERIA FOR APPROVAL OF THE PLAN?

A. Those criteria are set out in 30 V.S.A. § 218d(a)(1) - (8). Those criteria require that the Board find that the proposed Plan will:

(1) establish a system of regulation in which such companies have clear incentives to provide least-cost energy service to their customers;

> (2) provide just and reasonable rates for service to all classes of customers;
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> (3) deliver safe and reliable service;
>
> (4) offer incentives for innovations and improved performance that advance state energy policy such as increasing reliance on Vermont-based renewable energy and decreasing the extent to which the financial success of distribution utilities between rate cases is linked to increased sales to end use customers and may be threatened by decreases in those sales;
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> (5) promote improved quality of service, reliability, and service choices;
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> (6) encourage innovation in the provision of service;
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> (7) establish a reasonably balanced system of risks and rewards that encourages the company to operate as efficiently as possible using sound management practices; and
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> (8) provide a reasonable opportunity, under sound and economical management, to earn a fair rate of return, provided such opportunity must be consistent with flexible design of alternative regulation and with the inclusion of effective financial incentives in such alternatives.

Q. DOES THE PLAN SATISFY THOSE CRITERIA?

A. Not completely. The Plan fails to satisfy criteria (1), (4), and (7). The proposed Plan is, on balance, helpful with regard to criterion (3) and the quality of service and reliability aspects of criterion (5). As to criterion (6), the Plan appears to encourage innovation only in regard to possible cost cutting measures. Criteria

(2) and (8) are general and conclusory criteria, and I do not reach any conclusion on them at this time, although I would note that criterion (8) is somewhat implicated under the other criteria.

Q. WHY DOES THE PLAN FAIL TO MEET THE REQUIREMENTS OF CRITERION (1)?

A. The proposed Plan attempts to establish incentives for least cost energy service to customers, but is ineffective for two reasons. One of those reasons is the failure to effectively decouple the utility's financial success from increased sales to end use customers. Although this is specifically addressed in criterion (4), it is also important to criterion (1) because incentives for least cost energy service under alternative regulation cannot be fully effective without effective decoupling. The other reason has to do with whether the Company has incentives under the proposed Plan to reduce costs in all areas or only in some; if the latter, the Plan cannot be said to fully address least cost service. Both of those reasons will be addressed more fully in following sections of this testimony. In brief, however, those reasons are (1) the Plan does not decouple return on equity from sales to end use customers, and (2) the Plan allocates all the burden of certain costs to retail ratepayers, eliminating any incentive the Company might have to provide least cost service.

Q. WHY DOES THE PLAN FAIL TO MEET THE REQUIREMENTS OF CRITERION (4)?

A. Criterion (4) calls for "incentives for innovation and improved performance that advance state energy policy." The criterion calls out specifically state energy policy relating to "increasing reliance on Vermont-based renewable energy" and "decreasing the extent to which the financial success of distribution utilities between rate cases is linked to increased sales to end use customers and may be threatened by decreases in those sales." As presented in more detail below, the plan fails to meet this requirement because the Company stands to obtain significantly increased returns on equity when sales to end use customers increase. The earnings "cap" in the Earning Sharing Adjustor limits this effect, eventually, but starting from where the most recent Base Rate Adjustment has left the Company, it will still realize increased profits from increased sales at the margin, which is the first place such disincentives matter the most.

Q. WHY DOES THE PLAN FAIL TO MEET THE REQUIREMENTS OF CRITERION (7)?

A. The Plan delivers *a* system of risks and rewards, just as traditional rate regulation does, but the Plan's system is not reasonably balanced and does not encourage the Company to operate as efficiently as possible. As already pointed out, the Plan relieves GMP of substantial financial risks with regard to certain costs and flows them through, in whole or in part, to customers.

The Earnings Sharing Adjustor insulates the Company from risks associated with extended, severe under-earning. Each quarter, the Power Adjustor could flow through to rate payers each quarter potentially substantial cost increases, especially those in Component A, which are flowed through in their entirety.

As important as these risk shifts are in considering the balance called for in this criterion, the Power Adjustor mechanism also fails to encourage "the company to operate as efficiently as possible using sound management practices" with regard to a whole range of management responsibilities.

Q. WHY IS THE PLAN, ON BALANCE, HELPFUL WITH REGARD TO CRITERION (3) AND THE QUALITY OF SERVICE AND RELIABILITY ASPECTS OF CRITERION (5)?

A. The Plan contains no explicit incentives for reliability, safety, or service quality. However, it contains a commitment to maintain the *status quo* regarding the current SQRP. And, more importantly, to the extent that the Plan enables easier or less expensive access to capital for infrastructure investment, it may facilitate the Company's efforts regarding these criteria.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS WITH REGARD TO THE PLAN'S COMPLIANCE WITH THE STATUTORY CRITERIA.

A. The proposed Plan fails to comply with some of the criteria and is, on balance, helpful with regard to others.

III. The Plan inappropriately transfers risk from the Company to ratepayers and fails to encourage the Company to operate as efficiently as possible.

Q. PLEASE EXPLAIN HOW THE PLAN INAPPROPRIATELY TRANSFERS RISK FROM THE COMPANY TO RATEPAYERS.

A. Criterion (7) calls for "a reasonably balanced system of risks and rewards that encourages the Company to operate as efficiently as possible using sound management practices." As already pointed out, the Plan relieves GMP of substantial financial risks with regard to certain costs and flows them through, in whole or in part, to customers. This is the self-evident, stated purpose of the proposed Plan as set out, for example, in sections II.B and II.C of the Plan. The questions for criterion (7) are whether that shift is reasonable and whether it results in encouragement to operate the Company *as efficiently as possible*. The Plan's system is not reasonably balanced and does not encourage the Company to operate as efficiently as possible. As will be explained below, certain parts of the risk shifting are not reasonable and create categories of costs for which the Company has a diminished incentive to operate efficiently.

The Earnings Sharing Adjustor contains a dead band of plus or minus 75 b.p. Untoward events or management errors that lead to reduced earnings beyond that are shared 50/50 with rate payers up to a certain limit (125 b.p.) and are then flowed through entirely to ratepayers. (II.B.1) Over-earnings of more than 75 b.p. are flowed entirely to ratepayers. As a practical matter, events that would decrease earnings are of more concern. For example, the Company has engaged in cost cutting for some years now. Further large operating cost savings greater than the dead band may be difficult.

The Power Adjustor flows through to rate payers each quarter certain cost increases. Many of these cost components are potentially substantial, including several in Component A, which are flowed through in their entirety. In recent times, we have seen the power market and fuel markets have become not only more expensive, but quite volatile. If either the Vermont Yankee or VJO/Hydro Québec purchase contracts vary from expected values, that would be in the direction of a shortfall, throwing the Company on the market. Thus, the proposed Plan imposes on ratepayers a risk that under traditional ratemaking is the Company’s, at least until it chooses to file a prospective rate case.

As important as these risk shifts are in considering the balance called for in this criterion, the Power Adjustor mechanism also fails to encourage "the company to operate as efficiently as possible using sound management practices" with regard to a whole range of management responsibilities ranging from contracting for ancillary services (or not doing so) to voting its rights as an owner of VELCO and a member of ISO-NE to making decisions about litigation before FERC. Nor does this mechanism include "effective financial incentives" for "sound and economical management."

Q. PLEASE EXPLAIN FURTHER.

A. The Plan relieves GMP of substantial financial risks with regard to certain costs that are, at least in the long term and possibly in the short term, partly within GMP's control or influence.

There are two perspectives on this issue. First, suppose we grant for the sake of argument that the types of costs the Company allocates to Part A of the Power Adjuster represent costs imposed on it by entities other than the Company. From the point of view of how utility ratemaking operates in Vermont as a practical matter, a utility with a minority position in an entity (a power plant, a transmission company, and an ISO or RTO) is still responsible for the management decisions of that entity. Under traditional ratemaking, a utility is accountable for the appropriateness of decisions made by such entities. The proposed Plan insulates the Company from the financial impact of many such decisions. It also reduces or eliminates the Company's incentive to control or to use its influence, vote, ability to appeal or file suits or actions before FERC to contain such costs. Furthermore, it is not plausible to assume that that Company has no control over actions by VELCO or the costs and capacity of owned generation. Second, it is unreasonable to simply assume that the full range of capacity costs, ancillary costs, or transmission by others is *totally* outside the Company's control of influence. For example, load control and energy efficiency decisions, as well as choices about distribution efficiency and distributed generation—clearly affect such costs. Many other utility decisions—from choices about market purchase strategies to resource planning choices—can impact these supposedly Committed Costs.

It might be argued that the limited life of the proposed Plan (just under three years) obviates these concerns, but it is not reasonable to presume that Plan will terminate and that three years worth of these concerns is immaterial. Going forward, very large power supply decisions and other resource planning choices will have to be made by the Company. Any alternative regulation plan established at this time should allocate risk in such a way as to encourage the most efficient, least cost resource choices both before and after that coming power supply transition.

IV. The Plan perpetuates a linkage between the Company's financial success and increased sales to end use customers.

Q. PLEASE EXPLAIN HOW THE PLAN FAILS TO PROVIDE SUFFICIENT (OR ANY) INCENTIVES TO GMP TO ENCOURAGE ENERGY EFFICIENCY AND ACQUIRING LEAST COST POWER RESOURCES FOR CUSTOMERS?

A. Criterion (1) calls for "clear incentives to provide least-cost energy service to their customers." Criterion (4) calls for "decreasing the extent to which the financial success of distribution utilities between rate cases is linked to increased sales to end use customers and may be threatened by decreases in those sales."

Without effective decoupling of utility profits from retail sales, neither of those criteria can be fully met.

To begin with, it should be noted that the Plan does not create any new incentives for energy efficiency, clean energy, or renewable energy. But more importantly, the Company has an existing disincentive to promote energy efficiency, a substantial part of which would continue under the proposed Plan. Under traditional ratemaking, rates are set to cover variable and fixed costs at a certain level of retail sales.[1] For each additional kWh of retail sales above that level, the Company potentially earns an additional return on equity equal to the fixed costs per kWh in the retail rate, all other things being equal. Likewise, for each kWh that retail sales falls below that level, the Company potentially loses earnings in a similar amount.[2]

Review of the computer model provided by the Company confirms that the proposed Plan embodies disincentives for the promotion end use energy efficiency and maintains a linkage between financial performance and increased retail sales. Model runs with higher sales result in increased return on equity; model runs with lower sales result in reduced return on equity.

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[1] In Vermont, that level of sales is traditionally the level of sales in the historic test year. Under the proposed Plan, that might change, but the important point is that rates are set to recover both variable and fixed costs for *some* specific level of sales.

[2] Many complications can arise, such as incremental costs of power varying from the estimates used in setting rates or incremental costs differing from average costs, but the Company has not shown any reason why it would not profit from increased sales or suffer from decreased sales.

Exhibit CLF-__ (WS-1) is a set of spread sheets showing runs of the model provided by the Company. Those runs demonstrate that a substantial disincentive for energy efficiency remains under the proposed Plan.

It does appear that this disincentive is capped when the ROE hits 11.25%, however, at least until the next base rate case. While that may be regarded as a small step towards decoupling, the initial incentive to increase sales is unchanged, and is significant.

V. Suitable Changes to the plan could address those two concerns.

Q. COULD YOU DESCRIBE HOW THE PLAN COULD BE CHANGED TO MORE APPROPRIATELY HANDLE THE SHIFT OF RISK FROM THE COMPANY TO RATEPAYERS?

A. Certainly, at least at a conceptual level. Two changes are especially relevant to concerns about criteria (1) and (4). These changes would rectify the risk balance, eliminate or greatly reduce incentives for load building, and ensure full, or nearly full, coverage of incentives for least cost energy service.

One way to accomplish these outcomes would begin by removing from Component A of the Power Adjustor all costs that *do not* flow directly from (1) ancillary service or demand charges pursuant to specific purchases or similar actions irrevocably entered into by the Company before the filing date of the proposed Plan, (2) transmission construction authorized and completed prior to that date, (3) actions taken by VELCO prior to that date, but not including construction costs not yet incurred irrevocably prior to that date, and (4) ISO-NE actions taken prior to that date and no longer appealable by GMP or VELCO. This change would continue by placing such costs in a new Component C of the Power Adjustor. In recognition that such costs are not totally without the control of the Company, but are more difficult for the Company to influence or to hedge than those in Component B, costs in Component C would be shared 50/50 with no dead band. This would place the sharing of risk for Component C costs between that for costs in Components A and B.

This change to the proposed Plan is consistent with the basic notion of alternative regulation. An effective alternative regulation plan should encourage the Company to make good decisions and not rest on the cost of capital savings that might or might not flow from eliminating consequences to the Company for bad decisions.

Q. PLEASE DESCRIBE HOW THE PLAN COULD BE CHANGED TO REDUCE OR ELIMINATE THE LINKAGE BETWEEN FINANCIAL SUCCESS FOR THE COMPANY AND INCREASED SALES TO END USERS.

A. The Plan should be changed so that earnings fluctuations that are solely due to changes in energy sales to end use customers do not benefit or harm the Company financially. This would eliminate the incentive for the Company to grow retail sales. For example, one way to accomplish this would be to replace the proposed earnings sharing mechanism with one that stabilizes the Company's revenue per customer in each customer class. A number of states have adopted such mechanisms at various times. Some examples include California's ERAM and Baltimore Gas and Electric's Rider 8. These and others are reported in Section 6.2 of the U. S. EPA's Clean Energy-Environment "Guide to Action: Policies, Best Practices, and Action Steps for States," which is attached as Exhibit CLF-__ (WS-2). The Mid-Atlantic Distributed Resources Initiative (MADRI) Working Group developed a model tariff rider for this purpose, which is attached as Exhibit CLF-__ (WS-3). While that model rider might need modification if used in conjunction with any of the other components of the Company's proposed Plan, it shows one general approach that could be considered. (The copy attached was modified from that distributed by MADRI only by clearing markup showing changes from a prior draft. The original showing that markup is available at http://www.raponline.org/MADRI/Archives/Uploads/RevenueRateRiderVer3.zip)

Q. DOES THAT COMPLETE YOUR TESTIMONY?

A. Yes, at this time.