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Making the Most of Smart Meters

A new report found many U.S. utilities are wasting their ratepayer-funded meters.

WASHINGTON, D.C.—Advanced metering infrastructure (AMI) networks better link customers to the true cost of electricity and encourage them to save it. These networks collect masses of interval data that help optimize energy-efficiency spending and other benefits. AMI is a key element to grid modernization.

A new report from the American Council for an Energy-Efficient Economy says few U.S. utilities are capturing the meters' full range of capabilities, and some are hardly capturing any at all. Utilities are largely missing the opportunity to use the AMI data to improve their energy efficiency and demand-response offerings in part because of regulatory, administrative and technological barriers, accord-

ing to the “Leveraging Advanced Metering Infrastructure To Save Energy” report.

The report offers solutions to better leverage AMI data including using time-varying pricing, more energy use feedback and programs that align payment with metered performance. Another solution is giving customers more actionable insights from evaluation, measurement and verification.

Providing only AMI data to customers rarely results in energy savings. Instead, customers need to have other tools, pricing strategies, incentives and services for them to change their energy use, the report says.

To incentivize the utilities to better use AMI, regulators can



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ACEE surveyed 52 large utilities and found most of them were underutilizing AMI. The report discusses use cases and barriers that prevent effective practices.

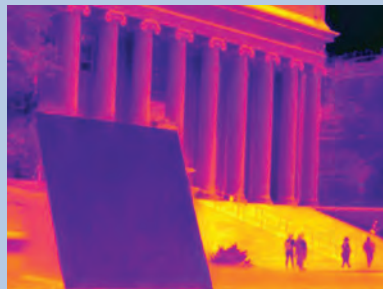
create energy-saving benefits, adjust stakeholder compensator based on performance and set performance standards for metered energy savings.

To read the report, visit <https://aceee.org/leveraging-advanced-metering-infrastructure-save>. ■

Super-Cool Materials Send Heat To Space

NATICK, MASS.—Paints, plastics and wood can be engineered to stay cool in direct sunlight. Academic researchers (from Stanford University, University of Colorado, Boulder and others) are analyzing materials that rely on passive radiative cooling, which might save on electricity bills and reduce a surge in demand for refrigeration and air-conditioning systems.

The materials reflect light, like mirrors or white paint. They absorb and emit radiation. The infrared



JYOTIRMOY MANDAL

A surface coated with a super-cooling paint can stay cooler than its surroundings.

rays pass through the atmosphere and into space when the materials point at the sky. This links the materials to an inexhaustible heat sink, a researcher said. These materials can radiate away heat away to stay a few degrees cooler than surrounding air. ■

INDUSTRY ROUNDUP

DOE Ramps Up Energy Storage Development

WASHINGTON D.C.—Increased funding and research for energy storage could create a roadmap to produce a range of storage and flexibility technologies over the next decade. The U.S. Department of Energy launched the Energy Storage Grand Challenge to speed up the development, commercialization and use of energy storage technologies.

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California to Enforce Light Bulb Efficiency Standards

CALIFORNIA—A federal judge has ruled that California can implement energy-efficiency rules for light bulbs. The rules effectively ban sales of incandescent and halogen light bulbs in favor of more efficient LED ones. California was one of the states that sued the Department of Energy in November, accusing it of violating federal energy laws by rolling back energy-efficient light bulb standards.

Mercedes-Benz Settles Lawsuit After Mold Found in HVAC Units

ATLANTA—A class-action lawsuit alleged that mold grows in various models of Mercedes-Benz vehicles' HVAC sys-

tems, leading to odor. The company has agreed to the suit that covers more than 2.5 million vehicles.

Largest C-PACE Deal Ever in U.S. Closes in Utah

SALT LAKE CITY—A hotel secured \$54 million in CleanFund C-PACE financing. The state's revamped C-PACE legislation enables public-private partnerships to work toward new development and revitalization of commercial buildings.

Turning Air-Conditioner Condensation into Beer

SAN DIEGO, CALIF.—The San Diego International Airport collects up to 100,000 gallons (378 541 L) of air-conditioning condensation a year.

The airport has partnered with Ballast Point Brewery to make a beer with reclaimed water from air conditioners. The airport typically used the water for washing or in cooling towers.

Modeling Tomorrow's Energy Infrastructure Today

GOLDEN, COLO.—Shifting climate conditions are anticipated to affect U.S. electricity generation. Current analysis has overlooked the influence of changing conditions. Researchers from the National Renewable Energy Laboratory, Sandia National Laboratories and the City University of New York applied a new modeling approach for long-term electricity generation infrastructure planning. ■

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