

CABLE Big Idea Workshop

Hosted by the DOE/EERE Advanced Manufacturing Office (AMO)

April 7-9, 2021

RECAP

DAY 1: April 7	
Time	Activity
11:30 AM – 12:00 PM	1.1 Opening Plenary
11:30 AM	1.1.1 Welcome from Organizers (Tina Kaarsberg, DOE Advanced Manufacturing Office)
11:35 AM	1.1.2 Welcome from U.S. Department of Energy (Mike McKittrick, Acting Director, DOE Advanced Manufacturing Office)
11:40 AM	1.1.3 Overview of CABLE (Tina Kaarsberg, DOE Advanced Manufacturing Office)
12:00 PM – 2:15 PM	1.2 Applications Panel Session (Part 1)
12:00 PM – 12:35 PM	1.2.1 Electric Delivery System (EDS) Applications Panel – Moderator: Andre Pereira, DOE Office of Electricity <ul style="list-style-type: none"> • Benjamin Shrager, DOE Office of Electricity, “Electricity Delivery System” • Joe Hagerman, Oak Ridge National Laboratory, “The Transformer Resilience and Advanced Components (TRAC) Program and CABLE: Looking Forward” • Iver Anderson, Ames Laboratory, “Al/Ca Composite Conductor Characterization”
12:35 PM – 1:30 PM	1.2.2 Transportation Applications Panel – Moderator: Isik Kizilyalli, ARPA-E <ul style="list-style-type: none"> • Timothy Haugan, U.S. Air Force Research Laboratory, “Advanced Electric Conductors for Aerospace Transportation” • Maricela Lizcano, National Aeronautics and Space Administration (NASA), “Materials Research Activities for High Voltage Power Transmission Cables in Electric Aircraft Propulsion” • Lynn Petersen, Office of Naval Research, “Risk Reduction Research: DC Cables for Electric Ships” • Burak Ozpineci, Oak Ridge National Laboratory, “Enhanced Conductors for EVs” • Don Hillebrand, Argonne National Laboratory, “CABLE – Ground Transportation Considerations”
1:30 PM – 2:15 PM	1.2.3 Facilitated Discussion on EDS and Transportation Applications (Emmanuel Taylor and Ridah Sabouni, Energetics)
2:15 PM – 2:45 PM	Break
2:45 PM – 4:45 PM	1.3 Applications Panel Session (Part 2)
2:45 PM – 3:15 PM	1.3.1 Efficiency Applications Panel – Moderator: Fredericka Brown, DOE Building Technologies Office

	<ul style="list-style-type: none"> • Kashif Nawaz, Oak Ridge National Laboratory, “Non-metallic Heat Exchangers for Energy Conversion Systems in Buildings and Beyond” • Jason Woods, National Renewable Energy Laboratory, “Rate Capability and Ragone Plots for Phase Change Thermal Energy Storage” • Matteo Pasquali, Rice University, “Rethinking the Conductor Challenge: We Must Leap-frog Metals by 2030”
3:15 PM – 4:00 PM	<p>1.3.2 Renewables Applications Panel – Moderator: Jian Fu, DOE Wind Energy Technologies Office</p> <ul style="list-style-type: none"> • Eduard Muljadi, National Renewable Energy Laboratory, “Renewables Applications” • Nate McKenzie, DOE Wind Energy Technologies Office, “Wind Energy” • Bill Vandermeer, DOE Geothermal Technologies Office, “Geothermal Applications for Enhanced-conductivity Materials” • Susan Huang, DOE Solar Energy Technologies Office, “Metallization and Cables in Photovoltaics – Areas for Research”
4:00 PM – 4:45 PM	<p>1.3.3 Facilitated Discussion on Efficiency and Renewables Applications (Emmanuel Taylor and Ridah Sabouni, Energetics)</p>
4:45 PM – 5:00 PM	1.4 Preview of Day 2