

MICHAEL P. MANLOVE, P.E.
CURRICULUM VITAE



EXPERIENCE

Principal

Manlove Engineering, LLC

August 2012 – Present

Hershey, PA

Founder and Principal of Manlove Engineering, Michael P. Manlove, P.E. works directly with each client to understand their specific goals and tailor innovative solutions to ensure their success. Mr. Manlove has extensive experience in the energy industry. He has overseen the conception, design, construction, and commissioning of multiple megawatts of solar generation spanning ten states and multiple foreign countries in the residential, commercial, industrial, and public sectors. Past projects have included net-metering, stand-alone generation, community energy/aggregated metering, micro-grids, and fully islanded/off-grid systems.

Mr. Manlove has the specific expertise to provide his clients with sound guidance through the engineering, financial, and regulatory steps needed to meet their return on investment goals. He understands the specific challenges of solar, renewable energy, and energy management projects including complex financial incentives, electrical codes, and utility guidelines.

Previously, Mr. Manlove was the Director of Engineering for Flexera, Inc., a Delaware based electrical engineering, solar photovoltaic, energy auditing, and lighting firm. During his four year tenure with Flexera, Mr. Manlove personally directed the design, installation, and commissioning of several hundred solar photovoltaic and renewable engineering projects. Highlighted projects include The Refuge at Dirickson Creek, Cripple Creek Golf & Country Club, the Sussex County Emergency Operation Center, the Worcester County Recreation Center.

Mr. Manlove's academic involvement includes serving as an adjunct faculty member at Delaware Technical Community College. Since 2009, his roles have included course development and teaching in the renewable energy, sustainable development, solar photovoltaic and energy efficiency fields.

Mr. Manlove received his Bachelor of Mechanical Engineering degree from the University of Delaware. He is an NCEES Records Holder, NCEES Model Law Engineer, and a licensed Professional Engineer.

Adjunct Instructor

Delaware Technical Community College

August 2009 – Present

Georgetown, DE

Mr. Manlove has supported Delaware Technical Community College's *Environmental Training Center* and *Energy Technologies Department* in building first-class Solar Photovoltaic, Renewable Energy, Sustainable Planning, and Energy Management programs. His diverse roles within the college have included course developer, adjunct instructor, energy forum member, and department adviser.

Highlighted courses developed and taught by Mr. Manlove include:

- Environmental Sustainability: Delaware Sustainable Professional
 - A 48 hour, four credit accreditation course jointly developed by Delaware Tech and the Delaware Department of Natural Resources & Environmental Control (DNREC) for design professionals,

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land developers, contractors, zoning officials, and policy makers seeking to learn the best practices of sustainable land planning, development, design, growth, and construction.

- This course is required as the Degree Capstone Course for the Environmental Engineering Technology Degree Program.
- Mr. Manlove serves as one of several industry professionals contributing to this course's development and instruction. His content areas of expertise included Renewable Energy and Energy Efficiency.
- Renewable Energy Sources
 - A 48 hour, four credit course covering the fundamental principles of many forms of renewable energy sources. Highlighted course topics include solar photovoltaic, solar thermal, wind turbine, fuel cell, utility-scale geothermal, and hydroelectric generating systems.
 - This course is a required course within the Energy Management Degree Program.
 - Mr. Manlove independently developed this course's content and taught it during the Fall Semesters of 2009 and 2010.
- Sustainable Energy Sources
 - A seven hour continuing education course offered to the public and specifically water and waste water facility operators. The course is specifically designed to look at alternative, sustainable, and renewable energy sources that are available for use onsite at water and wastewater facilities. It includes a discussion of key engineering and other factors needed to adopt some or all of these energy sources. The energy sources covered include Solar Photovoltaic, Wind Turbines, Biomass, and Fuel Cells.
 - The course is an accredited for (7) Continuing Education Units (CEU) for Water & Waste Water Operators in Delaware and Maryland.
 - Mr. Manlove independently developed this course's content and teaches it semiannually.
- Operation & Maintenance of Solar Energy Systems for Operators
 - A seven hour continuing education course offered to the public and specifically water and waste water facility operators. The course is designed to assist operators with operation and maintenance of solar electrical systems. Topics include an overview of solar energy systems, an installation overview, safety and inspection protocols, and preventative maintenance procedures.
 - The course is an accredited for (7) Continuing Education Units (CEU) for Water & Waste Water Operators in Delaware and Maryland.
 - Mr. Manlove independently developed this course's content and teaches it semiannually.

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EDUCATION

Bachelor of Mechanical Engineering (B.M.E.)

May 2006

Undergraduate Research Fellowship: Hydrogen Fuel Cell Group
Minor: Economics

University of Delaware, College of Engineering

Newark, DE

REGISTRATIONS

Professional Engineer – Connecticut – License No. 29609

Professional Engineer – Delaware – License No. 17245

Professional Engineer – Maryland – License No. 41576

Professional Engineer – Massachusetts – Temp. Permit No. 250

Professional Engineer – New Jersey – License No. 24GE05027400

Professional Engineer – New York – License No. 090723

Professional Engineer – Pennsylvania – License No. PE079792

Professional Engineer – Virginia – License No. 50530

Professional Engineer – South Carolina – License No. 33330

Professional Engineer – U.S. Virgin Islands – License No. 1322-E

Professional Engineer – Washington, D.C. – License No. PE906589

NCEES Record Holder & Model Law Engineer – Record No. 47789

ABOUT MANLOVE ENGINEERING

Founded in 2012, Manlove Engineering is a full-service electrical engineering firm specializing in design, project management, and consulting solutions for the solar photovoltaic, renewable energy, and energy management industries. Based in southeastern Pennsylvania, Manlove Engineering serves public and private sector clients in the Mid-Atlantic and Northeast regions of the United States.

CONNECT



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