

Energy Automation Solutions (EAS)

# 2018 EAS User Training and Technical Showcase Event

Smart Solutions. Smarter Grid.

**EATON**

*Powering Business Worldwide*

# Smart solutions for a Smarter Grid

## Radisson Blu Mall of America

- 1 The Lake's Ballroom A
- 2 The Lake's Ballroom B
- 3 The Lake's Ballroom C
- 4 The Lake's Ballroom D
- 5 Sky Bridge
- 6 Harriet A
- 7 Harriet B
- 8 Calhoun
- 9 Cedar
- 10 Minnetonka A
- 11 Minnetonka B
- 12 Minnetonka C
- 13 Nokomis A
- 14 Nokomis B
- 15 Nokomis C
- 16 Restrooms

Third floor level

Second floor level





## Pre- and post-forum supplemental training sessions

Monday, October 22 and Wednesday, October 24

<p>Monday, October 22 6:30–8:00 a.m. Lakes Ballroom A and B</p>	<p><b>Breakfast</b></p>
<p>Monday, October 22 Noon–1:00 p.m. Lakes Ballroom A and B</p>	<p><b>Lunch</b></p>
<p>Monday, October 22 6:00–8:00 p.m. Sky Bridge</p>	<p><b>Hospitality Welcome Reception</b> Blue drink tickets for cocktails at Eaton Reception Bar only</p>
<p>Monday, October 22 8:00 a.m.–Noon Lakes Ballroom C</p>	<p><b>Engineering Overview of How the RF Network Works</b> (1/2-day session—morning)</p> <p>This session will provide a technical overview of the RF Mesh network and how all the network components work together to form the network. Network design guidelines and methods for optimizing your network will also be included. At the end of the course, participants will understand:</p> <ul style="list-style-type: none"> <li>• The building blocks required for the RF Mesh network</li> <li>• Different networks (mesh vs. tower)</li> <li>• How the RF Mesh network forms</li> <li>• Network paths, links and hops and the impact on the network performance</li> <li>• Network applications</li> <li>• Design guidelines for network optimization</li> <li>• Methods to assess the health of the network</li> </ul> <p><i>Raj Kapur</i></p>



## Pre- and post-forum supplemental training sessions (continued)

Monday, October 22  
1:00–5:00 p.m.  
Lakes Ballroom C

**Itron Meter Training**  
(1/2-day session—afternoon)  
Itron Sentinel and PC Pro+ training  
*Itron*

Monday, October 22  
1:00–5:00 p.m.  
Nokomis C

**Honeywell Meter Training**  
(1/2-day session—afternoon)  
Honeywell meter and MeterCat training for the A3 meter  
*Honeywell*

Monday, October 22  
*Two sessions available:*  
10:00–11:30 a.m.  
or 1:00–2:30 p.m.  
Lakes Ballroom D

**Yukon Software Introduction**  
(No charge session)  
Are you new to Eaton's Smart Grid network? Have you been working with the software for less than 12 months? This informal overview of the Yukon user experience will show you how the software manages your network, provides tools for individual device interaction and integrates to other systems.  
*David Sutton*  
*Stacey Nelson*

Monday, October 22  
8:00 a.m.–4:30 p.m.  
Nokomis A

**Yukon Feeder Automation—Basic Software Training**  
In this session, participants will receive an in-depth look at the Yukon Feeder Automation (YFA) software with an overview of the latest feature additions including:

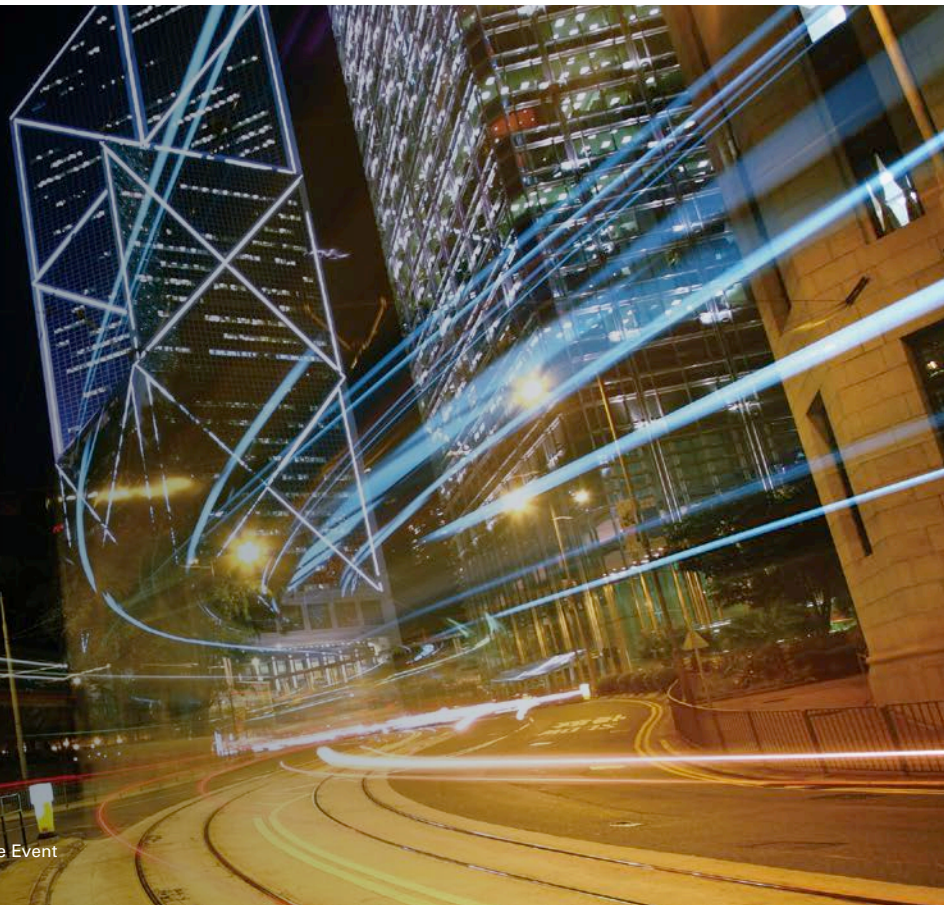
- A brief overview of the installation and licensing mechanism
- Creating a diagram in Visual T&D
- Editing the topology configuration
- Editing the communications server configuration, including automation functions
- Managing data points in Visual T&D Explorer
- Automation behavior in various situations

*Dan Landreman, Product Manager*  
*Charlene Erickson, Product Manager*

"At the EAS User Training and Technical Showcase, we look forward to demonstrating how our approach to power system design and modernization can help utility customers optimize asset efficiency while reducing system operating costs, downtime and environmental impact."

**Ken Polarek**

*Director of Marketing,  
Eaton's Energy Automation Solutions Division*



## Pre- and post-forum supplemental training sessions (continued)

Monday, October 22 8:00 a.m.–4:30 p.m. Eaton office	<b>CBC-8000 Control Configuration, Installation and Troubleshooting</b>  We will cover the basics of the CBC-8000 control hardware, including available hardware options for installation and communication, programming through the front panel and with ProView™ NXG software, and troubleshooting an installation, including wiring issues and programming issues. Attendee feedback is welcome to focus the discussion. Laptop with latest version of ProView NXG software installed is required. CBC-8000 controls will be provided.  <i>Toyebi Adedipe, Field Application Engineer</i>
Monday, October 22 8:00–11:30 a.m. Harriet B	<b>Energy Market Fundamentals: What They Are and How They Work</b> (1/2-day session—morning)  The ISO Energy Markets operate in over half of the U.S. continental territory and manage over 70% of the total power system load. This year, a group of utilities across several western states have proposed merging into the Southwest Power Pool. At this point, most municipal and cooperative utilities operate in energy markets through their G&Ts, PMAs or energy suppliers. However, the way that energy markets operate is making these entities change their programs so that they better match with the ISO rules. This training class will provide attendees with the knowledge of how the markets operate and provide references to resources to help distribution utilities understand their specific market programs.  <i>Joe Childs, Senior Program Manager</i>
Monday, October 22 1:00–4:30 p.m. Harriet B	<b>Do Your Own DR Feasibility Study</b> (1/2-day session—afternoon)  In this workshop, each participant will receive a spreadsheet model that can be filled out for yourself with your wholesale rates. From there, you can design your own DR feasibility study, including what programs to design, what loads to control, install rate, churn rates, marketing costs, peak day load curves and number of customers.  <i>Joe Childs, Senior Program Manager</i> <i>Roger Rognli, Senior Program Manager</i>
Monday, October 22 1:00–4:30 p.m. Nokomis B	<b>Introduction to Big Data Tools and Techniques</b> (1/2-day session—afternoon)  Big Data Analysis is a topic brought up in many conversations today. This 1/2-day seminar will introduce you to the world of Big Data Analysis. We will start out with an overview of what Big Data Analysis means and the tools that have been developed, both open source and commercial to analyze data. We will walk through two examples of how Eaton is using big data tools to get a better understanding of customer behavior and improve system performance. We will also provide the students with hands-on time and exercises using a big data tool.  <i>Rodney Nibbe, Demand Response Technical Specialist</i>
Wednesday, October 24 8:00 a.m.–Noon Nokomis A	<b>Yukon Feeder Automation—Advanced Software Training</b> (1/2-day session—morning)  In this session, participants will receive training on Yukon Feeder Automation advanced software topics. This will include: <ul style="list-style-type: none"><li>• Advanced simulator features</li><li>• Commissioning recommendations</li><li>• Mixed simulations setup and lab environment</li><li>• YFA log troubleshooting and remote log monitoring setup</li></ul> <i>Dan Landreman, Product Manager</i> <i>Charlene Erickson, Product Manager</i>
Wednesday, October 24 8:00 a.m.–Noon Nokomis B	<b>Smart Sensors/GridAdvisor Basics</b> (1/2-day session—morning)  Participants will have the opportunity to learn about Eaton's smart sensor solution platform. The session will show the process to commission your GridAdvisor sensors and set up the Visual T&D custom visualizations.  <i>Ryan Rausch, Product Manager</i>

# Introduction to technical showcase sessions

Tuesday, October 23

Lakes Ballroom A and B

6:30–8:00 a.m.	<b>Breakfast</b>
8:30–9:45 a.m.	<b>General Session</b> Welcome
9:05–9:25 a.m.	<b>General Session</b> Today, tomorrow and the future
9:25–9:30 a.m.	<b>General Session</b> Executive Perspective

## Break, meal and activity information

Tuesday, October 23 and Wednesday, October 24

Tuesday, October 23 9:30–10:00 a.m. Sky Bridge and Nokomis Foyer	<b>Coffee break</b>
Tuesday, October 23 Noon–1:00 p.m. Lakes Ballroom A and B	<b>Lunch</b>
Tuesday, October 23 2:50–3:10 p.m. Sky Bridge	<b>Coffee and snack break</b>
Tuesday, October 23 6:00–7:00 p.m. Lakes Ballroom A and B	<b>Dinner and bar</b> Orange drink tickets for cocktails at Eaton dinner bar only.
Tuesday, October 23 7:00–11:00 p.m. GameWorks	<b>Tuesday night activity at GameWorks</b> Drink tickets and game cards handed out at GameWorks upon entry.
Wednesday, October 24 7:00–8:30 a.m. Lakes Ballroom A and B	<b>Breakfast</b>
Wednesday, October 24 10:50–11:10 a.m. Sky Bridge and Nokomis Foyer	<b>Coffee break</b>
Wednesday, October 24 Noon–1:00 p.m. Lakes Ballroom A and B	<b>Lunch</b>
Wednesday, October 24 2:50–3:10 p.m. Sky Bridge	<b>Coffee and snack break</b>





## Grid Automation sessions

Tuesday, October 23

Nokomis A

<p>10:10–11:00 a.m.</p>	<p><b>Substation Automation Technology Highlights</b></p> <p>New technologies are now available to the Substation Automation landscape. Discussion of ‘what’s new?’ and success stories for the following technologies: substations gateways, I/O, HMI and IED management.</p> <p><i>Eric Lebeau</i></p>
<p>11:10 a.m.–Noon</p>	<p><b>Substation Computing Made Easy and Reliable</b></p> <p>Overview of computing technologies targeted at harsh substation environments, Eaton’s new Substation Server solution. Discussion of use cases, virtual environment and OOB technology for remote maintenance.</p> <p><i>Elie Chalhoub</i></p>
<p>1:00–1:50 p.m.</p>	<p><b>Innovative, Robust and Cost-Effective Distributed I/O Solution</b></p> <p>Meet the new SMP IO-2230! Loaded with features such as advanced management, cyber-security and logic engine, this new product will meet the most demanding I/O requirements at an unbeatable price point.</p> <p><i>Maia Zarmair</i></p>
<p>2:00–2:50 p.m.</p>	<p><b>Distribution Automation Product Roadmap Highlights</b></p> <p>We will review the roadmaps of the following DA technologies: Yukon Feeder Automation, Volt-VAR Management, capacitor bank controls and smart sensors.</p> <p><i>Dan Arden and Select Eaton Team Members</i></p>
<p>3:10–4:00 p.m.</p>	<p><b>Grid Modernization with Optical Voltage and Current Sensors in the Distribution System</b></p> <p>Features and benefits review of high-accuracy high-precision optical sensors juxtaposed against other voltage and current sensing technologies and how best to deploy a cost-effective mix of each.</p> <p><i>Ryan Rausch</i></p>
<p>4:10–5:00 p.m.</p>	<p><b>Innovations Which Enrich Your CBC experience.</b></p> <p>Learn about the recent CBC-8000 enhancements. Wi-Fi access, open the bank on power up, DNP3 master and come see Eaton’s new optical sensors operational with the CBC-8000.</p> <p><i>Troy Hedlund</i></p>

# Demand Response sessions

Tuesday, October 23 and Wednesday, October 24

Harriet B

Tuesday, October 23  
10:10–11:00 a.m.

## DR Industry Update

Eaton attends a number of conferences and meetings annually. In this session, we will present some of the successful utility program innovations from these meetings. We will cover program design, customer engagement and learnings from program delivery.

*Joe Childs, Sr. Program Manager*

Tuesday, October 23  
11:10 a.m.–Noon

## What's New with Eaton DR?

In this session we'll review how the industry and technology trends are influencing Eaton's Demand Response product line and product roadmap. We will cover recently released Yukon features and new DR hardware and dive into what you can expect for features and products in the future.

*Ryan Brager, Product Manager*

Tuesday, October 23  
1:00–1:50 p.m.

## Energy Management Circuit Breaker Pilot

Eaton will provide an update on the Energy Management Circuit Breaker use cases and their plans for the EMCB deployment.

*Ryan Brager, Product Manager*



“With our Demand Response solutions, we can help customers who are looking to reduce peak demand, shift load to balance generation and ease electrical system constraints. We provide solutions that often help utilities defer investments in expensive generation and distribution infrastructure.”

## Ryan Brager

*Product Manager,  
Demand Response*

Tuesday, October 23  
2:00–2:50 p.m.

## Duke Energy Small Business Demand Response/Energy Efficiency

The presentation will provide a review of Duke Energy's small business EE and DR program being operated in three Midwest and two Southeast states. The review will include an overview with the results of the first two years of operations, customer engagement and education, lessons learned and improvement opportunities. The presentation will include actual examples of customer interactions and equipment operation along with some initial EM&V results.

*Jeremy Morrison, Sr. Program Manager  
Duke Energy*

Tuesday, October 23  
3:10–4:00 p.m.

## Consumers Energy Demand Response Rollout

Consumers Energy will discuss the challenges and success of their rollout of a large ZigBee Air Conditioning DR Program.

*Jim Heiss, Sr. Program Manager  
Consumers Energy*

Tuesday, October 23  
4:10–5:00 p.m.

## DR Customer Round Table

We will pose several questions to encourage feedback from the attendees.

1. What do you see as DR's future in your utility?
2. What is that little thing that makes your job difficult, that we might be able to fix?
3. What worries you about your DR project? What causes you DR panic? And what can we do to reduce your DR stress?

*Roger Rognli, Demand Response Application Specialist*

Wednesday, October 24  
9:00–9:50 a.m.

## Evolution of DR from 1.0 to 3.0

The PLMA has developed a DR roadmap that documents the evolution of DR from 1.0 to 3.0. This session will discuss the market forces and technology changes that are driving the evolution. Examples of utilities benefiting from this evolution will be presented.

*Joe Childs, Sr. Program Manager*



## Demand Response sessions (continued)

Wednesday, October 24 10:00–10:50 a.m.	<b>NRECA GridBallast—DOE NODES Project</b> The GridBallast project design provides solutions to grid management in environments with high solar PV penetration. The presentation will cover the work NRECA has done on the modeling of power systems and the development of technology to automatically address overvoltage and frequency conditions locally with field equipment that allows devices to run and absorb the over generation. <i>David Pinney, Lead Project Manager NRECA</i>
Wednesday, October 24 11:10 a.m.–Noon	<b>Smart Thermostats as Part of DR Program</b> The Smart Thermostat providers are modifying their capabilities to better meet a utility's requirements. The technology is maturing, but there are still major differences among the vendors' capabilities. Bring Your Own Thermostat programs are evolving and now include Utility Store Front programs. This session will cover the changing landscape and Yukon's capabilities to support these programs. <i>Joe Childs, Sr. Program Manager</i>
Wednesday, October 24 1:00–1:50 p.m.	<b>Lessons Learned from RFN DR Deployment</b> Eaton will share learnings from deploying RFN Demand Response system at utilities with a legacy Demand Response system. <i>Rodney Nibbe, Demand Response Technical Specialist</i>
Wednesday, October 24 2:00–2:50 p.m.	<b>Eaton LCRs and Their Operation</b> This session will describe the different LCR models and communications options available along with their features and operation. ExpressCom addressing, wiring options, TrueCycle and other best practices operations will be discussed. <i>Roger Rognli, Demand Response Application Specialist</i>
Wednesday, October 24 3:10–4:00 p.m.	<b>Basic Yukon DR Setup and Operation</b> Learn the basics when it comes to setting up Yukon for a Demand Response program. <i>Jon Dayton, Sr. Project Manager</i>

## Advanced Metering Infrastructure sessions

Tuesday, October 23 and Wednesday, October 24

Lakes Ballroom C

Tuesday, October 23 10:10–11:00 a.m.	<b>Eaton AMI 101</b> This session will provide an overview of Eaton's AMI solutions, the products currently available and an overview of the AMI product ordering process. <i>Dan Smock, Product Manager</i>
Tuesday, October 23 11:10 a.m.–Noon	<b>Eaton Smart Grid Solutions Overview</b> This session will provide a holistic overview of the Eaton Smart Grid Network detailing the offerings and benefits it opens up for your utility. <i>Brian Simpson, Product Manager</i>
Tuesday, October 23 1:00–1:50 p.m.	<b>Eaton RF Mesh 101</b> In this session you will be given an overview of the Eaton RF Mesh network and how it operates and can work for you. <i>Michael Sharp, Product Manager</i>

## Advanced Metering Infrastructure sessions (continued)



“There are a number of developments occurring within the AMI industry today—technology innovations, system obsolescence, the need for more data, etc. With our RF AMI solution and track record of maintaining backward and forward compatibility, we will be there to help utilities navigate the landscape, enabling you to focus on serving the evolving needs of your customers while also optimizing efficiency and staff productivity.”

### **Jim Roche**

*Senior Market Manager, AMI*

Tuesday, October 23  
2:00–2:50 p.m.

### **Engineering and Operations Panel**

This panel discussion with utility personnel will cover topics such as outage management, voltage monitoring, distribution automation and other engineering and analysis tools.

*Jim Roche, Product Manager*

Tuesday, October 23  
3:10–4:00 p.m.

### **RF Mesh Deployment**

This session highlights best practices for planning, implementing and deploying your AMI RF Mesh network.

*Tom Fairchild, Project Deployment Manager*

Tuesday, October 23  
4:10–5:00 p.m.

### **Field Troubleshooting**

This session will detail best practices for troubleshooting your AMI network from the office and the field.

*Mark Harkins, System Application Engineer*

Wednesday, October 24  
9:00–9:50 a.m.

### **Fiber to Home Considerations**

This session will detail considerations that should be investigated prior to implementing a Fiber to the Home project.

*Tom Asp  
CTC Energy*

Wednesday, October 24  
10:00–10:50 a.m.

### **New Field Tool**

This session will provide an in-depth overview of the new NS-200 (Field Tool).

*Owen Parry, RF Application Supervisor*

Wednesday, October 24  
11:10 a.m.–Noon

### **RF Installation—Best Practices**

Owen Electric Cooperative will detail their methodology during equipment installation and project rollout.

*Tim Cammack, Manager of Technical Services*

Wednesday, October 24  
1:00–1:50 p.m.

### **Hosted Yukon**

Professional Computer Systems (PCS) will present how they host Yukon for utilities and how this hosted service can be advantageous.

*Kim Ingerslev, Chief Executive Officer*

*Co-presenter: Matt Williams, Grand Valley Rural Power Lines in Grand Junction, CO*

Wednesday, October 24  
2:00–2:50 p.m.

### **Consumer Portal: Bringing Additional Value to Your Customers**

This session will provide a demonstration of the consumer portal solution, highlighting how both customers and utilities benefit from new tools for energy management and communications enabled by advanced metering. This session will highlight how the MyMeter platform can put data and insights into the hands of customers and customer support reps, utilize notifications and alerts to prompt action in response to changing consumption and demand patterns, and allow utilities to target program offers based on usage patterns and property characteristics.

*Ed Houn, VP Customer Development*

Wednesday, October 24  
3:10–4:00 p.m.

### **Remote Access Best Practices**

This session will discuss and detail the remote access process going into security concerns as well as what options are currently available.

*Brian Mattison, Support Engineer*

# Yukon sessions

Tuesday, October 23 and Wednesday, October 24

Lakes Ballroom D

Tuesday, October 23 10:10–11:00 a.m.	<b>What's New and What's Next?</b> Find out what Eaton has been implementing in the Yukon Software platform. <i>David Sutton</i> <i>Stacey Nelson</i>
Tuesday, October 23 11:10 a.m.–Noon	<b>Device Configuration Lifecycle</b> Wondering how to best manage the meter configuration process? This session will provide attendees with a best practice look at the meter configuration lifecycle. Join us to discuss how best to configure and validate your meter's settings from initial factory order to changes needed post installation. <i>Mark Harkins</i> <i>Paul Heintl</i> <i>Matt Fisher</i>
Tuesday, October 23 1:00–1:50 p.m.	<b>Yukon Tips and Tricks</b> This session is packed with demonstrations of elements of the software that allow you to use Yukon to its full potential and maximize the benefits for your utility. Learn something new or remind yourself of the tools you always meant to use. <i>Michael Sharp</i>
Tuesday, October 23 2:00–2:50 p.m.	<b>How Do I See and Use All of This Data?</b> Review the many ways to display, monitor and export data from the Yukon software. <i>David Arp</i>
Tuesday, October 23 3:10–4:00 p.m.	<b>Using Yukon's Configurable Dashboards</b> Have you taken advantage of the configurable landing page now available in Yukon? This session will provide an overview of the widgets available and how they may be applied. Come and share what you've done and discuss what other types of data widgets would benefit your installation. <i>David Sutton</i>
Wednesday, October 24 9:00–9:50 a.m.	<b>What's Coming Next? Help Us Decide</b> Review completed requests from previous user conferences and discuss what improvements would provide you the most value. <i>David Sutton</i> <i>Stacey Nelson</i>
Wednesday, October 24 10:00–10:50 a.m.	<b>Data Analysis Possibilities</b> Want to use Yukon data in conjunction with information from other systems? Attendees of this session will be provided an overview of the big data analysis tools available and examples of their use. <i>Rodney Nibbe</i>
Wednesday, October 24 11:10 a.m.–Noon	<b>Find Out Sooner: Using Smart Notifications with your Data Monitoring</b> Interested in real time email notifications when meter data just doesn't look right? In this session, we'll discuss some updated data monitoring capabilities and how to subscribe to an email notification should a violation occur. <i>David Sutton</i>



## Eaton lab

Tuesday, October 23 and Wednesday, October 24

Harriet A

8:00 a.m.–4:00 p.m.

### **Eaton lab**

Your technical support at the conference. Staffed by members of our Support teams, our lab is set up with AMI, DA and DR equipment to help answer your questions and solve your problems.

## Customer service desk

Tuesday, October 23 and Wednesday, October 24

Sky Bridge

8:00 a.m.–4:00 p.m.

### **Customer service desk**

Your one-stop shop for any conference, product or technical questions you may have. Members of our Marketing and Technical Services team are here with the answers you need. If we're not the expert you're looking for, we'll help you get connected to that expert at the conference.









# We make what matters work.\*

\* At Eaton, we believe that power is a fundamental part of just about everything people do. Technology, transportation, energy and infrastructure—these are things the world relies on every day. That's why Eaton is dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because that's what really matters. And we're here to make sure it works.

See more at [Eaton.com/whatmatters](https://www.eaton.com/whatmatters)

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