Southeast Wisconsin Solar PV Operations & Maintenance Training
Milwaukee Shines: Solar PV O&M Training for Municipalities

• Project Goals:
  • The proposed project will address specific operations and maintenance procedures as they apply to municipalities in southeast Wisconsin.
  • To date, no one at the City of Milwaukee, Milwaukee County or other organizations in southeast Wisconsin have been trained in the operations and maintenance for installed solar PV.
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• Project Goals:
  • Ensuring that new and existing PV systems are properly maintained throughout their expected system lifetimes will be essential as more PV is installed in Milwaukee and the surrounding area.
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- Partners:
  - Milwaukee County Sustainability Office
  - Midwest Renewable Energy Association
  - UW-Milwaukee
  - Milwaukee Shines
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• Attendees:
  • Milwaukee County
  • Milwaukee Metropolitan Sewerage District
  • Milwaukee Public Schools
  • UW-Milwaukee
  • City of Kenosha and City of Milwaukee
  • Urban Ecology Center
  • H&H Solar
Cari Helberg, the instructor, brought a number of tools to show to the attendees, including: a torque wrench and a thermal camera.
Cari went over a 12 month check up for PV systems including walking your system and looking for loose wires, broken modules, critter damage, racking failures, damaged connectors, equipment error codes – and doing random torque tests, IR scans and IV curves.
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• Training Location:
  • We chose UW-Milwaukee because:
    • they had classroom space,
    • they have PV installs and were interested in learning about O&M, and
    • this particular location had an install that showcased a number of problems that Carrie talked about in class
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Disconnect switch in ‘off’ position

Unlocked box.
Bullet hole in one of the panels. Cari was able to take students out to test this system.

Tall weeds growing in front of some panels
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• Results:
  • We received very positive feedback from attendees
  • Everyone that attended learned a great deal on O&M for existing installs but also things to plan for on future installs
  • We decided to separately hold a Solar Thermal O&M course a few weeks after this course because many of the attendees had both system types
Thank You!

• WiDRC funding made this training possible and we are very grateful for your support!