

**BEFORE THE  
The Mississippi Public Service Commission**

**Docket No. 2008-AD-158**

**In: Re Proceeding to Review Statewide Electric Generation Needs**

**PREPARED PRELIMINARY TESTIMONY OF  
WILLIAM STEINHURST  
ON BEHALF OF THE SIERRA CLUB**

**June 10, 2008**

1 **Q. Please state your name, title and business address.**

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

5 **Q. Please describe Synapse Energy Economics.**

6 A. Synapse Energy Economics ("Synapse") is a research and consulting firm  
7 specializing in energy and environmental issues, including electric generation,  
8 transmission and distribution system reliability, market power, electricity market  
9 prices, stranded costs, efficiency, renewable energy, environmental quality, and  
10 nuclear power.

11 Synapse's clients include state consumer advocates, public utilities commission  
12 staff, attorneys general, environmental organizations, federal government and  
13 utilities. A complete description of Synapse is available at our website,  
14 [www.synapse-energy.com](http://www.synapse-energy.com).

15 **Q. Please describe your educational and employment background.**

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

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

7 I have testified as an expert witness in approximately 30 cases on topics including  
8 utility rates and ratemaking policy, prudence reviews, integrated resource  
9 planning, demand side management policy and program design, utility financings,  
10 regulatory enforcement, green marketing, power purchases, statistical analysis,  
11 and decision analysis. I have been a frequent witness in legislative hearings and  
12 represented the State of Vermont and various consulting clients in numerous  
13 collaborative processes and other alternative dispute resolution processes for  
14 addressing energy efficiency, resource planning and distributed resources.

15 I was the lead author or co-author of Vermont's long-term energy plans for 1983,  
16 1988, and 1991, as well as the 1998 report *Fueling Vermont's Future:*  
17 *Comprehensive Energy Plan and Greenhouse Gas Action Plan*, as well as  
18 Synapse's study *Portfolio Management: How to Procure Electricity Resources to*  
19 *Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail*  
20 *Customers.*

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

1 More detail about my experience is contained in my resume attached as Exhibit  
2 WS-1.

3 **Q. Do you anticipate that any of your colleagues from Synapse will provide**  
4 **testimony in this proceeding?**

5 A. Yes. It is possible that Dr. Ezra Hausman, Mr. David Schlissel, or both will  
6 present testimony in this proceeding. A final decision will be made once we and  
7 the Sierra Club have had an opportunity to review the direct testimony of the  
8 other parties to this proceeding so that we can best determine whose areas of  
9 experience and expertise will be most applicable to the issues at hand. The current  
10 resumes for Dr. Hausman and Mr. Schlissel are available at the Synapse website  
11 given above.

12 **Q. On whose behalf are you appearing in this proceeding?**

13 A. I am appearing on behalf of the Sierra Club.

14 **Q. What is your assignment for this testimony?**

15 A. Synapse has been asked by to outline the issues that it currently anticipates that it  
16 will evaluate through its review of the planning documents to be filed by the  
17 utilities on June 10, 2008. In addition, I present certain recommendations  
18 concerning implementation of the resource planning requirements for the  
19 Commission's consideration.

20 **Q. In general, what type of practices and guidelines do you recommend that the**  
21 **Commission consider in its activities under MC § 77-3-14. Construction of**  
22 **electrical generating and transmitting facilities?**

23 A. As explained below, I recommend that Commission and electric utilities follow  
24 the general practices and guidelines for integrated resource planning ("IRP") in  
25 their activities under that section of the Code, beginning now in the current  
26 proceeding.

1 **Q. Why are IRP practices and guidelines relevant and appropriate to the**  
2 **Commission’s activities under MC § 77-3-14. Construction of electrical**  
3 **generating and transmitting facilities?**

4 A. MC § 77-3-14 provides, in part, that “no public utility or other person shall begin  
5 the construction of any facility for the generation and transmission of electricity to  
6 be directly or indirectly used for the furnishing of public utility service in this  
7 state, even though the facility be for furnishing the service already being rendered,  
8 without first obtaining from the commission a certificate that the public  
9 convenience and necessity requires, or will require, such construction.”

10 The statute, in subdivision (2) further requires the Commission to

11 develop, publicize and keep current an analysis of the long-range needs for  
12 expansion of facilities for the generation of electricity in Mississippi,  
13 including its estimate of the probable future growth of the use of  
14 electricity, the probable needed generation reserves, the extent, size, mix  
15 and general location of generating plants and arrangements for pooling  
16 power to the extent not regulated by the Federal Energy Regulatory  
17 Commission and other arrangements with other utilities and energy  
18 suppliers to achieve maximum efficiencies for the benefit of the people of  
19 Mississippi, and shall consider such analysis in acting upon any petition  
20 by any utility for construction

21 and requires each electric public utility to

22 submit to the commission its forecasts and plans for the addition of  
23 generating capacity planned by the utility for an ensuing five-year period  
24 and shall furnish to the commission such documents and proof with  
25 respect to the need therefor as the commission may reasonably require.

26 Two key provisions in these excerpts are the phrases “analysis [by the  
27 Commission] of the long-range needs for expansion of facilities for the generation  
28 of electricity in Mississippi” and “forecasts and plans [by the utilities] for the  
29 addition of generating capacity planned by the utility.” Another key provision in  
30 this passage is “such . . . proof with respect to the need therefore as the  
31 commission may reasonably require.”

1 **Q. Please explain the policy significance of these passages and their relation to**  
2 **your conclusions concerning IRP practices and guidelines.**

3 The utilities are required to submit, and the Commission is required to develop,  
4 and analyze related, forward-looking assessments of electric resource needs and  
5 plans for meeting those needs. (I will refer to these products, broadly, as “resource  
6 plans.”) The resource plans called for in the statute serve precisely the same  
7 purposes as IRPs, and are widely recognized in the field of electric utility  
8 planning to be the purposes for which IRPs are prepared in many jurisdictions. In  
9 my opinion, it would be appropriate and wise for the Commission to recognize the  
10 more than twenty-five years of IRP experience nationally in the field of power  
11 planning and, as a matter of policy, to interpret, and implement the above  
12 statutory language as requiring IRPs.

13 **Q. Do IRP practices and guidelines call for such planning to be done in specific**  
14 **ways?**

15 A. Yes. In particular, there are two broad principles that are central to IRP practice.  
16 The first is that all resources are to be considered on a “level playing field.” That  
17 is, the development of the IRP considers all resources that may contribute to  
18 meeting need. It also means that energy efficiency and demand response  
19 (together, demand-side management) resources, transmission and distribution  
20 resources (including improvements to transmission and distribution efficiency),  
21 and all types of generation resources must be considered on an equal basis. The  
22 second broad principle is that the planning process should result in an integrated  
23 portfolio of resources with the mix of resources that will provide adequate and  
24 reliable service at the lowest life cycle cost. Life cycle cost comparisons (between  
25 resources or portfolios) should be made using either the Total Resource Cost  
26 (“TRC”) Test or the Societal Test. Each of these tests has its own advantages, but  
27 generally speaking the TRC Test is somewhat easier to implement, while the  
28 Societal Test is more comprehensive in the costs and benefits that it considers. As

1 both of these IRP practices are calculated to lead to adequate and reliable utility  
2 service at least cost to consumers, it would be sound public policy for the  
3 Commission to require that the resource plans called for in the statute abide by  
4 those practices and, in general, the practices and guidelines for IRP.

5 **Q. Is there any support for these principles in Mississippi law?**

6 A. The statute cited above provides that

7 (3) In acting upon any petition for the construction of any facility for the  
8 generation of electricity, the commission shall take into account the  
9 utility's arrangements with other electric utilities for interchange of power,  
10 pooling of plant, purchase of power *and other methods for providing*  
11 *reliable, efficient and economical electric service. [emph. added]*

12 While I am not an attorney, I am aware that “efficient and economical electric  
13 service” is widely understood in the practice of electric utility planning and  
14 management to mean service at the lowest life-cycle cost. In addition, based on  
15 my knowledge of and experience in electric utility regulation, I believe that  
16 practitioners of utility resource planning would implement the phrase “other  
17 methods for providing . . . electric service” by considering (and incorporating) in  
18 utility resource plans energy efficiency and demand response (together, demand-  
19 side management) resources, transmission and distribution resources (including  
20 improvements to transmission and distribution efficiency), and all types of  
21 generation resources, including renewable generation, in utility resource plans.  
22 Such consideration must be on an equal basis (“level playing field”) across all  
23 types of resources if it is to result in efficient and economical service and to serve  
24 the public interest. Therefore, I conclude that subdivision (3) of the cited statute  
25 means that the Commission should follow the practices and guidelines of least-  
26 cost integrated resource planning.

1 **Q. What implications, if any, do the above conclusions have for Commission**  
2 **oversight of electric utilities in Mississippi?**

3 A. These conclusions have a very important implication for Commission oversight of  
4 the electric utilities. In terms of practical implementation, there is a clear linkage  
5 among the following items in the statute: (1) the Commission's duty to analyze  
6 electricity need and resources, (2) the utilities' obligation to submit data, analyses  
7 and plans, and (3) the Commission's duty to make construction planning  
8 decisions "tak[ing] into account the utility's arrangements with other electric  
9 utilities for interchange of power, pooling of plant, purchase of power and other  
10 methods for providing reliable, efficient and economical electric service." Given  
11 the essentially "straight line" logical sequence from utility data and plans to  
12 Commission analyses to Commission permitting decisions, the logical conclusion  
13 is that the Commission will be able to implement its analysis and permitting  
14 activities most efficiently and accurately only if it requires the utilities to prepare  
15 the "forecasts and plans" in accordance with practices and guidelines of IRP, as  
16 described above. Failure to do so would hobble the Commission in the execution  
17 of its duty under subdivisions (2) and (3) of the statute, potentially resulting in  
18 resource decisions that would severely harm the public good for decades into the  
19 future.

1 **Q. Do you have any other recommendations at this time for the Commission**  
2 **with regard to implementing the Commission’s activities under MC § 77-3-**  
3 **14?**

4 A. Yes, I have one other recommendation. As stated above, a key provision in this  
5 passage is “such . . . proof with respect to the need therefore as the commission  
6 may reasonably require.” For the reasons just explained, I believe that it would be  
7 reasonable for the Commission require, in support of implementation of its  
8 analytical duties under the statute, that the utilities submit resource plans that  
9 comply with the practices and guidelines of IRP as an essential component of the  
10 “the proof with respect to the need [for the addition of generating capacity  
11 planned by the utility].” I recommend that the Commission require the utilities to  
12 do so as part of this proceeding.

13 **Q. Are there other important points the utilities and the Commission should**  
14 **have in mind when preparing, reviewing, or implementing a plan?**

15 A. Yes. The two most important are assessment of (1) uncertainties and risk and (2)  
16 consideration of environmental impacts.

17 **Q. Please provide some examples of the uncertainties and risks that the**  
18 **Commission should consider.**

19 A. The resource portfolio that is projected to have the lowest life cycle cost under  
20 one set of assumptions about the future, may or may not also be the best under  
21 another set of assumptions. Assumptions that can make a material difference to  
22 the performance of resource portfolios include, but are not limited to:

- 23 • load growth, weather and other factors affecting the size and timing of  
24 resource needs over time, such as trends in customer types, end use make  
25 up and load shape,
- 26 • cost, availability and deliverability of fuels, equipment, construction  
27 materials and expertise, labor, land, transmission service and other goods

1 and services that determine the cost of the various resources in the  
2 portfolio,

- 3 • financial factors, such as inflation rates, utility bond ratings and changes in  
4 the rating criteria, cost and availability of various types of insurance, cost  
5 and availability of various types of capital,
- 6 • factors relating to implementation schedules and “lumpiness” of various  
7 resource options, such as construction or installation times or delays in  
8 those times, risk of project failure or cost increase,
- 9 • environmental and regulatory risks, such changes in emission standards  
10 (including the likelihood of CO<sub>2</sub> regulations), new emission standards or  
11 fees, permitting risk, and
- 12 • planning risk, for example, the risk that a resource will become obsolete or  
13 unnecessary while under construction.

14 **Q. Please explain the assessment of uncertainties and risk in the context of**  
15 **utility resource planning.**

16 A. While the technicalities can be somewhat abstract, the essence of risk and  
17 uncertainty assessment in this context is to measure the variability of a resource  
18 portfolio’s results due to uncertainties in factors or assumptions such as those  
19 listed in the preceding answer. The Commission should look for (1) a thorough  
20 inventory and description of the relevant risks, together with an assessment of  
21 their probabilities, (2) an objective analysis of how those risks impact the  
22 performance of various resource plans individually and in combination, (3)  
23 development of a plan relying on a portfolio of resources that manages risk and  
24 uncertainty to a reasonable level while delivering the lowest life-cycle cost over  
25 the fullest possible range of plausible future scenarios.

26 **Q. The practices and guidelines you recommend seem to include substantial**  
27 **analysis and data gathering. To what standards should the Commission hold**  
28 **those actions?**

29 A. In order to facilitate review by the Commission and parties, and to promote  
30 accuracy, I recommend that these assessment and data gathering activities should  
31 be transparent (clear and understandable to the Commission, the parties and the

1 public), fully documented and supported by work papers and methodologies that  
2 allow the Commission and the parties to determine their validity, quantitative  
3 whenever possible, and treat all resources on a level playing field. Cost-benefit  
4 comparisons of resources and portfolios should be carried out using one or both of  
5 the two tests recommended above.

6 **Q. Please explain the consideration of environmental impacts in the context of**  
7 **utility resource planning.**

8 A. Any resource choice will entail some environmental impacts. If the Commission  
9 chooses to employ the Societal Test for comparing resources and resource plans,  
10 it will automatically include those environmental costs that it can quantify. (Other  
11 environmental costs may show up as constraints on which resources are feasible  
12 or as non-quantified considerations to be balanced by the Commission.) If the  
13 Commission chooses to rely on the TRC Test, then it should adopt for planning  
14 purposes monetary proxies for those environmental costs that are likely to impact  
15 resource costs in the future.

16 **Q. What topics form a necessary part of IRP development?**

17 A. While there are many details that may vary from situation to situation, in general,  
18 the following aspects of IRP development need careful consideration:

- 19 • establish objectives;
- 20 • survey energy use patterns and develop demand forecasts;
- 21 • investigate electricity supply options;
- 22 • investigate demand-side management measures;
- 23 • prepare and evaluate supply plans;
- 24 • prepare and evaluate demand-side management plans;
- 25 • integrate supply- and demand-side plans into candidate integrated resource  
26 plans;
- 27 • select the preferred plan based on the selected benefit-cost test, uncertainty  
28 and risk analysis, and other factors; and

- 1           •       during implementation of the plan, monitor, evaluate, and iterate (plan  
2                    revision and modification).

3           In testimony in this proceeding, the Sierra Club expects to provide information  
4           on best practices and suitable guidelines regarding these and other related topics.

5   **Q    What other issues do you anticipate evaluating in your review of the**  
6   **planning documents provided by the utilities on June 10?**

7   **A.**   My colleagues and I expect to review a variety of issues.  These include, but are  
8           not limited to:

- 9           •       What is the potential for and what are the utilities' assumptions  
10           concerning energy efficiency, combined heat and power applications, and  
11           renewable generating technologies within each utility's service territory?  
12           Are these assumptions reasonable and are they properly integrated into  
13           their forecasts or considered as a separate resource option?
- 14          •       What is the potential for and what are the utilities' assumptions  
15           concerning demand response within each utility's service territory?  Are  
16           these assumptions reasonable and are they properly integrated into their  
17           forecasts or considered as a separate resource option?
- 18          •       Have the utilities made reasonable assumptions regarding future  
19           generating resource capital and operating costs and performed realistic  
20           sensitivity analyses in this area?
- 21          •       What are likely future emissions costs for CO<sub>2</sub> and other pollutants, and  
22           how have these costs be incorporated in utility planning?
- 23          •       How have the utilities treated the requirements for individual utility and  
24           statewide reserve margins?
- 25          •       How do the utilities accommodate sharing of reserves, demand response  
26           and transmission enhancements to improve reserve sharing vs. generation  
27           in peaking resources?
- 28          •       Have the utilities considered transmission and demand management on a  
29           comparable economic basis with new generation?
- 30          •       How are capital costs and operating costs and their respective uncertainties  
31           treated?
- 32          •       How have the utilities accommodated likely future technological  
33           advances, such as the potential for carbon capture and sequestration?

1 **Q. Do you expect the scope of testimony that you will file later this summer to**  
2 **match precisely your list of issues?**

3 A. Not necessarily. It is possible that the scope of issues that we will address will be  
4 affected by the planning materials and information that the utilities will file on  
5 June 10, 2008 and that they provide during discovery in this proceeding.

6 **Q. Does this complete your testimony at this time?**

7 A. Yes.

STATE OF Vermont  
COUNTY OF Washington

**NOW BEFORE ME**, the undersigned authority, personally came and appeared, William Steinhurst, who after being duly sworn by me, did depose and say:

The above and foregoing is his sworn testimony in this proceeding and that he knows the contents thereof, that the same are true as stated, except as to matters and things, if any stated on information and belief, and that as to those matters and things, he verily believes them to be true.

William Steinhurst

SWORN AND SUBSCRIBED BEFORE ME

THIS 10<sup>th</sup> DAY OF JUNE 2008

Annabel L Gonyaw  
NOTARY PUBLIC

**ANNABEL L GONYAW**

My commission expires NOTARY PUBLIC, VERMONT

**MY COMMISSION EXPIRES FEB. 10, 2011**

# **EXHIBIT WS-1**

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# William Steinhurst

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## **PROFESSIONAL EXPERIENCE**

### **Synapse Energy Economics Inc., Cambridge, MA.**

*Senior Consultant, July 2003 to Present*

Provided consulting services to consumer advocates, environmental organizations, and utility regulators on power supply procurement, electric industry restructuring, green marketing, portfolio management, rate design, economic impacts of efficiency and renewable generation programs, and other utility and energy topics. Expert witness services and litigation advice. Co-authored reports, journal articles and conference presentations on portfolio management, energy efficiency programs, and electric reliability.

### **Vermont Department of Public Service, Montpelier, VT.**

*Director for Regulated Utility Planning, 1986-2003*

Responsible for preparation of Vermont's long range policy plans in the areas of electric utilities, energy and telecommunications, including oversight of research, modeling, public input processes, policy analysis and writing. Development of policy positions and drafting of legislation and rules concerning utility resource planning, least cost provision of service, power supply acquisition, generation and transmission permitting, environmental costing, energy efficiency and alternative generation, utility restructuring and retail choice, distributed utility planning, rate setting and rate design, mergers, financing and acquisitions, decision analysis, power contract restructuring, Qualifying Facility contracts and permits, net metering, and other critical regulatory issues. Extensive expert testimony on those matters, as well as utility bankruptcy, prudence reviews, and critical utility policy matters. Extensive legislative testimony.

*Planning Econometrician, 1981-1986*

Energy demand forecasting, economic and demographic projections, economic and policy impact analysis, avoided cost estimates, and other quantitative analysis for utility and energy policy making. Development of State's basic policies regarding least cost planning and resource selection, including methodologies for evaluation of and program design for generation, transmission and demand-side options. Implementation of utility energy efficiency program requirements.

### **Vermont Agency of Human Services, Montpelier, VT.**

*Director of Planning, 1979-1981*

### **Vermont Department of Social and Rehabilitation Services, Waterbury, VT.**

*Director of Planning and Evaluation, 1977-1979*

*Acting Deputy Commissioner, 1977*

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**Vermont Department of Corrections**, Montpelier, VT.  
*Director of Planning and Research*, 1974-1977  
*Chief of Research and Statistics*, 1973-1974

***Energy Consulting***

Ill. Energy Office, 1986.  
Mass. Exec. Office of Energy Resources, 1986.  
Northern Technology, Inc., Gorham, NH, 1983-1985.  
James River Corporation, Green Bay, WI, 1985.  
Newfoundland Department of Natural Resources, 1995

***Teaching***

University of Vermont, Burlington, Vt., 1977 to 1989  
Adelphi University, Garden City, N.Y., 1980 to 1988  
University of N. H., Complex Systems Ctr., Grad. Studies Comm., 1992-1994  
Institute of International Education, Least Cost Planning Seminar, 1999  
Community College of Vermont, 2002

***Miscellaneous***

National Science Foundation Undergraduate Research Grant, 1965.  
Wesleyan University Astronomy Prize, 1967.  
Association for Criminal Justice Research (Northeast/Canada), Director, 1973 to 1981,  
Secretary/Treas., 1973 to 1980.  
University of Vermont Graduate Award in Statistics, May, 1980.  
Contributing Editor, Current Index to Statistics, 1976-1985.  
Chair, Session on Energy Economics, New England Business and Economics Association  
Annual Meeting, 1983.  
Member, Intl. System Dynamics Soc., Tau Beta Pi.  
Northeast International Committee on Energy, New England Governors' Conference/Eastern  
Canadian Premiers, various periods, 1986 to 2003  
Director, Vermont Girl Scout Council, 1989-1991; Secy., 1991-1997  
Editor, Intl. System Dynamics Soc. Bibliography, 1990-  
Advisory Group Member, New England Project, MIT Analysis Group for Regional  
Electricity Alternatives, 1991-1995.  
Chair, Steering Committee & Modeling Subcommittee, New England Governors Conf.  
Regional Energy Planning Project, 1991-1995.  
Member, Montpelier School System Technology Steering Committee and Montpelier  
High School Technology Committee, 1992-1993.  
Reviewer, Vermont Experimental Program to Stimulate Competitive Research, 1993-  
Invited Speaker, 3rd Intl. Conf. on Externality Costs, Ladenburg, FDR, 1995.  
Member, Steering Committee, New England Governors Conference, Restructuring/  
Environmentally Sustainable Technologies Project, 1996-1997  
U. S. DOE Distributed Generation Collaborative, 2000-2

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## **EDUCATION**

### ***Degrees***

B.A., Physics, Wesleyan University, Middletown, CT, 1970

M.S., Statistics, University of Vermont, Burlington, VT, 1980

Ph.D., Mechanical Engineering , University of Vermont, Burlington, VT, 1988

### ***Continuing Education***

Seminar in Electricity and Telecommunications Demand, 1981

Advanced Workshop in Regulation and Public Utility Economics, June, 1982 and  
June, 1983, Rutgers University

Transmission Reliability Assessment, Power Technologies, Inc., 1986

Regional Forecasting and Simulation Modeling, January, 1991, U. Massachusetts-Amherst

## **TESTIMONY**

### **Vermont Public Service Board**

Docket 4661 - Green Mountain Power Rate Increase

Dockets 5009/5112 - Vt. Electric Coop. Rate Increase

Dockets 5108/5109 - Vt. Marble Co. Small Power Rate

Docket 5133 - Moretown Hydro Energy Co. Small Power Rate

Docket 5202 - VPPSA Refinancing

Docket 5248 - DPS Ontario Hydro Power Purchase

Docket 5270 - Least Cost Planning and Demand-Side Management

Docket 5270-GMP-1 - Highgate Apartments Fuel Switching

Docket 5270-CV-1&3 - Demand-Side Management Preapproval and  
Ratemaking Principles

Docket 5270-CV-4 - IRP

Docket 5270-VGS-1 - Demand-Side Management Preapproval

Docket 5270-WEC-1 - Demand-Side Management Preapproval

Dockets 5270-BRTN-1, 5270-CUC-3, 5270-HDPK-1, 5270-JHNS-1, 5270-JKSN-1,  
5270-LDLW-1, 5270-LYND-1, 5270-MRSV-1, 5270-ORLN-1, 5270-RDSB-1,  
5270-ROCH-1, 5270-STOW-1, 5270-SWNT-1, 5270-VMC-1 - IRP's

Docket 5270-VGS-2 - Demand-Side Management Preapproval

### **Vermont Public Service Board (cont.)**

Docket 5277 - DPS Ontario Hydro Transactions Agreement

Docket 5330A - Hydro Quebec Power Purchase

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Docket 5330E - Hydro Quebec Power Purchase, Waiver and Amendment  
Docket 5372 - CVPSC Rate Increase  
Docket 5491 - CVPSC Rate Increase  
Docket 5630/32 - VEC Debt Restructuring & Rate Increase  
Docket 5634 - NET Toll Dialing Plan  
Docket 5638 - CVPSC Mack Molding\*  
Docket 5664 - EPACT Standards  
Docket 5810/11/12 - VEC Debt Restructuring & Rate Increase  
Docket 5825 - Ludlow IRP\*  
Docket 5832 - Lyndonville IRP\*  
Docket 5854 - Electric Restructuring\*  
Docket 5857 - GMP Rate Increase\*  
Docket 5859 - Citizens Utilities Prudence Review & Revocation Petition  
Docket 5971 - VEC Bankruptcy Reorganization\*  
Docket 5980 - Proposal for Statewide Efficiency Utility  
Docket 5983 - GMP Rate Increase (HQ Issues)  
Docket 6018 - CVPSC Rate Increase (HQ Issues)  
Docket 6107 - GMP Rate Increase (HQ Issues)  
Docket 6140 - Electric Industry Restructuring (various presentations)\*  
Docket 6033/6053/6110/6142/6158/6326/6327/6371/6462/6464 - various municipal electric rate increases\* (HQ and Settlement Issues)  
Docket 6290 - Distributed Generation\*  
Docket 6300 - Sale of Vermont Yankee  
Docket 6330 - Petition of CVPSC and GMP on Restructuring (various presentations)\*  
Docket 6149/6315 - WEC electric rate increases\* (HQ and Settlement Issues)  
Docket 6460 - CVPSC Rate Increase (HQ Issues)  
Docket 6495 - Vermont Gas Systems Rate Increase (Deferral Account and Hedging)  
Docket 6565 - Various station service contracts  
Docket 6596 - CUC rate Increase (HQ Issues)  
Docket 6758 - Fourteen Utilities - Violations of Statutes on Special Contracts and Special Rates -- Phases I & II

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**Vermont State Environmental Board**

Docket 5W0584-EB - Developers Diversified Land Use Permit

**Public Utilities of Ohio**

Restructuring Roundtable – System Benefit Charges\*

**Federal Energy Regulatory Commission**

Docket Nos. ER95-1586-000 and EL96-17-000 - Citizens Utilities Company

**Connecticut Department of Public Utility Control**

Docket Docket No. 03-07-16 - Alternative Transitional Standard Offer (live testimony, prefiled comments)\*

\* No prefiled testimony

**TECHNICAL REPORTS**

Allen, R., V. L. McCarren and W. Steinhurst. *Vermont Telecommunications Plan: Final Draft and Final*. Vt. DPS, 1992.

Backus, G., J. Amlin, W. Steinhurst and P. Cross. *Champlain Pipeline Project: Energy and Economic Systems – Assessment*. Vt. DPS, 1989.

Bartels, C., R. Squires, and W. Steinhurst. *Electric Power Supply in Vermont*. Vt. DPS, 1983.

Biewald, B, C. Chen, A. Sommer, W. Steinhurst and D. E. White. *Comments on the RPS Cost Analyses of the Joint Utilities and the DPS Staff*. Synapse Energy Economics report for Renewable Energy Technology and Environment Coalition. September 19, 2003.

Blomberg, L., B. Hausauer, and W. Steinhurst, et al., *Fueling Vermont's Future: Comprehensive Energy Plan and Greenhouse Gas Action Plan: Public Review Draft*. Vt. DPS, 1997 and *Final*, 1998.

Copp, L., W. Steinhurst, et al. *Electric Power Issues in Vermont*. Vt. DPS, 1982.

----- *Electric Power in Vermont: Statistical Sourcebook*. Vt. DPS, 1982.

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