MDMS *UPDATE*

~ METER DATA MANAGEMENT SYSTEM ~

VOLUME 4 ISSUE 3

FEB. – MAR. 2019

FROM THE PROGRAM MANAGER

By Michael Ott, MDMS Program Manager, USACE—Huntsville Center

Welcome to our February - March 2019 issue of the *MDMS Update,* designed to keep you informed on the growth and latest developments of the Meter Data Management System and the Army Metering Program.

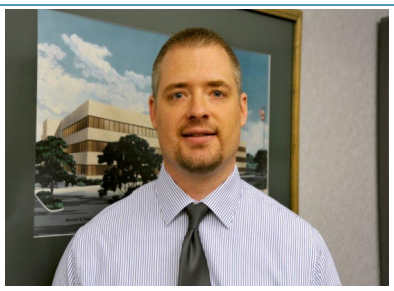
We have provided, and continue to provide, abundant opportunities for users to be trained on the Upgraded MDMS. Whether it be online webinars, conferences, or one-on-one sessions, these efforts have been ongoing since September 2018. Below you will see the status of these ongoing training activities.

On pages 2 and 3, we detail the recent 2019 Annual Energy Summit, which was held in Huntsville, Alabama and had over 40 Resource Efficiency Managers (REMs) in attendance with other Energy Managers (EMs) and energy industry representatives from both private and Government sectors. This year's Summit had keynote addresses from both Rob Ivester, DOE's Federal Energy Management Program Director and J. E. "Jack" Surash, Deputy Assistant Secretary of the Army for Energy & Sustainability.

On page 4, we brief the REM workshop, which coincided with the Summit. Be sure to check out several examples of savings cited by REMs as part of their efforts on their Installation Energy and Water Plans (IEWPs).

The MDMS User Outreach Team provided two face-to-face breakout training sessions during the Summit. These are covered on page 4, but take special note of the team's three key take-aways as it pertains to system degradation.

As always, our mission is to improve the MDMS experience for end users. Your input is valuable, and we welcome your feedback at: usarmy.coe-huntsville.cehnc.mbx.armymeterhelp@mail.mil



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MDMS TRAINING STATUS

Since September 2018, the MDMS contractor General Dynamics Information Technology's User Outreach Team has conducted over 20 training webinars, with requests continuing to come in to provide more. Over 300 participants have attended these webinars, and more than 70 new user accounts have been added to MDMS.

Several new users have been on recent webinars and have asked for additional help navigating the new layout specifically for their site/installation. We have provided one-on-one sessions with many of these users. If you would like to setup an individual training session for your installation or region, please reach out to the Army Meter Service Desk (AMSD).

The focus of the training webinars to date has been on the new layout of the system and navigating through all the functional areas and corresponding energy analysis tools. The team continues to answer questions and take feedback during these webinars, which are usually turned into informational and "how to" articles in future versions of this newsletter. Some of the more popular, useful topics covered how to get your installation's GIS data into MDMS, how to get access to MDMS, and how to get non-reporting meters' data back into MDMS. In addition, we continue to review user feedback and input to assess program requirements and feasibility for system inclusion.

The team has both demonstrated and provided training on MDMS at two Energy Conferences in February: the DPW Conference in San Antonio, Texas and the 2019 Annual Energy Summit in Huntsville, Alabama. REMs and Energy Managers from around the world were introduced to new functionality that has been added since the December rollout, such as the Customer Billing, Daily Comparison, and Override Rollup reports. As the team went through the numbers on the Override Rollup report, the REMs were surprised by the number of systems overridden and the consistency of those system overrides for the last 30 and 60 days. REMs were provided with some pointers on how to use this report to exempt buildings, such as 24/7 operations, as well as follow up with maintenance shops.

Training webinars will continue to be scheduled with the focus on new users. We will also begin scheduling more in-depth trainings on one or more aspects of the energy analysis and functional tools. If you would like to participate in a future webinar, send a request to the AMSD.

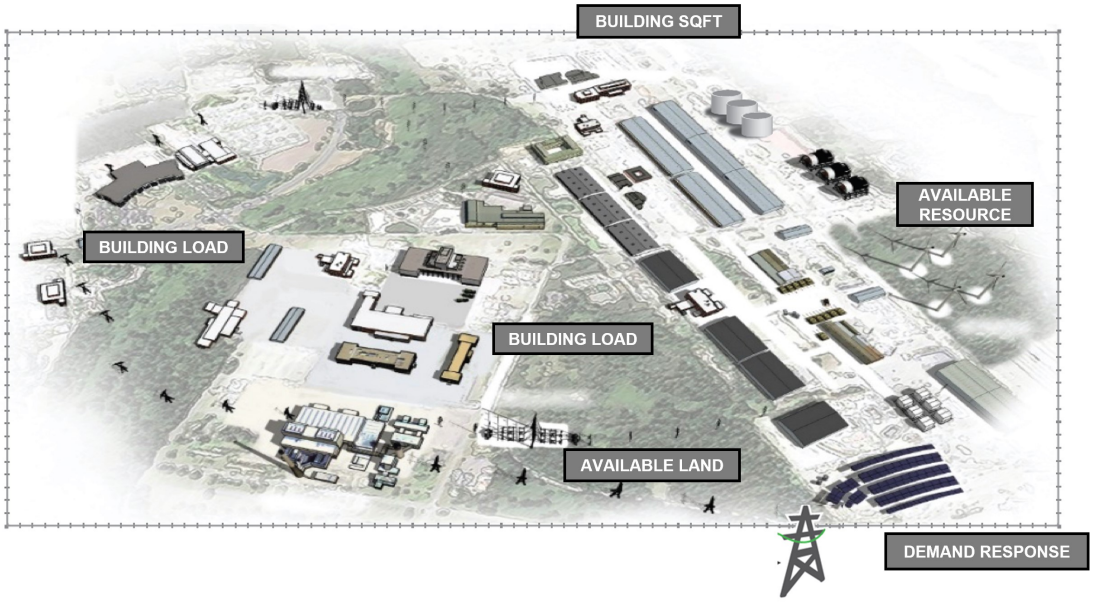
2019 ANNUAL ENERGY SUMMIT

The 2019 Annual Energy Summit, hosted by the Energy Huntsville Initiative with support from and coordination with the U.S. Department of Energy (DOE), took place in Huntsville, Alabama February 25-27 at the Huntsville Marriott on the U.S. Space & Rocket Center campus. This year's event again coincided with the Huntsville Center's contracted REM workshop and provided key insights into energy programs and initiatives, resiliency, cybersecurity, and advanced manufacturing, as well as partnerships among cities, companies, and installations. Resource Efficiency Managers and Energy Managers from around the globe were also in attendance. Throughout the Summit, there were multiple training breakout sessions on energy management and technology topics with two such sessions providing CEUs for those in attendance.

The first day's opening keynote was provided by Dr. Rob Ivester, DOE's Federal Energy Management Program Director. Ivester provided an overview on the DOE's Energy Efficiency & Renewable Energy (EERE) programs, as well as insights into many of the successes over the years regarding clean energy trends and new technology developments. Ivester also showed the impacts that EERE programs have had on the transportation, manufacturing and renewable power sectors. Following the opening keynote was a panel discussion focused on energy initiatives and challenges, with a diverse set of panelists including Ivester. For more information on the DOE's EERE programs and services, go to: https://www.energy.gov/eere/office-energy-efficiency-renewable-energy

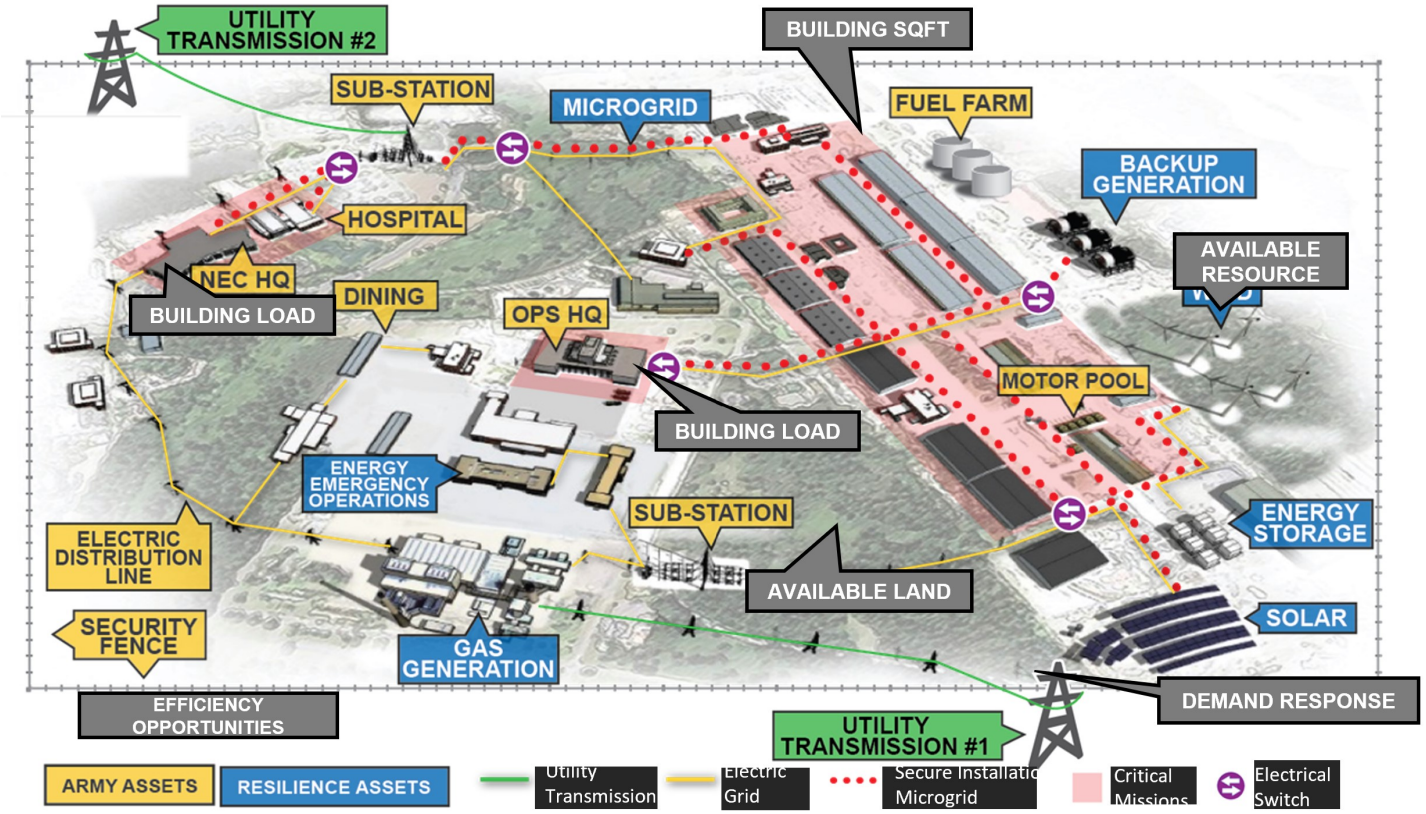
The afternoon focused on cybersecurity and its impact on energy-related projects. Supervisory Special Agent Scott Pierre, FBI Cyber Squad for the Birmingham, Alabama region provided the session's keynote address. Pierre's squad consists of eight agents covering Tuscaloosa up to North Alabama. He indicated that they have a lot of work, especially with Redstone Arsenal in their territory. Pierre warned the audience, "anything connected to the network is vulnerable." Pierre went on to say, "The energy sector is a very, very big target." He urged for diligence and continuous analysis and improvements in network protection efforts every day, no matter how great a cybersecurity team might be. While he said the FBI couldn't analyze a company's network, they could offer pointers and advice based on what they have seen. The keynote was followed by a panel that included many of the industry's top leaders and advisors with vast expertise in energy-related cybersecurity challenges and solutions. One of the questions asked of the panelists was what type of analyst/engineering discipline/degree proved best to serve in cybersecurity roles. A majority of the panel said that they prefer to take someone with a solid background and then train them on their company's specific processes and operating procedures, especially interns. Jonathan Pettus, Director of Cybersecurity & Information Technology Solutions for Dynetics, indicated that different types of people are good at different things and that it was more important to ensure that the team's assignments were prioritized every day to ensure the right focus. "From a risk perspective and a mission perspective, it's important to think through how you're structured in terms of responding to priorities that really affect the mission," Pettus said.

The second day's keynote address was provided by J. E. "Jack" Surash, Deputy Assistant Secretary of the Army for Energy & Sustainability on the topic of resiliency. After an impressive introduction by USACE - Huntsville Center's Program Director, Albert "Chip" Marin III, Surash opened his presentation with a video animation that showed the installation of the future. "Energy and water security and resilience ensures available, reliable, and quality power and water to continuously sustain critical missions," said Surash. He showed a visual overview of the installations of yesterday (see image at left), where the Army's goals were energy efficiency and conservation, based on Federal mandates as the key driver. This view showed the primary solutions as building load management strategies and onsite generation. *(Cont. on pg. 3)*



2019 ANNUAL ENERGY SUMMIT (CONT. FROM PG. 2)

Whereas installation's of today (see image below) are moving to satisfy critical mission requirements as their key driver, where the focus is on security and resilience. Here the primary solutions are expanded to load management plus operations & maintenance (O&M), infrastructure, and onsite generation and storage.



The panel discussion following Surash's keynote involved another well-rounded and highly experienced panel to discuss current best practices as it pertains to resiliency. Dr. Grace Bochenek, Energy and Environment Team Lead for The Spectrum Group and previously Acting Secretary of DOE and Director of DOE National Energy Technology Laboratory, offered her insights on creating resiliency around energy ecosystems regionally since there are diverse energy issues, infrastructure, resources, technology options and footprints for different regions. She said that we have to "start thinking creatively about public-private partnerships and activities, and connections with universities to Government installations, and connections between Government installations and industries. We need to step back and think of it regionally and come up with a more holistic plan per region."

Rounding out the last afternoon of the Summit, Elio Orta, Sofos Harbert Renewable Energy's Marketing and Sales Director for the U.S. Market, kicked off the advanced manufacturing session with the keynote address. Orta indicated that the most important thing to focus on now is change for the future. He went on to share one of his favorite quotes from Walt Disney, "Times and conditions change so rapidly that we must keep our aim constantly focused on the future." Orta educated attendees on solar energy installation and it's key players. He also highlighted the fact that Alabama has no state or local renewable portfolio standards. In the subsequent advanced manufacturing panel, participants such as Huntsville Hospital, Toyota, and Polaris discussed energy management and the integration of advanced technology.

Summit presentations are available for download at http://energyhuntsvillesummit.com/presentations/. Also, stay tuned, as the video recordings of the main program sessions, including keynote addresses such as Jack Surash's and Rob Ivester's, will be made available for viewing soon.

REM TRAINING

USACE Huntsville Center (HNC) held their annual one-day REM workshop coincident with the Summit on Feb. 28. Huntsville Center's REM program provides contracted subject-matter experts to Department of Defense branch installations to increase energy program effectiveness by identifying programs and practices to reduce energy and water costs and meet resilience and security requirements.

John Trudell, Huntsville Center's REM Program Manager said the reason for the events to coincide was to allow REMs to get face-time with other attending REM and energy industry representatives and participate in focused seminars, such as cybersecurity and energy resiliency. Gayle Hoffman is one of the REMs at Naval Base Guam. She has only been in the position for two months, but she said she is learning and looking forward to getting back so she can implement programs for her command. "I'm learning a lot of new terminology and acronyms associated with the job and meeting with other REMs and industry representatives has helped me fill in a lot of gaps," Hoffman said. "I've also learned a lot about energy resiliency priorities that has a wide focus across all service branches. It has been great meeting with vendors and learning about public/private partnerships and to meet with the other REMs and hear about their experiences and learn from them too," Hoffman said.

Some REMs are working towards completing the current year's Installation Energy and Water Plans (IEWPs) mandated by the DOD. Trudell said in the process of completing the IEWPs, energy saving projects will be identified. Trudell cited examples of recent savings as the REM at Fort Hunter Liggett, California received a rebate for the amount of $804,000; the REM at Camp Pike, Arkansas replaced the inefficient 80 gallon cast iron boiler (71 percent efficient) with inline tankless water heaters (95 percent efficient) for a savings of more than $125,000, and REMs at Fort Devens, Massachusetts, identified more than $500,000 in direct savings by analyzing water and sewage bills and receiving credit for previous errors.

"We have a strong record of our REMs developing projects to improve the facilities for the Soldier, provide secure resilient power to ensure mission readiness, and finding projects to save energy and money," Trudell said. "Getting most of the REMs under one roof once a year for the REM workshop gives them a chance to explore each other's programs and projects and offers them the opportunity to learn from one another, teach them additional ways to reduce energy and water consumption and save the DOD money. That's good for both the taxpayer and the environment."

MDMS USER OUTREACH TRAINING SESSIONS

On Feb. 27, during the Summit's technical breakout sessions, the MDMS contractor General Dynamics Information Technology's User Outreach Team conducted two training sessions.

With nearly 40 REMs and other energy industry representatives in attendance, Michael Ott, MDMS Program Manager, USACE HNC, opened with a welcome and brief synopsis of the importance of the Army's metering program. He then turned it over to the Outreach Team of George "Buster" Barksdale, CEM, MDMS Systems Engineer and Kecia Pierce, PMP, MDMS Outreach Strategist/ Trainer.

The first session was a face-to-face MDMS training. However, there was far more interaction than the typical online webinars. REMs were more readily engaged, asked questions and wanted to see their sites in specific tools, especially the building plug loads in the Component Benchmarking tool. Good feedback was offered and many stated that they were excited to get back to their sites and start working with the system.

The second session, "Monitoring Performance and Commissioning through Metering," identified the processes involved in Monitoring Commissioning (MCX), which Barksdale compared to "peeling back the onion." Three important take-aways were that: 1) commercial facilities degrade to override on average between 48-60 months, 2) institutions degrade to override between 18-24 months, and 3) one override, such as a schedule, may wipe out all other control sequence savings.

After talking about the advantages and measured effectiveness of MCX, Barksdale demonstrated to the REMs how to perform analysis using the benchmarking plug load. The Top Ten list of overrides was presented, followed by Buster's Law, "Without a smart, continuous and aggressive program to maintain automatic control, the control system applications will quickly migrate toward manual (override) positions."

Pictured here are (l-to-r): Justin Goodwin, MDMS Project Manager, Barksdale, Pierce, and Jay Newkirk, Board Chairman for Energy Huntsville.