

Agenda

Presented by Clay Sterling

Solar Photovoltaic (PV) Energy System Basics

- History of solar PV systems
- Statistics on current installations
- Applications for solar systems
- Certifications and permitting

Solar PV Economics

- Cost of components
- Net metering
- Lifecycle analysis
- Incentives
- Calculating payback
- Solar renewable energy certificates
- Monetizing your solar energy system

Solar PV System Siting and Sizing

- Analyzing power needs
- Evaluating the site
- Sizing systems and using energy produced

Solar PV System Materials and Design

- Performance modeling software
- System modules
- Inverters and microinverters
- Racking and mounting systems
- Battery systems
- Balance of system components
- Interconnection and batteries

Codes, Wiring, Connections and Commissioning

- Utility interconnection
- Safety requirements
- Grounding requirements
- Labeling requirements
- Testing and commissioning

Case Studies or Small Group Exercise on System Design

Small Commercial

Solar Photovoltaic Energy Systems

Live, Interactive Webinar - Tuesday, September 15, 2020

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HalfMoon Education Inc.
PO Box 278
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Learning Objectives

You'll be able to:

Explore the commercial applications for solar photovoltaic (PV) energy systems, available certifications, and permitting requirements.

Discuss the economics of solar PV systems, including initial costs, net metering, lifecycle analysis, incentives and opportunities for monetization.

Analyze small commercial business power needs and evaluate sites for PV system feasibility.

Identify required PV system materials and explore options for modules, inverters, racking systems and batteries.

Reference codes to understand wiring, interconnection and commissioning requirements.



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HalfMoon Education Online Learning Small Commercial Solar Photovoltaic Energy Systems

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Examine applications for solar systems

Learn about solar PV economics and life cycle analysis

Consider interconnection and batteries

Understand how to size solar PV systems

Explore racking and mounting systems

Monetize your solar energy system

Continuing Education Credits

Professional Engineers

6.5 PDHs

International Code Council

.65 CEUs (Energy)

Architects

6.5 HSW CE Hours

6.5 AIA LU|HSW



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Faculty

Clay Sterling is an associate professor of Renewable Energy Technology at Kankakee Community College and is an IREC certified PV and small wind instructor. In the recent past, he instructed both solar photovoltaic (PV) and wind courses at the Midwest Renewable Energy Association for over 15 years. He has a construction background gained from working in his family’s plumbing shop, and he has worked nine years as a commercial electrician on large construction projects. He now works as an electrician in the summers for a solar installation company in Madison, Wisconsin. In 2009, Wisconsin’s K-12 Energy Education Program named him the Non-Formal Energy Educator of the Year. Mr. Sterling also received the “Clean Energy Trainer of the Year” award in 2013 from the Interstate Renewable Energy Council (IREC).

Webinar Information

Log into Webinar 8:00 - 8:30 am CDT	Break 11:55 am - 12:25 pm CDT
Morning Session 8:30 - 11:55 am CDT	Afternoon Session 12:25 - 3:50 pm CDT

Tuition
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How to Create a Pavement Management System

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How to Identify Soil Types

- Fri., Sept. 11, 2020 | 11:00 am - 1:00 pm CDT

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- Mon., Sept. 14, 2020 | 11:00 am - 12:30 pm CDT

How To Analyze Common Construction Defects and Failures

- Mon., Sept. 14, 2020 | 12:00 - 2:00 pm CDT

How to Lessen Stresses on Vegetation in Green Stormwater Infrastructure

- Tues., Sept. 15, 2020 | 11:00 am - 1:00 pm CDT

How to Assess and Clean up a Contaminated Site

- Thurs., Sept. 17, 2020 | 10:00 am - 12:00 pm CDT

How to Design Accessible Parking

- Mon., Sept. 21, 2020 | 11:00 am - 12:30 pm CDT

How to Use Xeriscape in Site Planning

- Thurs., Sept. 24, 2020 | 11:00 am - 1:00 pm CDT

How to Navigate the New Mass Timber Construction Types in the 2021 IBC

- Fri., Sept. 25, 2020 | 2:00 - 4:00 pm CDT

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Completion certificates will be awarded to participants who complete this event and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

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Registration

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