Electricity Advisory Committee

Assistant Secretary Gene Rodrigues Opening Remarks

June 5, 2024



Accomplishments

- <u>Science Synthesis Prize</u>: Launched on May 8th: Goal is to generate new and comprehensive knowledge on the current stateof-science in renewable integration into power systems.
- Power Sector Transmission & Distribution Data and Information workshop report: OE has been working to develop a data strategy for the U.S. power sector. To support the development, OE sponsored a four-part webinar series, culminating in an in-person summit.
- <u>Digitizing Utilities Prize</u>: R2 Phase 1 submissions closed May 7th. Goal is to help electric utilities tackle data challenges to advance reliability, resilience, and affordable operation.
- Integrated Distribution System Planning (IDSP) training to SEOs and PUCs:
 - November 29-30, Washington, D.C. Participants from 17 states (AK, CT, DE, GA, KY, MA, MD, MI, NH, NJ, NY, OH, PA, RI, TX, VA, WA), District of Columbia, and two local governments (Arlington County, VA, and Montgomery County, MD)
- January 24, Irvine, CA Participants from 20 states (AK, AZ, CA, CO, GA, HI, ID, IL, MA, MN, MT, NC, NM, NV, OR, TX, UT, WA) and District of Columbia
- March 20, Nashville, TN Participants from 22 states (AR, GA, IL, IN, IA, KS, LA, MA, MI, MN, MS, MO, NJ, NM, ND, NY, TN, TX, WA, WI, WV, WY), District of Columbia and Virgin Islands



Data Strategy

Accomplishments [2]

- Flexible Innovative Transformer Technologies (FITT) FOA announced February 13, 2024 (note this is coincident with the last EAC meeting)
- Silicon Carbide packaging prize announced February 23, 2024
- Advanced Conductor Scan Report Revised/Updated, April 2024
- Reconductoring Economic Financial Analysis (REFA) Tool showcased at White House Summit on Modernizing the Power Grid, May 2024
- OE issued the press release May 21,2024 that announces selection of eight projects for \$10.5 million in DOE funding from the "Underserved and Indigenous Community Microgrids" FOA. These selections range from providing modular, replicable microgrid building blocks to make microgrids affordable, to enabling shared resources and loads between connected communities for enhanced reliability and resilience and to enhancing local workforce capacity.
- The 2022/2023 Microgrid and Integrated Microgrid Systems Program Report to Congress has been published. The report presents
 significant progress made and provides recommendations for both remote microgrids and microgrids for critical infrastructure, which are
 being addressed in current DOE collaborations and future work.
- Under support by OE, PNNL published the "<u>Port Electrification Handbook: A Reference to Aid U.S. Port Energy Transitions</u>". The Handbook is to help maritime port operators and planners evaluate different electrification technologies. Three port microgrid case studies were provided, including an independent microgrid, a community one, and a networked microgrid design.



Power Elec. & Grid Components

Advanced Conductors & GETs

Accomplishments [3]

- FOA 3020 LDES Consortia Selections (April 2024), supporting dual objectives of Reaching the Long Duration Storage Shot goal and Diversifying our energy storage supply chain:
 - o New Lab (Zinc Batteries)
 - o Battery Council International (Lead Batteries)
 - o Clean Tech Strategies (Flow Batteries)
- <u>Big Idea Generator</u>: Awarded funding (jointly with EE) to several lab teams to identify and scope key energy storage to address over the next decade, in support of the Long Duration Storage Shot, and held in conjunction with the LDES summit, hosted by DOE-industry LDES MOU partners (EEI, EPRI, LDES Council)
- <u>Zinc Battery Supply Chain Workshop</u> (April 2024)
- <u>Commercialization Forum for Sodium Ion Batteries</u> (April 2024)
 - [Part of OE/OTT/VTO funded "Scaling to TWh-Energy Endeavors from Research" Project at SLAC]
- US-India Energy Storage Webinar Series (April 2024)
 - 9th monthly webinar, >600 cumulative attendees
 - Covered topics including markets, technologies, safety, recycling
- VO-7 and VO-8 LDES Innovation and Community Voucher Opportunities (April 2024)
- Release of 2024 Energy Storage Safety Strategic Plan (May 2024)
 - Highlights safety considerations during energy storage deployment in the US, spanning codes and standards, permitting, insurance, and all phases of project execution.
 - Review the current state of energy storage safety and identify priorities to advance the field
- NOI for Storage and Critical Infrastructure Demos (May 2024)
- FOA 3036 Storage Demo and Validation Awardee Selections (May 2024), expanding the safety and reliability knowledge base into new non-lithium technologies:
 - DTE Electric: LFP; Fully Hybrid and Second Life Pine River Wind Park, Michigan
 - Capybara Energy; Aqueous supercapacitor; Environmental remediation of mining waste; Essex County, New York
 - o muGrid Analytics; VRFB; Critical services for a Tribal community; Bad River Reservation, Wisconsin



Thank you for your Service!

Name	Subcommittees Served *	Leadership Positions Held
Christopher Ayers	ES, SG	
Tom Bialek	ES, SG, GRNS	
Robert Cummings		
Andrew "Drew" Fellon		
Clay Koplin		EAC Vice Chair and Energy Storage Subcommittee Vice Chair
Richard Mroz		
Delia Patterson		
Darlene Phillips		Smart Grid Subcommittee Vice Chair
Kimberly Denbow		
Sheri Givens		
		EAC Chair, EAC Vice Chair, Smart Grid Subcommittee Chair, Served two separate terms (2010-2016 and 2018-2024)

