

ACI's 9th National Conference on **MICROGRIDS**

Expanding the availability of resilient and sustainable energy

April 17-18, 2019 • Boston, Massachusetts



**FEATURING AN EXCLUSIVE TOUR OF THE
OTIS AIR NATIONAL GUARD BASE MICROGRID
APRIL 16, 2019 • SEE PAGE 2 FOR MORE INFORMATION**

KEY TOPICS

- Regulatory Framework
- Techno-Economic Analysis
- Strategies for Workforce Growth
- Distributed Energy Resources
- Modular Microgrids
- Hurricane Resilience
- Military Applications
- Vehicle-to-Grid Capabilities
- California's Historic SB-100 Bill

SPONSORSHIP OPPORTUNITIES

With leading companies and organizations from the Microgrids industry attending and speaking at our event, we have the perfect opportunity to provide outstanding exposure to a high-level, professional audience. There are varying sponsorship packages available, including sponsorship of a cocktail reception on the first evening of the event and sponsorship of a networking lunch.

Sam Cormack, Manager of Sponsorship Sales
+44 203 141 0626 • samc@acieu.net

CONFERENCE SPONSOR



INTRODUCTION

The concept of a microgrid is quickly becoming one of the most popular trends in energy distribution, offering resilience and independence that can't be achieved relying on the traditional power grid. Installations such as military bases, hospitals, universities and rural communities are already experiencing the benefits of switching to this method of power supply, and it seems the number of organizations adopting microgrid capabilities is growing steadily. With the added benefits of infrastructure resilience and renewable energy emphases, microgrids seem like a perfect fit for the future of energy distribution.

OTIS AIR NATIONAL GUARD BASE

After three years of planning and construction, a ribbon-cutting ceremony took place on Aug 29 that marked the DoD's first wind-powered microgrid, signifying the system's readiness to support the 24/7 Intelligence, Surveillance and Reconnaissance mission of the 102nd Intelligence Wing.

The Otis Microgrid, a DoD-funded research project, provides for an energy capability almost exclusively based on renewable energy while ensuring a high-level of grid security. In addition to providing energy resiliency for the wing's ISR mission, it increases value to the Air Force and National Guard as well as state and Federal government through revenue and research opportunities for the energy industry.

The Cape Cod unit performs intelligence processing, exploitation and dissemination by analysing and interpreting information from manned and unmanned reconnaissance aircraft as well as signals within the cyberspace domain; transforming this material into decision quality intelligence. This information is distributed rapidly across the globe for use in the planning and execution of operations

CONFERENCE SPEAKERS

Thomas Weaver, Manager Of Distribution System Planning
AMERICAN ELECTRIC POWER

Brad Swing, Director of Energy Policy and Programs
CITY OF BOSTON

Seth Mullendore, Vice President and Project Director
CLEAN ENERGY GROUP

Jen Stevenson, Director of Research & Operations
CLIMABLE

Edward Yim, Energy Policy Advisor
DEPARTMENT OF ENERGY AND ENVIRONMENT

Darrell Thornley, Independent Consultant
D-TEC

Larisa Dobriansky, Chief Business & Regulatory Innovations Officer
GENERAL MICROGRIDS

Travis Sheehan, Founder and CEO
GRIDLING GLOBAL

Galen Nelson, Senior Director of Innovation And Industry Support
MASSACHUSETTS CLEAN ENERGY CENTER

Michael Zimmer, Washington Counsel
MICROGRID INSTITUTE

Sam Crawford, Associate Director
NAVIGANT CONSULTING, INC.

Michael Winka, Senior Policy Advisor
NEW JERSEY BOARD OF PUBLIC UTILITIES

James Gallagher, Executive Director
NEW YORK STATE SMART GRID CONSORTIUM

Randolph Horner, Energy & Sustainability Correspondent
NORTHEAST SUSTAINABLE ENERGY ASSOCIATION

Thomas Bourgeois, Deputy Director
PACE ENERGY AND CLIMATE CENTER

Jerome Garciano, Attorney
ROBINSON & COLE LLP

Colonel Matt Barker, Director for Microgrids and Critical Power
TYPHOON HIL INC.

Tarek Abdallah, Energy Security Program Manager
US ARMY CORPS OF ENGINEERS

PAST ATTENDEES INCLUDE

- National Grid
- Entergy
- NREL
- Southern Company
- SaskPower
- Edison Electric Institute
- Great River Energy
- Idaho Power
- Oncor
- The Clean Coalition
- Duke Energy
- Eversource Energy
- SDG&E
- NRG Energy
- Avista

CALL FOR PAPERS

If you would like to be considered as a speaker for the event with a 30-45 minute presentation, please submit an abstract for consideration.

Garett Williams, Senior Conference Producer
+1 312 780 0700 • garett@acieu.net

REGISTRATION/INFORMATION

For further information or to register your attendance, please contact:

Cheryl Williams, Marketing
+44 203 141 0623 • cwilliams@acieu.net

CONFERENCE DAY ONE • April 17, 2019

8:00 AM

REGISTRATION & COFFEE

9:00 AM

CHAIRPERSON'S OPENING REMARKS

9:15 AM

SESSION ONE: MEASURE TWICE, CUT ONCE: USING TECHNO-ECONOMIC ANALYSIS TO AVOID PITFALLS IN MICROGRID DESIGN

- Understanding Techno-Economic Analysis (TEA), its applicability within a microgrid context, and the importance of generating insight over precision
- Identifying the right assessment metrics for different stakeholders including both microgrid off-takers and social and financial investors
- Optimizing microgrid investment value throughout the development lifecycle by selecting the right TEA tool for each development stage (or: screwdrivers and hammers solve different problems)

Sam Crawford, Associate Director
NAVIGANT CONSULTING, INC.

10:30 AM

MORNING REFRESHMENTS

11:00 AM

CONFERENCE PRESENTATION: CRUSHING THE DEVELOPMENT CHALLENGES OF MICROGRIDS – THE SECURE MICROGRID® PROCESS

- Determining project design priorities
- Applying standardized development process
- Implementing a successful project process

Darrell Thornley, Independent Consultant
D-TEC

11:45 AM

CONFERENCE PRESENTATION: USING HARDWARE IN THE LOOP (HIL) TECHNOLOGY FOR MICROGRID LIFECYCLE ENGINEERING

- In an increasingly digital power world we must move beyond Design-Build-Test to Design-Model-Analyze (iterate) Build-Test-Operate approach.
- Typhoon's Controller Hardware In the Loop (CHIL) technology enables a Model and Simulation Based System Engineering (MBSE) solution for Microgrids.
- Typhoon's CHIL testbed was used to great effect on the Otis Microgrid Project.

Colonel Matt Barker, Director for Microgrids and Critical Power
TYPHOON HIL INC.

12:10 PM

LUNCH

1:10 PM

CONFERENCE PRESENTATION: MASSACHUSETTS SMART PROGRAM AND ITS IMPLICATIONS FOR MICROGRID

Jerome Garciano, Attorney
ROBINSON & COLE LLP

1:55 PM

SESSION TWO: NEW CHALLENGES AND OPPORTUNITIES ASSOCIATED WITH THE PROLIFERATION OF DISTRIBUTED ENERGY RESOURCES

- Optimizing system investments and diversifying grid services through regional planning process and community preference
- Analyzing the downsides of a shift away from centralized power supply in terms of DER forecast and visibility
- Enabling optimal communication and cooperation with DER's using efficiently-planned MG technology

Edward Yim, Energy Policy Advisor
DEPARTMENT OF ENERGY AND ENVIRONMENT

Randolph Horner, Energy & Sustainability Correspondent
NORTHEAST SUSTAINABLE ENERGY ASSOCIATION

3:10 PM

AFTERNOON REFRESHMENTS

3:40 PM

SESSION THREE: SMART ENERGY + SMART GRID + MICROGRIDS = SMART CITY

- Enhancing regional economic development utilizing the involvement of county and city governments, real estate developers, military and local utilities
- Integrating microgrids into future community development projects such as harbors, train stations, farms and rural areas, airports, fuelcell installations and many more
- Observing local case studies to determine potential growth both locally and nationally

Michael Zimmer, Washington Counsel
MICROGRID INSTITUTE

4:55 PM

CLOSE OF DAY ONE

CONFERENCE DAY TWO • April 18, 2019

8:30 AM

REGISTRATION & COFFEE

9:00 AM

CHAIRPERSON'S OPENING REMARKS

9:05 AM

CONFERENCE PRESENTATION: UTILITY PERSPECTIVE ON HELPING COMMUNITY AND INDIVIDUAL CUSTOMERS DEVELOP MICROGRIDS

Thomas Weaver, Manager Of Distribution System Planning
AMERICAN ELECTRIC POWER

9:50 AM

PANEL DISCUSSION: DEVELOPING AND IMPLEMENTING A COMMUNITY MICROGRID

- Understanding and translating the needs of community members and key stakeholders
- Securing financing for innovative projects
- Balancing economic returns with resiliency goals
- Incorporating the economic impacts of power outages

Seth Mullendore, Vice President and Project Director
CLEAN ENERGY GROUP

Larisa Dobriansky, Chief Business & Regulatory Innovations Officer
GENERAL MICROGRIDS

Jen Stevenson, Director of Research & Operations
CLIMABLE

10:35 AM

MORNING REFRESHMENTS

11:05 AM

SESSION FOUR: MULTI-USER MICROGRIDS BUSINESS MODELS AND THE BOSTON MICROGRIDS ENERGY STUDY

Travis Sheehan, Founder and CEO
GRIDLING GLOBAL

Galen Nelson, Senior Director of Innovation And Industry Support
MASSACHUSETTS CLEAN ENERGY CENTER

12:20 PM

LUNCH

1:20 PM

CONFERENCE PRESENTATION: SMART UTILITIES POLICY AND BOSTON'S DEVELOPMENT REVIEW PROCESS

Brad Swing, Director of Energy Policy and Programs
CITY OF BOSTON

2:05 PM

SESSION FIVE: MILITARY APPLICATIONS AND SECURITY CONCEPTS FOR MICROGRIDS

- Highlighting the achievements of the SPIDERS JCTD and where further improvements will take the technology
- Analyzing the statistics related to a reduction in outages as a result of SPIDERS implementation and its positive effect on cost
- Outlining of process of successful renewable integration in self-sufficient military installations

Tarek Abdallah, Energy Security Program Manager
US ARMY CORPS OF ENGINEERS

3:20 PM

CHAIRPERSON'S CLOSING REMARKS

3:30 PM

END OF CONFERENCE AND AFTERNOON REFRESHMENTS

REGISTRATION IS SIMPLE:

If you would like to register for this event or wish to find out more information, you can contact **Cheryl Williams** using any of the following methods:

Phone: +44 203 141 0623

Email: cwilliams@acieu.net

Website: <http://www.acius.net>

Mail: ACI Europe, 10 Gough Square, London, EC4A 3DE, UK

DELEGATE PASS (Solution Providers)	\$2,500.00*
DELEGATE PASS (End Users, Consultants, Companies)	\$1,995.00*
DELEGATE PASS (Government, Academic, Non-Profit)	\$1,595.00*
DOCUMENTATION PACK ONLY	\$615.00

*excludes VAT

Delegate passes include all presentations plus pre-conference workshops, networking receptions, food and drink, any potential supplementary event such as a tour, and the documentation pack.

Documentation packs include all conference proceedings including PowerPoint presentations, program agenda, detailed attendee list, sponsor/exhibitor literature and collateral materials, any other premiums or information distributed at conference.

Please Note: Members and customers of all supporting organizations are entitled to a discount off their conference package.

For more information, please call Cheryl Williams at +44 203 141 0623.

DOCUMENTATION PACKAGE:

You can purchase the papers for this conference at just \$615. Simply check the box on the booking form, sent it with payment and your copy will be on its way to you after the meeting.

This important manual will be a source of invaluable reference for the future.

ACTIVE COMMUNICATONS INTERNATIONAL:

Active Communications International, Inc. (ACI) is a leader in conference planning and production. With offices in Chicago, London, Pune, Portland, Poznań and Milwaukee, we produce world-class events focusing on areas of most relevance to our served industry sectors. We are dedicated to deliver high-quality, informative and value added strategic business conferences where audience members, speakers, and sponsors can transform their business, develop key industry contacts and walk away with new resources.

Mission Statement: ACI's mission is to unite key industry influencers and leaders to build strong relationships and enable our clients to achieve operational efficiencies, maintain competitive advantage in the marketplace, and increase their profitability.

Quality: ACI invites senior-level executives and key industry leaders to share their insights and real-life working experiences with our audience. Our unique conference format offers an intimate and time-efficient educational development platform where our attendees can meet one-on-one with the people that can assist them in achieving their goals.

Research: ACI offers cutting-edge conferences that are developed through extensive research and development with industry experts to bring you the latest trends, forecasts, and best practices.

Experience: Our team of experienced conference producers and managers know you and your business demands. ACI has the resources, knowledge, and experience to create the events you need to remain on the forefront of your industry.

Garett Williams, Senior Conference Producer, thanks contributing professionals for their insights, recommendations, and participation.

TERMS AND CONDITIONS:

Payment: Payment must be recieved within five business days of returning the signed contract. After receiving payment a VAT receipt will be issued. If you do not receive a letter outlining details two weeks prior to the event, please contact the Conference Coordinator at ACI Europe Ltd.

Discounts are available for multiple/group bookings. Please call Cheryl Williams at +44 203 141 0623 for more information.

Cancellations: Substitutions are welcome up to 24 hours prior to the event. Cancellations must be received in writing no less than three weeks prior to the start of the conference; a full credit voucher towards a future ACI conference will be issued. Any cancellation received less than three weeks prior to the start of the event shall be deemed a breach of this contract by client, and accordingly, no credits will be given. Cancellations must be received in writing by mail or fax three weeks before the conference. Thereafter the full conference fee is payable. If for any reason ACI Europe Ltd decides to amend, cancel or postpone this conference, the conference fee will not be refunded. Furthermore, ACI Europe Ltd will not be responsible for covering airfare, hotel or other costs incurred by registrants. In the event that ACI Europe Ltd cancels or postpones the event, ACI Europe Ltd reserves the right to transfer booking to another conference to be held in the following twelve months, or to provide a credit of an equivalent amount to another conference within the following twelve months. The construction, validity and performance of this agreement shall be governed in all respects by the laws of England to the exclusive jurisdiction of whose courts the Parties hereby agree to submit.

Accommodation: The cost of accommodation is not included in the event fee. Preferential rates will be arranged with or near the event venue, and all confirmed delegates will be given details of how to book accommodation at this rate in due course.