Illinois Commerce Commission Energy Storage Webinar Series

Session 6: Decarbonization & Energy Storage

Tuesday, January 18, 2022

1:00 PM to 3:00 PM (CT)

Presented by:
U.S. DOE Office of Electricity Energy Storage Program,
Illinois Commerce Commission,
and Sandia National Laboratories

Energy storage is the key to unleashing the power of renewables, relieving generation, transmission, and distribution demands, and hastening the energy transition to a decarbonized future. Illinois Commerce Commission Staff & Stakeholders are invited to participate in a series of energy storage webinars presented in collaboration with US DOE Office of Electricity Energy Storage Program and Sandia National Laboratories. Experts from the national labs, regional agencies and other organizations and institutions will provide content, with time for discussion and questions.

Agenda

January 18, 2022 – Decarbonization & Energy Storage

1:00 - 1:10	**Introductory Remarks** **Dr. Imre Gyuk**, Director, DOE Office of Electricity Energy Storage (ES) Program
1:10 - 1:35	**Decarbonization & Energy Storage** **Dr. Lola Infante**, Electric Power Research Institute (EPRI)
1:35 - 2:00	**California Self Generation Incentive Program (SGIP) & Getting GHGs out of Energy Storage** **Brian Bishop**, Pacific Gas & Electric (PG&E)
2:00 - 2:25	**Watt Time & Getting GHGs out of Energy Storage** **Henry Richardson**, WattTime
2:25 - 2:50	**Energy Equity** **Rebecca O'Neil**, Pacific Northwest National Laboratory
2:50 - 3:00	**Closing Remarks** **Dr. Imre Gyuk**, Director, DOE Office of Electricity Energy Storage (ES) Program

Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525. SAND2022-0283 O

Speaker Biographies

Dr. Imre Gyuk, Director, DOE Office of Electricity Energy Storage (ES) Program

After taking a B.S. from Fordham University, Dr. Imre Gyuk did graduate work at Brown University on Superconductivity. Having received a Ph.D. in Theoretical Particle Physics from Purdue University he became a Research Associate at Syracuse. As an Assistant Professor he taught Physics, Civil Engineering, and Environmental Architecture at the University of Wisconsin. Dr. Gyuk became an Associate Professor in the Department of Physics at Kuwait University where he became interested in issues of sustainability. Dr. Gyuk joined the Department of Energy to manage the Thermal and Physical Storage program. For the past two decades he has directed the Electrical Energy Storage research program in the Office of Electricity, developing a wide portfolio of storage technologies for a broad spectrum of applications. He supervised the $185M ARRA stimulus funding for Grid Scale Energy Storage Demonstrations and is now partnering with the States on numerous storage projects for grid resilience. His work has led to 12 R&D 100 awards, two EPA Green Chemistry Challenge Awards, and Lifetime Achievement Awards from ESA and NAATBatt. He is internationally recognized as a leader in the energy storage field.

Dr. Lola Infante, Electric Power Research Institute

Dr. Lola Infante is Executive Director, Government and External Affairs at EPRI where she leads stakeholder engagement for the institute and develops strategic initiatives that facilitate active partnerships and business development. Since 2018, Infante is a member of the U.S. DOE Electricity Advisory Committee where she chairs the Energy Storage Subcommittee. She is also a member of ESIG's (Energy Systems Integration Group) Board of Directors. Previously, Infante was Sr. Director, Clean Energy Technology and Policy at the Edison Electric Institute (EEI), where she focused on market and policy developments in clean and alternative energy resources as well as other critical fuels for power generation. Among other things, she launched and managed EEI's energy storage practice and led many initiatives on renewables and distributed energy resources. Before joining EEI, Infante worked at the Center for the Advancement of Energy Markets, a Washington DC think tank, and at GAB-Robins in Paris, France, where she worked in marketing and corporate finance. Infante is a frequent speaker on these issues at many technical and policy groups, has authored several articles and papers on energy related topics, and participates in several industry committees. Dr. Infante holds a PhD with Distinction in International Relations from the Johns Hopkins University, an MA in Energy, Environment, Science and Technology from the School of Advanced International Studies division of Johns Hopkins University, an MA in International Economics and Finance, and a Bachelor's degree in Economics and Finance from Sciences Po Paris, France.

Brian Bishop, Pacific Gas & Electric

Brian Bishop has been with PG&E for 8 years managing the California Solar Initiative Thermal Program, as a Principal on the Public Safety Power Shutoff PMO team, and leading the Self-Generation Incentive Program. Under Brian's leadership SGIP has evolved from a focus on generation to a focus on overburdened communities, greenhouse gas emission reduction, wildfire mitigation and resiliency. Before joining PG&E Brian spent many years in the solar industry deploying residential solar projects on the west coast. Brian has a 'green' MBA, a MA in Environmental Science and Geography, and is from Albany-Berkeley CA.

Henry Richardson, WattTime

As an analyst at WattTime, Henry helps WattTime's partners and collaborators understand how they can affect the electric grid and achieve the greatest reductions in greenhouse gas emissions, whether through location-based renewables siting or automated emissions reductions. Henry specializes in building performance, including emissions-focused load shifting, energy storage integration, and methods for assessing overall building emissions.

Rebecca O'Neil, Pacific Northwest National Laboratory

Ms. Rebecca O'Neil is an advisor for Pacific Northwest National Laboratory. In her career at the Laboratory, she has served as the lab relationship manager for the US DOE EERE Renewable Energy portfolio, served a rotation into the U.S. Department of Energy's Water Power Technologies Office to develop a hydropower-grid research program, and led the regulatory area for energy storage. Her research interests relate to energy justice, energy storage, community-scale innovation, sustainable hydropower and marine energy development. She joined PNNL in 2015 from the Oregon Department of Energy, where she represented the agency on water power development, oversaw the state renewable portfolio standard, and ran a multi-million-dollar portfolio of federal grants ranging from renewable energy feasibility studies, agricultural efficiency measures, energy assurance, and woodstove replacement programs. Before her state service, she managed the multifamily energy efficiency program for the Energy Trust of Oregon, administering incentives to drive upgrades in multifamily dwellings. For years, Rebecca represented a coalition of river conservation and recreation organizations in federal hydropower dam licensing, becoming a recognized and published expert in the regulatory process and the relationship between hydropower operations and environmental effects. She serves on multiple organizational boards and advisory groups related to renewable energy. Unrelated to energy, Rebecca has served as an AmeriCorps-VISTA teaching childhood literacy in rural Kentucky. As a Wagoner Scholar, she conducted Honors work in Cape Town, South Africa, producing a thesis on the role of literacy in manumission. She is a civilian advisory graduate of the National Security Seminar at the U.S. Army War College in Carlisle, Pennsylvania. She earned a B.A. from Rice University in Houston.