



Conference on Energy Storage Trends and Opportunities



September 12-13, 2016
Sheraton Kona at Keauhou Bay
Kailua-Kona, Hawai'i



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SCHEDULE

7:00 – 8:00 Registration

7:15 – 8:00 Breakfast

8:00 – 8:15 **Traditional Hawaiian Welcome**

8:15 – 8:30 **Welcome Remarks**

Introduction: John DeLong, Chairman, Natural Energy Laboratory of Hawai'i
Authority (NELHA) Board
John DeFries, Director, Department of R&D – County of Hawai'i

8:30 – 9:15 **The State of Energy Storage: Overview by Key Note Speaker**

Dr. Imre Gyuk, Program Manager Energy Storage, U.S. Department of Energy

9:15 – 9:45 **Opportunities and Challenges for Energy Storage in Grid Modernization**

Dr. Jud Virden, Associate Laboratory Director - Energy & Environment,
Pacific Northwest National Laboratory

9:45 – 10:00 Break

10:00 – 11:15 **Overview of Energy Storage Related Initiatives at National Labs**

Panel – Chair: Dr. Jud Virden (Pacific Northwest National Laboratory)

- Dr. Babu Chalamala, Manager, Energy Storage Technologies and Systems, Sandia National Laboratories
- Dr. Bill Kramer, Senior Research Engineer, National Renewable Energy Laboratory
- Gregory Krumdick, Principal Engineer, Argonne National Laboratory
- Dr. Boryann Liaw, Manager Energy Storage and Advanced Vehicles, Idaho National Laboratory

- 11:15- 12:15 **Discussion on Policies and Regulations for Energy Storage**
 Panel - Chair: Richard Rocheleau (Director, Hawai'i Natural Energy Institute)
 Dr. Imre Gyuk (U.S. Department of Energy), Mark Glick (Administrator, Hawai'i State Energy Office), House Representative Nicole Lowen (Energy and Environmental Committee)
- 12:15 – 2:00 Lunch
 Speaker: Janice Lin/Co- Founder and Managing Partner California Energy Storage Alliance – **Update on the Implementation of 1.3GW energy storage goal by 2020 in California**
- 2:00 - 2:30 **Economics and Business Models for Energy Storage**
 Dr. Bryan Hannegan, Associate Laboratory Director for Energy Systems Integration, National Renewable Energy Laboratory.
- 2:30 – 3:15 **Overview of the Economics of Storage**
 Panel – Chair: Dr. Bryan Hannegan (National Renewable Energy Laboratory)
 Dr. Travis Simpkins (Sr Engineer, National Renewable Energy Laboratory), Raymond Byrne (Distinguished Member Technical Staff, Sandia National Laboratories); Paul Ponthieux (Director/CTO, Blue Planet Research LLC)
- 3:15 – 3:45 **Overview of Venture funding/Accelerator funding and other opportunities to assist Start-ups/entrepreneurs**
 Panel - Chair: Kyle Datta (General Partner, Ulupono Initiative)
 Jill Sims (Co- Founder, Energy Exceclerator)
- 3:45 – 4:00 Break
- 4:00 – 5:00 **Overview of Storage Issues and projects on the Island of Hawai'i**
 Panel – Chair: Jay Ignacio (President, Hawai'i Electric Light Company)
 Dan Borneo (Project Manager, Sandia National Laboratories), Will Rolston (Energy Coordinator, County of Hawai'i), David Tomlinson (Sr. Director-Project Development, UniEnergy Technologies)
- 5:00 – 5:15 **Wrap-up**
 Hawai'i House Representative Chris Lee (Chair, Energy and Environmental Committee)
- 6:00- 8:00 Networking Reception

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September 13, 2016
Field Visits
West Hawai'i, Hawai'i

SCHEDULE

- 8:30 – 9:00 **Field Trip Check In @ Bayview Rooms: Mauna Kea Room**
- 9:00 – 9:30 **Bus departs from Sheraton Kona at Keauhou Bay to NELHA**
- 9:30 – 10:30 **Gateway Center including Edisun Heliostats**
Aaron Fyke, CEO, Edisun Heliostats Inc.
- 10:30 – 11:15 **Koyo USA – 750 kW PV/250kW Saft Battery**
Larry Visocky, Chief Production Officer, Koyo USA Corp.
- 11:15 – 12:30 **Research Campus Battery Storage Test Bed**
- Aquion Battery
Roland Shackelford, Vice-President, Renewable Energy Services, Inc.
 - SCADA system
NELHA staff
 - HNEI Hydrogen Project
Mitch Ewan, Hydrogen Systems Program Manager, Hawai'i Natural Energy Institute
 - OTEC
Mike Eldred, Project Manager, Makai Ocean Engineering LLC
- 12:30 – 2:00 **Lunch at Hale Iako**
Speaker: Pete Devlin, Program Manager, US DOE Energy Efficiency and Renewable Energy, Fuel Cell Technologies Office
Speaker: Mitch Ewan, Hydrogen Systems Program Manager, Hawai'i Natural Energy Institute)
- 2:00 – 2:30 **Bus departs NELHA to Pu'u Wa'awa'a**
- 2:30 -4:00 **Blue Planet Research H2 and Energy Storage Demonstration at Pu'u Wa'awa'a**
Paul Ponthieux, Director and CTO, Blue Planet Research
- 4:00 – 4:40 **Depart Pu'u Wa'awa'a to return to Sheraton Kona at Keauhou Bay**

NELHA and the County of Hawai'i would like to thank the Hawai'i State Energy Office, the University for Hawai'i and Dr. Terry Surles for assistance in preparing and marketing this conference.