
William Steinhurst

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PROFESSIONAL EXPERIENCE

Work 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

Vermont Department of Corrections, Montpelier, VT.

Director of Planning and Research, 1974-1977

Chief of Research and Statistics, 1973-1974

Pre-2004 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, 2000-2003

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

On behalf of the Vermont Department of Public Service:

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
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 - externalities
Docket 5832 - Lyndonville IRP - externalities
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

For consulting clients:

Docket 6958 - Green Mountain Power Rate Design - for AARP

Docket 6958 - Green Mountain Power Rate Design - for Conservation Law Foundation

Vermont State Environmental Board

Docket 5W0584-EB - Developers Diversified Land Use Permit

Ohio Public Utilities Commission

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 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.

Biewald, B., Woolf, T., Roschelle, A., & Steinhurst, W. (2003) *Portfolio Management: How to Procure Electricity Resources to Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail Customers*. Synapse Energy Economics report for NARUC. October 10, 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.

----- *Electric Power in Vermont: Twenty-Year Plan*. Vt. DPS, 1983.

Copeland, R. and W. Steinhurst. *Private Sector Day Care Rates*. Vt. Dept. of SRS, 1979.

Huffman, B., W. Steinhurst, et al., *Energy Use in Vermont and the Public Interest*.
Vt. DPS, 1984.

Parker, S., & Steinhurst, W. (2004). *How To Deliver the (Efficiency) Goods: Why an Independent Third Party Works Best and How To Make Sure It Works Well*. Synapse Energy Economics, Inc.

Shapiro, W., W. Steinhurst, et al. *Vermont Telecommunications Plan: Final Draft*. Vt. DPS, Aug. 1996 and *Final*, Dec. 1996.

----- *Vermont Telecommunications Plan: Final Draft*. Vt. DPS, 1999 and *Final*, 2000.

Steinhurst, W., *Hypothesis Tests for Parole Survival Analysis*. Masters thesis,
University of Vermont, May, 1980.

----- *Residential Price Elasticity of Electric Demand in the Northeast*, Vt. DPS, 1982.

----- *Long Range Forecast of Electric Loads for Vermont*. Vt. DPS, 1983.

----- *Electricity Conservation in Vermont*. Vt. DPS, 1983.

----- *Twenty Year Electric Plan: Public Review Draft*. Vt. DPS, 1987, and *Final*, 1988.

----- *Twenty Year Electric Plan: Public Review Draft*. Vt. DPS, Mar. 1994, and *Final*, Dec. 1994.

----- *On Some Aspects of the Thermoplastic in Engineering*. Ph.D. Dissertation. Univ. of Vermont, 1988.

Steinhurst, W. (August 6, 2004). *Social Priorities under Restructuring: Coordinated and Comprehensive Delivery*. Paper presented at the Standard Offer Service Conference, Wilmington, DE.

-----, et al. *Vermont Comprehensive Energy Plan*. Vt. DPS, 1991.

-----, R. Allen, et al. *Shutdown Assessment of the Vermont Yankee Nuclear Power Facility: Interim Report*. Vt. DPS, 1987.

-----, R. Allen, et al. *Shutdown Assessment of the Vermont Yankee Nuclear Power Facility*. Vt. DPS, 1988.

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- , et al. *A Field Assessment of the Vermont Low-Income Weatherization Program*. Vt. DPS, 1990.
- , et al. *Vermont Comprehensive Energy Plan*. Vt. DPS, 1991.
- , et al. *Vermont Government 2000 Conference Report*. 1989.
- Steinhurst, W., Woolf, T., & Roschelle, A. (2004). *Energy Efficiency: Still an Cost-Effective Resource Option*. Paper presented at the USAEE/IAEE Conference, Washington, D.C.
- Steinhurst, W., Chernick, P., Woolf, T., Plunkett, J., & Chen, C. (2003). OCC Comments on Alternative Transitional Standard Offers (pp. 58). CT DPUC Docket 03-07-16 on behalf of CT OCC.
- and D. Lamont. *Building Energy Code Study*. Vt. DPS, 1985.
- and D. Lamont. *Guide to Evaluating Energy Conservation Opportunities*. Vt. DPS, 1985.
- and B. Patterson. *Weeks School Recidivism Study*. Vt. Corrections Dept., 1976.
- and N Perrin. *1977-78 High School Survey: Patterns of Substance Use*. Vt. Dept. of SRS, 1979.
- , N. Perrin, and A. Jette. *Running in the SRS Juvenile System: 1975 - 1979*. Vt. Det. of SRS, 1979.
- and T. Weaver. *Long Range Forecast of Electric Loads for Vermont*. Vt. DPS, 1986.
- Roschelle, A., Steinhurst, W., Peterson, P., & Biewald, B. (2004). Procuring Default Service: Relationships between Contract Duration and Contract Price (pp. 15). ME PUC. On behalf of ME Office of Public Advocate. May 21, 2004.
- Roschelle, A., Steinhurst, W., Peterson, P., & Biewald, B. (2004). *Long Term Power Contracts: The Art of the Deal*. Public Utilities Fortnightly (August), 56-74.
- Roschelle, A., & Steinhurst, W. (forthcoming). *Best Practices in Procurement of Default Electric Service: A Portfolio Management Approach*. Electricity J.
- Stoneman, K., and W. Steinhurst. *Comprehensive Proposal for Corrections in Vermont*. Vt. Corrections Dept., 1972.
- White, D., Roschelle, A., Peterson, P., Schlissel, D. A., Biewald, B., & Steinhurst, W. (forthcoming). *The 2003 Blackout: Solutions that Won't Cost a Fortune*. Electricity J.
- Wilson, D., J. O'Rourke, W. Steinhurst, et al. *Welfare Reform: A Vermont Perspective*. Vt. AHS, 1980.
- von Turkovich, B., and W. Steinhurst. "Plastic Flow Localization and Instability in Metal

Processing." *Proc. 14th N. Amer. Manuf. Res. Conf.*, Minneapolis, May, 1986, pp. 340-347.

ARTICLES AND PRESENTATIONS

Andersen, D., G. Richardson, J. Rohrbaugh, S. Ratanawijitrasin, W. Steinhurst. "Group Model Building. *Proceedings of the International System Dynamics Conference*. Intl. System Dynamics Soc., 1992.

Biewald, B., Chernick, P., and W. Steinhurst. *Environmental Externalities: Highways and Byways*. Proc. NARUC IRP Conf., Kalispell, MT, 1994.

Hamilton, B., L. Milford, S. Parker and W. Steinhurst, "Fuel Switching in Vermont: Issues and Experiences." *Proc. of ACEEE 1992 Summer Study on Energy Efficiency in Buildings*, 12 pp.

Hogan, C. and W. Steinhurst. "Managing Change in Corrections." *Federal Probation*, June, 1976.

Steinhurst, W., "Hypothesis Tests for Limited Failure Survival Distributions." *Proc. Social Statistics Section*, American Statistical Association, 1980, pp. 521 - 524.

----- "Hypothesis Tests for Parole Survival Analysis." *Evaluation Review*, 5, 699-711 (1981).

----- "Don't Throw Out the Baby: Some Design Requirements for Federalism Reform." *New England Journal of Human Services*, 1, 41 - 45 (1981).

----- "Environmental Externalities: Analysis and Advocacy." *Proc. 3rd Intl. Conf. on Externality Costs*, Springer-Verlag: Berlin.

----- and G. Backus. "Application of System Dynamics to an Integrated Economic and Environmental Policy Assessment." In D. F. Andersen, et al., *System Dynamics '90, Proc. of the 1990 International System Dynamics Conf.*, Boston, MA., pp. 1060-1074.

----- and W. Merten. "Statistical Analysis of Thermal Shock Tests." *Statistics in Manufacturing*, S. G. Kapoor and M. R. Martinez, eds., ASME Proc., PED-9 (83), 51-56.

----- and W. Merten. "Statistical Analysis of Thermal Shock Tests." *J. of Engineering for Industry*.

----- and R. Samuels. *The Future of the Uniform Parole Reports Project: Proceedings of the ACJR-UPR Working Session*. Assoc. for Criminal Justice Research, 1978.

----- and R. Squires. *Electric Utility Cost of Service Projections for James River Corporation New England Mills: 1984 to 2000*. Northern Technology, Inc., Jefferson NH, 1985.

----- and B. von Turkovich. "Material Influences on Plastic Flow Localization and Instability in Metal Processing." *Proc. 2nd Intl. Conf. on Technology of Plasticity*, Stuttgart, 1987.

Resume dated June 2005.