



service providers and regulated utilities, green marketing, distributed resource issues, economic impact studies, rate setting and rate design.

- (5) Prior to joining Synapse, I served, first, as Planning Econometrician and, then, Director for Regulated Utility Planning at the Vermont Department of Public Service (Department or DPS), the State's Public Advocate and energy policy agency. I have provided consulting services for various clients, including the Connecticut Office of Consumer Counsel, the Illinois Citizens Utility Board, the California Division of Ratepayer Advocates, the D.C. and Maryland Offices of the Public Advocate, the Delaware Public Utilities Commission, the Regulatory Assistance Project, the National Association of Regulatory Utility Commissioners (NARUC), the National Regulatory Research Institute (NRRI), American Association of Retired Persons (AARP), The Utility Reform Network (TURN), the Union of Concerned Scientists, the Northern Forest Council, the Nova Scotia Utility and Review Board, the U.S. EPA, the Conservation Law Foundation, the Sierra Club, the Southern Alliance for Clean Energy, the Oklahoma Sustainability Network, the Natural Resource Defense Council (NRDC), New Energy Economy, the Vermont Department of Public Service, the Vermont Legislature, the Illinois Energy Office, the Massachusetts Executive Office of Energy Resources, the James River Corporation, and the Newfoundland Department of Natural Resources.
- (6) I hold a B.A. in Physics from Wesleyan University, an M.S. in Statistics, and a Ph.D. in Mechanical Engineering from the University of Vermont. I have attended various in-service trainings on utility matters, including Vermont Yankee Nuclear Power Corporation's BWR [Boiling Water Reactor] Fundamentals I. I have testified as an expert witness or filed affidavits in more than 100 proceedings 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, the Delaware Public Utilities Commission Staff, and several other groups in numerous collaborative settlement processes addressing energy efficiency, resource planning and distributed resources.

- (7) I was the lead author or co-author of Vermont's long-term energy plans for 1983, 1988, and 1994, as well as the 1998 report *Fueling Vermont's Future: Comprehensive Energy Plan and Greenhouse Gas Action Plan*, and also Synapse's study *Portfolio Management: How to Procure Electricity Resources to Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail Customers*. In 2008, I was commissioned by the National Regulatory Research Institute (NRRI) to write *Electricity at a Glance*, a primer on the industry for new public utility commissioners. In 2011, NRRI commissioned me to prepare a second edition of that work.
- (8) In sum, I have extensive qualifications as a policy expert on the full range of issues and practices comprising state regulation of the electric industry.
- (9) I have been asked to examine documents related to Luminant Motion, Exhibit 9, Declaration of David Campbell, focusing on the assumptions and methodologies underlying Luminant's estimates of job losses. I am being compensated \$200 per hour for my work on this matter. Appendix A contains my resume, which includes a listing of past testimony, papers, and reports.

- (10) In the paragraphs that follow, I discuss issues Luminant’s job analysis, including the omission of jobs supported by compliance with the EPA’s Cross-State Air Pollution Rule (CSAPR), and flaws in Luminant’s job loss estimates.

### **Summary of Issues with Luminant’s Job Analysis**

- (11) Luminant’s estimates of job losses are built around flawed assumptions and limited to jobs that would be lost at the plants and supporting mines. They fail to include the jobs that would be created by complying with the Cross-State Air Pollution Rule (CSAPR) recently finalized by the U.S. Environmental Protection Agency (EPA). Most importantly, Luminant (the company) claims it will invest \$1.5 billion to install emission controls but fails to mention the required jobs to install and operate these measures.<sup>1</sup> A report from Ceres and the Political Economy Research Institute (PERI) provides guidance for the type of job creation expected from these activities.<sup>2</sup> Based on average impacts provided in this report, Luminant’s planned emission control investments would create, on average, an estimated 1325 jobs during eight years of installation and 341 long-term operations jobs thereafter. Details on these omissions and other shortcomings in Luminant’s analysis are provided in the sections below.

### **Omission of Jobs Supported by Compliance with EPA’s CSAPR**

- (12) The company’s motion repeatedly discusses the job losses at the Monticello plant and supporting mines that would result from compliance with the EPA CSAPR rule.

However, for example, in this same motion, the company also claims that it would have

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<sup>1</sup> Luminant Press Release, September 12, 2011, “Luminant Announces Facility Closures, Job Reductions in Response to EPA Rule.”

<sup>2</sup> “New Jobs—Cleaner Air: Employment Effects Under Planned Changes to the EPA’s Air Pollution Rules,” Ceres and Political Economy Research Institute, February 2011.

to spend an initial \$280 million in 2011 and 2012 to install scrubber upgrades at Martin Lake, Monticello Unit 3, and Sandow, as well as selective non-catalytic reduction (SNCR) at Martin Lake.<sup>3</sup> Further, in total, the company claims it will invest \$1.5 billion in upgrades by 2020 to comply with CSAPR.<sup>4</sup> While the motion discusses these expenses as evidence of further harm to the company, it fails to mention the resulting stimulus to the economy. As the company itself states, in order to perform upgrades it “must start ordering major equipment and commissioning engineering and construction work immediately.”<sup>5</sup> These activities do not perform themselves; more employment of equipment manufacturing workers, engineers, and construction workers would be required. Activities and investments to generate replacement power or deliver alternative energy efficiency resources would further stimulate the economy. However, quantitative estimates of those effects were not provided, nor was their existence even mentioned by the company.

- (13) The installation of emissions controls for compliance with EPA’s CSAPR rule will generate jobs at Luminant’s plants, as it will at many other plants throughout the U.S. A Ceres and PERI report estimated the economic impacts of 36 states’ (not including Texas) compliance with the proposed CSAPR.<sup>6</sup> The report distinguished between impacts from installation of pollution controls and those from replacement capacity (e.g., new renewable investments). The average direct job impact of construction of pollution controls is 3.5 job-years (i.e., one job for one year) per million dollars in spending. When

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<sup>3</sup> Luminant Motion, Exhibit 9, Declaration of David Campbell, page 12 of 287.

<sup>4</sup> Luminant Press Release, September 12, 2011, “Luminant Announces Facility Closures, Job Reductions in Response to EPA Rule.”

<sup>5</sup> Luminant Motion, Exhibit 9, Declaration of David Campbell, page 7 of 287.

<sup>6</sup> “New Jobs—Cleaner Air: Employment Effects Under Planned Changes to the EPA’s Air Pollution Rules,” Ceres and Political Economy Research Institute, February 2011.

including indirect effects (i.e., economic activity by suppliers of goods and services to the firms directly affected) this number increases to 7.2 job-years per million dollars spent. Using these average figures and Luminant's own estimate of spending on emission controls of \$1.5 billion in eight years—their upgrades would create:

- (a) An estimated 5200 direct job-years and an additional 5400 in indirect job-years involving construction. In total, this amounts to 10,600 job-years. This equates to an average of 650 direct jobs and 675 indirect jobs, totaling 1325 jobs, for the eight-year span of installing the upgrades. Each of these figures outweighs the claimed losses at Luminant's plants and mines.
  - (b) In addition, long-term operations and maintenance (O&M) jobs would be created with the new emissions controls. Again, using the Ceres and PERI estimates this would create an estimated 115 direct and 226 indirect long-term jobs, or a total of 341 long-term jobs.<sup>7</sup>
- (14) It is important to note that this outcome (new jobs triggered by CSAPR compliance outweigh job losses) is reasonable and expected. Continued operation of the Monticello plant and supporting mines relies on existing capital equipment (so few if any new manufacturing and construction jobs result aside from routine capital maintenance), while installation and operation of the required control equipment will create entirely new economic activity. Further, the previously mentioned Ceres-PERI report also measured the losses of jobs at coal plants, concluding that the new O&M jobs required by the

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<sup>7</sup> It should be noted that the total job estimates from this study only include direct and indirect jobs and exclude induced jobs, which result from workers re-spending their wages.

necessary emission controls outweigh those lost at coal plants by 2000 long-term jobs across the 36 states considered in that study, consistent with the result presented here.

- (15) While the above job creation estimates for Luminant's compliance with CSAPR are estimates based on a U.S. average, there is evidence of job creation from actual experience at other plants that have upgraded their scrubbers. The Ceres-PERI report mentions that Westar, which operates Jeffrey Energy Center in Kansas, spent \$500 million in upgrading the plant, requiring 850 construction workers (i.e., direct jobs) on-site at the peak of installation. PSEG, which operates Mercer and Hudson plants in New Jersey, spent \$1.3 billion in upgrades, requiring 1600 workers at the peak of their activity.<sup>8</sup> In fact, Luminant recently invested \$100 million on a selective catalytic reduction (SCR) installation at its Sandow plant, employing 1200 construction workers at the peak of construction.<sup>9</sup>

### **Flaws in Job Loss Estimates**

- (16) The company's estimates of economic impacts from job losses at Monticello and the supporting mines are overstated. First, as discussed in the previous section, the positive impacts from complying with EPA CSAPR were not measured and would likely outweigh Luminant's job loss claims (during construction) should the company choose to close part of Monticello and the supporting mines. Second, the estimates of economic impacts provided in the motion exaggerate the negative impacts on the local area, as explained below.

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<sup>8</sup> "Responsible Coal: Hudson and Mercer Station," The Clean Energy Group, March 2011.

<sup>9</sup> "1,200 on the job at Sandow 4," Rockdale Reporter, February 4, 2010.

- (17) The company’s economic impact analyses employ different methodologies, but share certain limitations:
- (a) There is no mention of potential job increases associated with Luminant or other Texas companies activities to replace the lost energy generation at Monticello with generation from other plants or investment in new alternatives such as wind or energy efficiency.
  - (b) Luminant claims that it will pay severance to workers of “approximately \$35 million in 2012.”<sup>10</sup> To derive an accurate estimate of economic effects, that severance pay should be included in the analysis. However, Luminant makes no mention of having done so.
  - (c) Luminant does not analyze whether those who lose jobs at its mines and plants will be able to find employment elsewhere.
  - (d) The harm to communities only refers to economic harm those communities that house the plant and mines. There is no discussion of the benefits to other communities, including but not limited to reduced mortality, morbidity, and health care costs in downwind communities.

## **Conclusion**

- (18) If Luminant, as part of complying with the CSAPR rule, decides to close part of Monticello and its associated mines, the economic impacts are not limited just to the negative effects on the plant and mines themselves. Luminant and other companies will

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<sup>10</sup> Luminant Motion, Exhibit 9, Declaration of David Campbell, page 22 of 287.

increase generation at other existing plants or invest in new resources (including, for example, wind and energy efficiency programs) all of which would create jobs. The company also has stated that they will significantly invest in pollution controls to comply with the rule, which would also create jobs in manufacturing, installation, operations, and maintenance. Luminant's one-sided and incomplete analysis falls far short of capturing the full employment implications of the EPA's CSAPR and presents a biased picture of the economic implications of that rule.

I declare under penalty of perjury that the foregoing is true and correct.

*William Steinhurst*

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William Steinhurst

Executed on October 6, 2011 in Montpelier, Vermont.

## APPENDIX A

### STEINHURST RESUME

William Steinhurst  
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#### PROFESSIONAL EXPERIENCE

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

*Senior Consultant, July 2003 to Present*

Consulting services to state public advocates, consumer advocates, environmental organizations, and utility regulators on regulatory policy, power supply procurement, electric industry restructuring, portfolio management, rate setting and 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*

Preparation of 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, 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 methods 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***

Illinois Energy Office, 1986.  
Massachusetts Executive 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, 2002-2004

***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, 2000-2008; Secy., 1991-1997  
3<sup>rd</sup> Vice President, Girl Scouts of the Green and White Mountains, 2009 to date  
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  
Justice of the Peace, Montpelier, Vermont, 2007-

**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 and AFFIDAVITS**

### **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  
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 5826 - Vermont Marble Electric Division - IRP - externalities  
Docket 5832 - Lyndonville IRP - externalities

Docket 5841/5859 - Citizens Utilities Prudence Review & Revocation Petition  
Docket 5854 - Electric Restructuring\*  
Docket 5857 - GMP Rate Increase\*  
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 6270 - Qualifying facility contract reform  
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  
Docket 6958 - Green Mountain Power Rate Design - for Conservation Law Foundation  
Docket 7085 - CVPS Street Lighting Tariff - for Village of Woodstock  
Docket 7175 - Green Mountain Power Rate Design - for Conservation Law Foundation and AARP  
Docket 7176 - Green Mountain Power Alternative Regulation Plan - for Conservation Law Foundation and AARP  
Docket 7336 - CVPS Alternative Regulation Plan - for Conservation Law Foundation\*  
Docket 7466 - Efficiency Utility Structure - for Conservation Law Foundation

**Vermont State Environmental Board**

Docket 5W0584-EB - Developers Diversified Land Use Permit

**Federal Energy Regulatory Commission**

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

**California Public Utilities Commission**

Multi-Stakeholder Study of Alternatives to the Mohave Generating Plant Pursuant to CPUC Decision 04-12-016 - for Southern California Edison (February 2006) \*

R.06-02-013 - Long Term Procurement Plans of PG&E, SCE and SDG&E&E - for the Division of Ratepayer Advocates (March 2007)

**Connecticut Department of Public Utility Control**

Docket No. 03-07-16 - Alternative Transitional Standard Offer (live testimony Dec. 2004, prefiled comments Jan. 2003) \*

**Delaware Public Service Commission**

Docket No. 04-391 – Standard Offer Service – for the Commission Staff (live testimony October 2006)

**District of Columbia Public Service Commission**

Formal Case 1047 – Investigation into the Structure of the Procurement Process for Standard Offer Service – for the District Office of People’s Counsel (June 2006 to date) \*\*

**Florida Public Service Commission**

Dockets 080407 through 080413-EG – Commission Review of Numeric Conservation Goals – for the Southern Alliance for Clean Energy and the Natural Resources Defense Council (August 2009)

**Illinois Commerce Commission**

Docket No. 05-0159 - Commonwealth Edison Basic Utility Service Procurement  
Docket No. 05-0160, 0161 and 0162 - Ameren CILCO, AmerenCIPS, and AmerenIP - Basic Utility Service Procurement

**Indiana Utility Regulatory Commission**

CAUSE NO. 42598 - Vectren North - Gas cost rate making mechanism and demand side management programs (Sept. 2004)  
CAUSE NO. 42612 - Public Service of Indiana - demand side management programs (Sept. 2004)

**Massachusetts Department of Public Utilities**

Docket 07-050 – Investigation into Rate Structures that will Promote Efficient Deployment of Demand Resources – for The Energy Consortium (June 2007) \*

**Mississippi Public Service Commission**

Docket 2008-AD-158 – Proceeding to Review Statewide Electric Generation Needs – for The Sierra Club (June 2008)  
Docket 2008-AD-477— Docket to Consider Standards Established by the Energy Independence and Security Act of 2007, Section 111(d) of Public Utility Regulatory Policy Act (16 U.S.C. § 2621)—for The Sierra Club (November 2009) \*

**New Hampshire Public Utilities Commission**

Docket DE 07-064 – Revenue Decoupling Investigation – for Conservation Law Foundation (May 2007 to date) \*

**Ohio Public Utilities Commission**

Restructuring Roundtable – System Benefit Charges - Commission workshop presenter \*  
Case No. 09-906-EL-SSO—Competitive Bidding Process—for Ohio Consumers’ Counsel (December 2009)

**Oklahoma Corporation Commission**

Cause No. RM 2007-007 – Demand Side Management Rulemaking – for The Sierra Club and the Oklahoma Sustainability Network (May 2008) \*

**South Carolina Public Service Commission**

DOCKET NO. 2009-261-E—SCE&G DSM filing—for Southern Environmental Law Center and the South Carolina Coastal Conservation League (January 2010) (testimony filed)

**U.S. District Court for the District of Vermont**

Civ. No. 2:03-cv-279 – Circumferential Highway Impact Analysis – for Vermont Public Interest Research Group, Inc., Friends of the Earth, Inc., Conservation Law Foundation, and The Sierra Club (January 2004) \*\*

#### **Virginia State Corporation Commission**

Docket # PUE-2009-00023 – Conservation and demand response targets – the Southern Environmental Law Center, Appalachian Voices, Chesapeake Climate Action Network and the Virginia Chapter of the Sierra Club (September 2009)

Docket # PUE-2009-00081 – Demand Side Management Program Approvals – the Southern Environmental Law Center, Appalachian Voices, Chesapeake Climate Action Network and the Virginia Chapter of the Sierra Club (December 2009)

Docket # PUE-2009-00096 – Dominion IRP – the Southern Environmental Law Center, Appalachian Voices, Chesapeake Climate Action Network and the Virginia Chapter of the Sierra Club (February 2010) (testimony filed pending hearing)

Docket # PUE-2009-00097 – APC0 IRP – the Southern Environmental Law Center, Appalachian Voices, Chesapeake Climate Action Network and the Virginia Chapter of the Sierra Club (March 2010) (testimony filed pending hearing)

\* No prefiled testimony

\*\* Affidavit only

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