

Innovative Environmental Solutions in Our New World

AN AECOM ENVIRONMENTAL WEBINAR SERIES
OCTOBER WEBINARS

Tuesday, October 12, 2021 (12:00 PM ET)

The Age of Extreme Change: Microgrids and Resilience

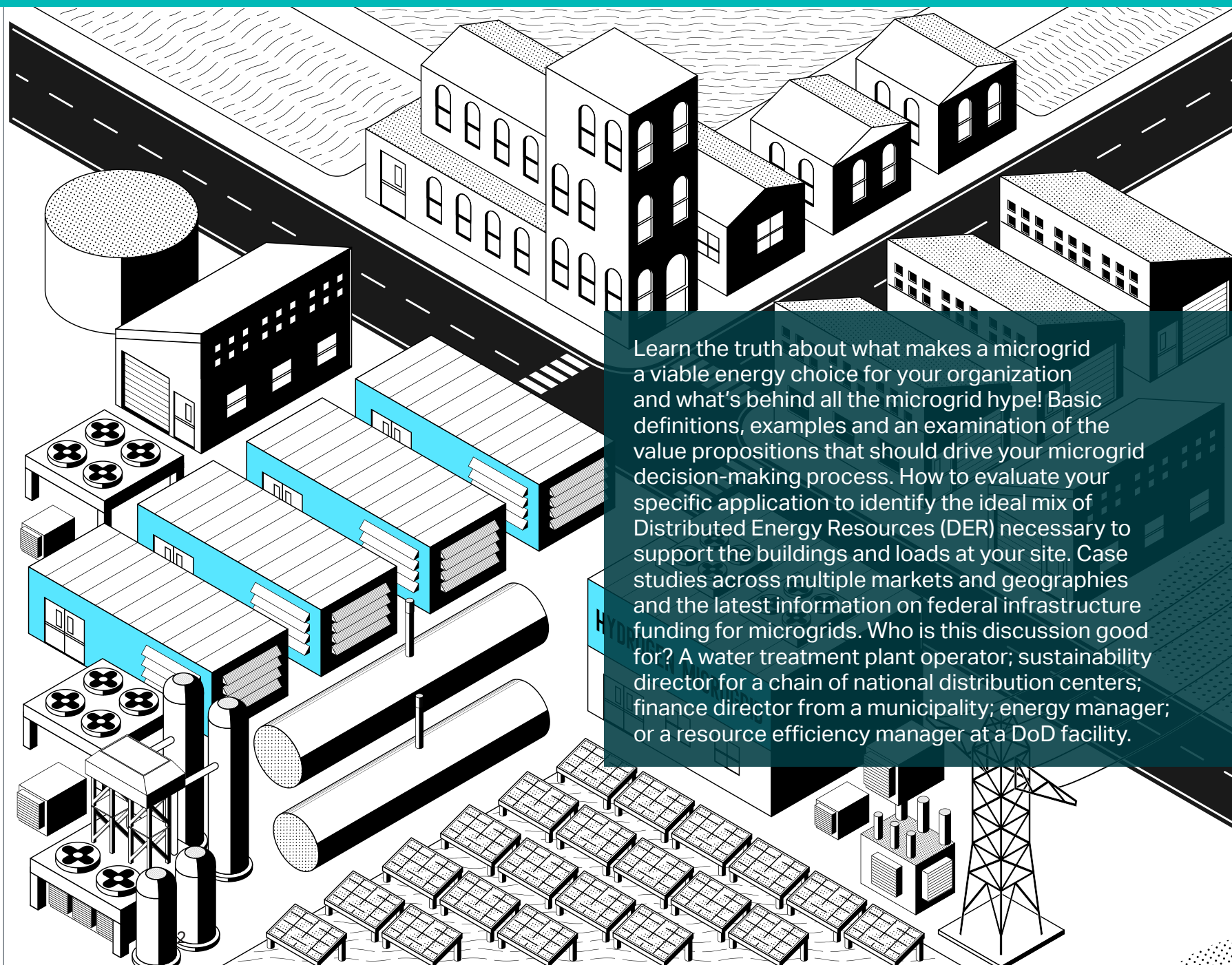
OUR SPEAKERS:

Dr. Nazar Al-Khayat and Chris Bleuher



DR. NAZAR AL-KHAYAT. Nazar is Chief Technical Officer and Microgrids Technology Lead for AECOM U.S. Energy Group. He has worked in the power generation and renewable sectors for the last 25 years and has led the development and introduction of several products and technologies, as well as the deployment of engineering solutions for commercial and industrial applications. At AECOM, he is responsible for the development and execution of microgrid projects that include system engineering, analysis and design of renewable power plants, evaluation and qualifications of technologies and project delivery. As a chartered engineer with a PhD in Power Systems, Nazar holds over 20 patents and authored several technical papers.

CHRIS BLEUHER. Chris' experience with energy efficiency and financial procurement models for energy projects fuels his integrated approach towards change in the market. He is passionate about creating and focusing teams to drive business around the digitization, decentralization and decarbonization of the energy landscape. At AECOM, Chris leads initiatives for engineering and design consulting services focused on the application of distributed energy resources, energy storage systems and their integration into a resilient energy ecosystem.



Learn the truth about what makes a microgrid a viable energy choice for your organization and what's behind all the microgrid hype! Basic definitions, examples and an examination of the value propositions that should drive your microgrid decision-making process. How to evaluate your specific application to identify the ideal mix of Distributed Energy Resources (DER) necessary to support the buildings and loads at your site. Case studies across multiple markets and geographies and the latest information on federal infrastructure funding for microgrids. Who is this discussion good for? A water treatment plant operator; sustainability director for a chain of national distribution centers; finance director from a municipality; energy manager; or a resource efficiency manager at a DoD facility.

Tuesday, October 26, 2021 (1:30 PM ET)

PFAS in Stormwater: Permits, Processes, and Treatment

OUR SPEAKER:

Matthew Zenker, PhD, PE



MATTHEW ZENKER, PHD, PE. Matt Zenker is a Technical Leader in AECOM's Environment Global Business Line, specializing in soil and groundwater remediation. He earned a BS degree in Civil Engineering from Virginia Military Institute, and MS and PhD degrees in Civil and Environmental Engineering from North Carolina State University. He is a licensed Professional Engineer and Board-Certified Environmental Engineer. Matt has 27 years of research and professional experience in remediation engineering, with experience encompassing intrinsic and enhanced biodegradation of anthropogenic chemicals, groundwater solute fate and transport, nonaqueous phase liquids and soil and groundwater remedial design. Matt is currently involved in several projects throughout North America tasked with the investigation of the fate and transport of per- and polyfluoroalkyl substances (PFAS) in soil, groundwater and surface water. He has been at AECOM since 2002 and is based out of the Raleigh, NC office.



Regulations related to per- and polyfluoroalkyl substances (PFAS) compounds in environmental media are rapidly evolving. The United States Environmental Protection Agency (USEPA) has recently issued an 'Interim Strategy' for PFAS in Federal National Pollutant Discharge Elimination System (NPDES) permits. This Interim Strategy outlines phased-in monitoring, best management practices (BMPs), stormwater pollutant control and permitting practices for PFAS. Several States have also enacted and/or proposed various stormwater regulations associated with PFAS monitoring and reporting through State/local NPDES permitting mechanisms. Achieving compliance with these forthcoming rules will require an understanding of monitoring, transport pathways and treatment options for stormwater impacted with PFAS. Developing this understanding is challenging for stormwater runoff due to its intrinsic diurnal/seasonal variability coupled with PFAS' unique physicochemical properties. This webinar will present an overview of various concepts and case studies related to PFAS in stormwater and thus provide information to practitioners for developing strategies to fulfill forthcoming regulatory requirements.

Thursday, October 28, 2021 (12:00 PM ET)

KEEPING UP WITH COAL ASH: What you Need to Know to Convert your CCR Closure to a Solar Asset

OUR SPEAKERS:

Gabe Lang, PE and Kenny Hughes (WatershedGeo)



GABE LANG, PE (AECOM). Mr. Lang is a Vice President and Program Manager with over 26 years of engineering and construction experience throughout the eastern United States. He serves as the AECOM CCR Technical Lead for the East Region, serving AECOM's largest private power sector clients. In this role, he has been responsible for overseeing teams of civil engineers and developing and implementing a variety of engineering and construction projects related to the closure, beneficiation and repurposing of coal combustion residuals (CCR) at over 35 fossil plants. Mr. Lang has presented on numerous CCR applications and technologies and was a significant contributor to the ACEC award winning projects at the TVA Gallatin and Kingston Plants.

KENNY HUGHES (WATERSHEDGEO). Kenny Hughes is the Vice President of Renewable Energy for WatershedGeo. He has over ten years of experience in the renewable power industry. He has been involved with close to a gigawatt of installed solar projects and directly overseen operations and maintenance teams that managed almost 100MW of solar assets. Hughes has worked in a variety of advisory roles for: Advisory task force with the Environmental Protection Agency (EPA), Puerto Rican Aqueduct and Sewer Authority (PRASA), Puerto Rican Electric Power Authority (PREPA) for multiple landfills in Puerto Rico and US Virgin Islands for high wind/hurricane zones.

Before entering the solar market, Hughes spent over 15 years in heavy civil construction working on some of the largest civil projects on the east coast.

With increasing CCR pond and landfill closures throughout the country, there is a growing interest in developing these formerly unusable units into solar power generating facilities. In the past, these applications were not economically or environmentally friendly to geomembrane lined closure facilities. However, recent advances have resulted in technologies that facilitate the installation of a friction based solar panel system on a synthetic lined turf (PowerCap™). The presentation will discuss potential applications, benefits and implementation of this system.





About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a Fortune 500 firm and its Professional Services business had revenue of \$13.2 billion in fiscal year 2020.

See how we are delivering sustainable legacies for generations to come at aecom.com and [@AECOM](https://twitter.com/AECOM).

