

American Public Power Association

DEEDdigest

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Webinar TODAY! FREE to DEED Members

Managing Your AMI Data

While Advanced Metering Infrastructure (AMI) has introduced a streamlined customer data collection method for utilities, it has also created a need to manage this large influx of data. Algona Municipal Utilities and Iowa State University sought to create a simple alternative that could help utilities seeking to manage their customers' data. AMU and ISU developed a tool to extract portions of stored AMI data to better understand the load behavior of different customer classes, analyze peak load and energy consumption, and check for bad and missing data that could be misinterpreted.

This webinar will dive into how to use the analysis tool the team developed, which contains an Excel and stand-alone MATLAB program. View these project deliverables and the final report and abstract on the [DEED Project Database here](#).

Join us **TODAY at 2PM EST** to hear from the team that planned and executed this project.

Register Now

Upcoming Webinar FREE to DEED Members

Improving Economics, Sustainability, and Reliability in the Building Energy Sector with a Thermal Microgrid

What do you get when you overlay a smart, sustainable microgrid onto a downtown area or campus? The smartest, clean energy solution available for multi-building complexes, and an innovative approach to electrification while compounding savings and improving reliability. *Thermal microgrid technology* combines system-level optimized thermal services, heat recovery, renewable energy, and electric power management through distributed communications and control techniques. Striving to provide an in-depth understanding of this technology, the City of Palo Alto Utilities (CPAU) partnered with Stanford University, and EDF Innovation Lab to create tools to support municipal utilities in evaluating the feasibility of deploying thermal microgrids in their communities. The tools, available on the [DEED Project Database](#), include a white paper describing the



DEED Webinars

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technology, economics, and market of thermal microgrids in comparison to alternatives; and a tool suite for assessing technical and economic feasibility of the thermal microgrid.

This webinar will educate you on the thermal microgrid technology, its benefits, and run through the tool suite for feasibility assessment. City sustainability managers and utility employees in generation and fuels, energy services, economic development, resource managers, key accounts, and customer programs will find the information provided during this webinar most valuable.

Join us on **Wednesday, March 13th at 2:00 PM EST** to hear from staff at CPAU, EDF Innovation Lab, and Stanford University, who planned and executed this project.

[Register Now](#)

Two Days Left to Submit your Grant or Intern Application!



Get your [utility grant](#) and [internship](#) applications in by **FRIDAY, FEBRUARY 15th!** Funding awards will be announced in mid-April. View [DEED's funding page](#) for more information. Email DEED@PublicPower.org or call **202-467-2942** with any lingering questions.

Mark your calendars for the Fall grant and scholarship cycles! The grant cycle opens on May 1st and closes on August 15th. The scholarship cycle runs from August 1st to October 15th. Learn more on the [DEED funding page](#).

Recently Completed Grant

One grant has wrapped up since our last newsletter. Visit the [DEED Project Database](#) for a repository of information on hundreds of outstanding research projects funded by DEED. Search this unparalleled database to learn what other public power utilities like yours have done. Discover how you can replicate the success of research projects and get ideas for projects you can conceive and submit for DEED funding.

G-397 Leveraging Experience from Stanford and EDF to Develop Information and Tools for Thermal Microgrid Feasibility Assessments

The City of Palo Alto Utilities partnered with EDF Innovation Lab in evaluating a sustainable microgrid alternative to help support municipal utilities in evaluating the feasibility of a smart, energy efficient way to electrify urban, building-dense areas. The "thermal microgrid," is a district energy system that combines system-level optimized thermal services, distributed generation, heat recovery, and electric power management through smart and distributed communications and control technologies. This grant also evaluated Stanford University's project, a campus-wide renewable electricity powered heat recovery with

low-temperature hot water distribution. Among the deliverables are a white paper describing the benefits of the technology, and a suite of tools for assessing technical and economic feasibility in your community. These are now available on the [DEED Project Database](#). [READ MORE](#).

Register for the Upcoming Webinar Here!

Tunable Lighting Research Shows Improvement for Children with Autism

Sacramento Municipal Utility District conducted a study searching for a correlation between light manipulation and its effects on children with autism. KCRA Channel 3 in Sacramento published the findings of the project in an article, [SMUD study looks at light manipulation and its effects on autism](#).

Stoughton Utilities completed a tunable lighting research project with a DEED grant, [Tunable Lighting in Schools: Energy Savings and an Improved Learning Environment](#). The project illustrated how different colors and spectrums of light improve student learning environments in schools.

Introducing a New Segment: Dig Deeper with DEED

We want to give you what you want! Beginning with this month's newsletter, DEED will highlight several current and completed projects having to do with one topic. Continue below for February's topic highlights on Drone Technologies!

Groundbreaking Research on Drones

Interested in learning more about recent DEED projects in the drone and infrared technology fields? This [APPA article](#) highlights related projects, such as the City of Westerville, Ohio's current [Drone Turnkey Solution project](#) and Huntsville Utilities' [Implementation and Best Practices for Unmanned Aircraft Systems \(UAS\) for Utility Operations project](#) completed in 2018.

A recent article, [Advancing drones in the power sector with new use cases](#), published by Engerati.com showcases New York Power Authority's groundbreaking work on their current DEED grant, [Unmanned Aircraft System \(UAS\) Equipped with Light Detection and Ranging \(LiDAR\) Technology](#). This project illustrates the importance of maintenance and vegetation management in utility operations.

Curious for more? Check out a joint project completed in 2017 between ElectriCities of North Carolina and North Carolina State University, [Building a Business Case for UAS Use in Public Power Operations](#).

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