



DAN MELLINGER PE, SENIOR CONSULTANT

EDUCATION

B.S., Electrical Engineering, Michigan State University, 1999

EXPERIENCE

2017-present: Senior Consultant, Energy Futures Group, Hinesburg, VT

2016-2017: Senior Strategic Planner, Vermont Energy Investment Corp., Burlington, VT

2009-2016: Commercial Lighting Strategy Manager, Vermont Energy Investment Corp., Burlington, VT

2005-2009: Business Energy Consultant, Vermont Energy Investment Corp., Burlington, VT

1999-2005: Semiconductor Manufacturing Engineer, IBM, Essex Junction, VT

PROFESSIONAL SUMMARY

Dan specializes in the design, planning and administration of commercial and industrial energy efficiency programs, with an emphasis on lighting technologies. His program design experience spans multiple service delivery paths and program types. He has consulted on hundreds of commercial efficiency projects across numerous jurisdictions and speaks nationally on program design, industry standards, and lighting technology. Dan is a licensed Professional Engineer (PE) in the State of Vermont, is a Certified Energy Manager (CEM), and is Lighting Certified (LC).

SELECTED PROJECTS

- *Natural Resources Defense Council (Michigan and Colorado)*. Critically review multi-year DSM plans filed by Michigan and Colorado utilities. Draft and defend regulatory testimony on energy efficiency potential. (2017 to present)
- *California Alternative Energy and Advance Transportation Financing Authority*. Provide technical assistance on development of commercial energy efficiency financing pilots. (2017 to present)
- *DesignLights Consortium*. Provide research and technical assistance on the evolution of the version 5.0 solid state lighting technical performance requirements. Develop adoption and energy savings forecasts for commercial and industrial LED lighting and networked lighting controls. (2018)
- *Minnesota Center for Environmental Advocacy*. Delivered and defended testimony that quantified the potential for higher levels of energy efficiency in a 250 MW gas plant integrated resource plan proceeding. (2018)
- *Technical Reference Manual Development (Vermont, Ohio, Illinois, Iowa, D.C.)*. Developed commercial lighting TRM characterizations for Efficiency Vermont prescriptive and midstream programs. Technologies addressed include LED lamps & fixtures, fluorescent lamps & fixtures, and lighting controls. Contributed to TRM lighting measure characterizations in Ohio, Illinois, Iowa, and the Washington D.C. (2011-2017)



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- ***Efficiency Vermont Technology Roadmap.*** Created a 3-year emerging technology planning roadmap for Efficiency Vermont. Roadmap addresses all technologies and all customer segments (residential, commercial, and industrial). Developed an interactive and dynamic Excel-based roadmap platform. (2017)
- ***District of Columbia Sustainable Energy Utility.*** Provided consultative support during the startup phase of the DC Sustainable Energy Utility (Washington, D.C.). Assisted with program design, TRM development, and technology education. (2011-2012)
- ***American Municipal Power (Ohio).*** Provided consultative support during the start-up phase of an efficiency program portfolio in Ohio. Assisted with program design, TRM development, and technology education. (2011-2012)
- ***Vermont Demand Resource Plan.*** Developed a 20-year forecast of efficiency potential from commercial and residential lighting for the Vermont Demand Resource Plan (DRP). Forecast metrics included adoption, energy and demand savings, and incentive spending. The DRP is used by the Public Utility Commission to establish Efficiency Vermont 3-year budgets and goals. (2016-2017)
- ***DesignLights Consortium (DLC) LED Qualification Program.*** Contributed toward the concept, launch, and growth of the DLC LED qualification program, in collaboration with Northeast Energy Efficiency Partnerships (NEEP) and other regional utilities. Acted as a leading technical advisor on specification development, program design, and strategic planning. (2010-2016)
- ***Vermont Efficiency Excellence Network.*** Aided in the design and launch of the Efficiency Excellence Network for Efficiency Vermont trade allies. Helped establish trade group participation criteria, aided in trade ally recruiting, and delivered programmatic and technical training. (2013-2016)
- ***LED Direct Install Program.*** Designed and launched an LED direct install program for small and medium businesses in Vermont. Targeted customers who were in capacity constrained areas of the electric grid in an attempt to avoid costly infrastructure investments. Responsible for RFP management, contractor selection, budgeting, and performance management. (2013)
- ***Lighting Design Program.*** Created a program that pairs Vermont commercial customers with professional lighting designers on retrofit projects. The resulting energy savings per project averaged 50% higher compared to typical lighting retrofits. With professional guidance, projects utilized the most efficient lighting equipment, light levels were optimized for the task, and lighting controls were used extensively. (2010-2016)
- ***Midstream Lighting Program.*** Contributed to the design of, and eventually administered, the nation's first commercial lighting midstream program. Continuously expanded and evolved the program to keep pace with new technology developments and market changes. Facilitated distributor relationships and grew participation to include 100% of Vermont electrical distributors. (2009-2016)



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- *Municipal Street Lighting Program.* Assisted in the design and launch of a program that creates a partnership between Vermont municipalities and utilities to upgrade existing street lighting to LED. Used financial strategies to address the utility non-depreciated asset costs while minimizing the municipality investment cost. Provided technical support to the program administrator and municipalities. (2010-2014)
- *Vermont Commercial Lighting Market Analysis.* Used a data analysis technique to evaluate the Vermont commercial lighting market. Established current levels of market penetration, estimated future rates of product adoption, quantified future savings potential, and identified areas of programmatic focus. Developed new strategies based on the data insights. (2013-2016)