

2020 UAS FOR UTILITIES

November 17-18, 2020
Online | Central Time

CASE STUDIES

Ameren

Eergy

Exelon

PG&E

Southern Company

Xcel Energy

EUCI ONLINE CONFERENCE

EUCI is pleased to offer this virtual conference on its online interactive platform. Enjoy a valuable learning experience with a smaller impact on your time and budget. You will gain new knowledge, skills, and hands-on experience in from the comfort of your remote location.

“

“Absolutely wonderful conference, by the way. All topics were extremely relevant and covered well. The networking opportunity was the best I’ve experienced so far!”

Operational Strategy & Business Intelligence - Strategic Initiatives, ComEd



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OVERVIEW

Drones have now proved themselves as an essential service to the energy industry. More and more utilities have benefited from adopting drones to inspect offshore drilling rigs, transmission and distribution infrastructure, and other operations as they seek to increase efficiency, cut costs, and improve worker safety. In fact, in last year alone more than 108,000 commercial operators registered their drones with the Federal Aviation Administration. The FAA projects the number of commercial drones flying in U.S. airspace will more than double to 828,000 by 2024 from 385,000 in 2019.

As we consider the evolution of commercial UAS in the energy industry, there are a great deal of challenges as well as exciting opportunities to consider. In its 4th annual delivery, hosted by Evergy, this year's all-virtual UAS for Utilities conference will focus on three main themes: equipment, data management, and service. Join us as we hear all fresh case studies from Ameren, Exelon, Evergy, Southern Company, Xcel Energy, and others as well as research from ORNL and the FAA. From vendor panels and technology demonstrations to networking and plenty of dedicating tools to connect, the 2020 UAS for Utilities Conference is sure to be one you don't want to miss!

LEARNING OUTCOMES

- UAS Business Cases
- Costs and financial ROI for utilities
- Keynotes from Evergy and the FAA
- Case studies from Ameren, Xcel Energy, Exelon, Evergy, PG&E, Southern Company
- Flight School Training Program
- Wildfire mitigation
- Emergency response
- Gas leak detection
- Project Management
- Latest Trends in data analytics: Machine Learning, AI, Imagery, and Asset Identification
- Risk management strategies

WHO SHOULD ATTEND

- EPCs (Engineering/Procurement/Construction)
- Surveyors
- Technology leads
- Geographic Information Officer
- GIS officers
- Operations & maintenance professionals in electric transmission & distribution
- T&D line inspection maintenance personnel
- T&D safety personnel
- Security professionals in the utility industry
- Attorneys who work in the utility industry
- Anyone else interested in learning more about how UAS can be used within utilities



"This outstanding conference brings together in one room the level of collaborations rarely found in our industry."

CTO, RBS Drone Technologies



"A rich environment for collaboration and sharing best practices information."

Flight Ops Supervisor,
Southern California Edison

AGENDA

TUESDAY, NOVEMBER 17, 2020 - CENTRAL TIME

- 8:45 – 9:00 am** **Log In and Sound Check**
- 9:00 – 9:05 am** **Conference Welcome**
Aaron Voss, Program Director, EUCI
- 9:05 – 9:30 am** **Keynote #1: The Role of Technology and Drones to Improve Utility Operations**
Kevin Bryant, Chief Operating Officer, Evergy
- 9:30 – 10:15 am** **Wildfire Sensing using Advanced Sensors on UAS Platforms**
An Oak Ridge National Laboratory (ORNL) research project, funded by the US Fire Service, tackles the difficult challenge of identifying the presence of airborne asbestos, with high confidence, in real- or near-real-time during a dynamic forest fire environment. In addition, providing the communication link between the UAS-mounted sensors and participants on the ground of the threat in real-time will be described.
Peter Fuhr, Tech Director, UAS Research Center, Oak Ridge National Lab
- 10:15 – 10:30 am** **Morning Break**
- 10:30 – 11:15 am** **SGI Process to Enable BVLOS Operation as a Response to Public Safety Power Shutoff (PSPS) Events**
The presentation will cover some emerging updates to the developments using the SGI process to enable BVLOS operation as a response to Public Safety Power Shutoff (PSPS) events. This talk will answer questions, cover data, and present on work, recently completed on the PSPS project for the very first time.
Craig Stenberg, Sr. Project Manager, Southern California Edison (SCE)
- 11:15 am – 12:00 pm** **How UAS is Supporting the Utility Industry at ComEd**
ComEd is exploring options to use UAS to support their industry in installing bird diverters. We are focusing on waterway crossings that are moderate to high collision risk with migratory birds. Studies have shown that the cost to install bird diverters the conventional way can be costly to a Company. By using UAS to install these diverters would save time and money to the industry.
Valerie Dammann, Manager Emergency Preparedness, Governance and Oversight for the UAS Program, ComEd
- 12:00 – 12:30 pm** **Break for Lunch**
- 12:30 – 1:15 pm** **Methane Emission Quantification of Compressor Regulator Stations Using Small UAV**
A new approach is being explored by PG&E to quickly screen compressor and regulator stations for methane emissions using fly over by UAV equipped with a high sensitivity detector. The method provides the overall emission rate of the facility as well as the identification of its most emitting sub-systems. Results can be used to prioritize maintenance and better characterize emissions of these stations.
Francois Rongere, Manager, R&D and Innovation Gas Operations, PG&E
Lance Christensen, Atmospheric Scientist, NASA JPL
- 1:15 – 1:45 pm** **KEYNOTE #2: FAA Plan for Continued UAS Penetration in the Commercial Market**
Thomas Baker, Manager of the UAS Operational Programs Branch, Safety and Integration Division, Federal Aviation Administration (FAA)
- 1:45 – 2:00 pm** **Afternoon Break**

REGISTER TODAY! CALL 303-770-8800 OR VISIT WWW.EUCI.COM

AGENDA

TUESDAY, NOVEMBER 17, 2020 - CENTRAL TIME (CONTINUED)

2:00 – 2:45 pm

In-Housing AI and New Technologies for UAS at Ameren

Ameren is in the process of transforming its UAS deployment into a sophisticated network of drone technology, including in-house data analysis and Artificial Intelligence. This presentation will cover the current work going on in this project, lessons learned, an evaluation of costs, and a look at the future. Objectives for this talk include:

- Observing an in-housed model of artificial intelligence and machine learning within a utility UAS program
- Evaluation of program costs and technologies
- Lessons learned and plans forward
- Discussion on vendors and tradeoffs

James Pierce, Supervisor – UAS Operations, AI Development Lead, Ameren

2:45 – 3:30 pm

Turning Drone Data into Action

So you've gathered asset imagery and data. Now what? How do you turn that data into action? Join Robert Henley, VP of Energy Solutions at PrecisionHawk, for best practices in collecting, processing, and analyzing information. You'll come away with innovative examples of how you can integrate drones to drive business objectives.

Robert Henley, Vice President, Energy Solutions, PrecisionHawk

3:30 – 4:30 pm

Hot Topics Panel

Moderator: Peter Fuhr, Tech Director, UAS Research Center, Oak Ridge National Lab

Lance Christensen, Atmospheric Scientist, NASA JPL

James Pierce, Supervisor – UAS Operations, AI Development Lead, Ameren

Al Brunner, Aviation Safety Inspector, UAS Integration, FAA

Valerie Dammann, Manager Emergency Preparedness, Governance and Oversight for the UAS Program, ComEd

Robert Henley, Vice President, Energy Solutions, PrecisionHawk

4:30 pm

Conference Concludes for the Day



"I was able to take away some invaluable information and new relationships that I otherwise would not have been privy to if I had not attended this EUCI conference."

Inspection Technician,
Ontario Power Generation



"Attending the UAS for Electric Utilities conference is highly recommended as it is a great way to hear about how utilities are using UAS."

Project Advisor, San Diego Gas & Electric



"I really enjoyed learning from other utilities and meeting industry counterparts. Our program will definitely benefit from attending this conference."

UAS Program Lead,
San Diego Gas & Electric

AGENDA

WEDNESDAY, NOVEMBER 18, 2020 - CENTRAL TIME

8:45 – 9:00 am

Log In and Sound Check

9:00 – 9:30 am

CASE STUDY: Distribution and Inspection Program at a Coop

This presentation will look at DEC’s UAS transmission and distribution inspection program. The program started this year after an emergency UAS inspection of one of our transmission lines found an issue that we were unable to detect from the ground. I will discuss the initial transmission issue as well as some of the issues that have been brought to our attention from the inspection program.

Troy Dickerson, Assistant VP of Engineering, Delaware Electric Coop

9:30 – 10:45 am

UAS Integration Panel

In this panel we will discuss some of the important outsourcing partnerships necessary to run a cohesive, cost effective, and technologically resilient UAS program. Topics include:

- Pilot onboarding and training
- Data acquisition and processing
- Servicing large transmission projects
- Safety and compliance
- OEM discounts and equipment procurement

Moderator: Mike Kelly, UAS Program Manager, Evergy

Panelists

Kurt Carraway, UAS Department Lead, Kansas State Polytechnic

Steve Hambric, President, North America, eSmart Systems

10:45 – 11:00 am

Morning Break

11:00 – 11:45 am

Integrating UAS into the Storm Restoration Process

It’s no surprise that Alabama has been in the path of some significant storms, leaving major restoration needs in its wake. Alabama Power has been utilizing UAS to improve grid resiliency and maintain robust O&M strategies. This presentation will cover the practices, applications, and lessons learned integrating UAS into the storm restoration process at Alabama Power Company.

Bobby Hawthorne, Manager, Distribution Engineering Services, Southern Company

11:45 am – 12:30 pm

Networking Reception and Virtual Card Exchange



“EUCI provided a well-rounded, informative conference of great interest to utilities. Their staff are professional facilitators who run great meetings.”

Principal Power System Engineer,
Utility System Efficiencies, Inc.



“I find these smaller conferences highly valuable due to the ready access to experts and more intimate networking.”

Manager- Projects, Com Ed

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INSTRUCTIONAL METHODS

PowerPoint presentations and case studies will be used in program.

IACET CREDITS



EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

EUCI is authorized by IACET to offer 1.0 CEUs for the conference.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must login for the entirety of conference to be eligible for continuing education credit.

ONLINE COURSE DELIVERY & PARTICIPATION DETAILS

We will be using Microsoft Teams to facilitate your participation in the upcoming event. You do not need to have an existing Teams account in order to participate in the broadcast – the course will play in your browser and you will have the option of using a microphone to speak with the room and ask questions, or type any questions in via the chat window and our on-line administrator will relay your question to the instructor.

- You will receive a meeting invitation that will include a link to join the meeting.
- Separate meeting invitations will be sent for the morning and afternoon sessions of the course.
 - o You will need to join the appropriate meeting at the appropriate time.
- If you are using a microphone, please ensure that it is muted until such time as you need to ask a question.
- The remote meeting connection will be open approximately 30 minutes before the start of the course. We encourage you to connect as early as possible in case you experience any unforeseen problems.

REGISTER TODAY! CALL **303-770-8800** OR VISIT **WWW.EUCI.COM**



REGISTRATION INFORMATION

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ENERGIZE WEEKLY

Energize Weekly is EUCI's free weekly newsletter, delivered to your inbox every Wednesday. We provide you with the latest industry news as well as in-depth analysis from our own team of experts. Subscribers also receive free downloadable presentations from our past events.

Sign me up for Energize Weekly

PLEASE SELECT

- 2020 UAS FOR UTILITIES ONLINE CONFERENCE**
NOVEMBER 17-18, 2020: US \$1,195 (Single Connection)
- PACK OF 5 CONNECTIONS:** US \$ 4,780 (20% Discount)
- PACK OF 10 CONNECTIONS:** US \$8,365 (30% Discount)
- PACK OF 20 CONNECTIONS:** US \$14,340 (40% Discount)

Please call us at 303-770-8800 if you have any specific questions on the volume discounts.

** all other discounts do not apply to license packs*

Online Course Delivery & Participation Details

See page 6 for information

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name

Job Title

Company

Address

City

State/Province

Zip/Postal Code

Country

Phone

Email

CREDIT CARD INFORMATION

Name on Card

Billing Address

Account Number

Billing City

Billing State

Exp. Date

Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)

Billing Zip Code/Postal Code

OR Enclosed is a check for \$ _____ to cover _____ registrations.

Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before October 16, 2020 in order to be refunded and will be subject to a US \$195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at 303-770-8800. EUCI reserves the right to alter this program without prior notice.

