Overview

- Session Objectives: The purpose of the Utility DER Programs Panel is to hear from leading utilities that are using or plan to use OpenADR;
    - the reasons
    - how they implementing
    - results to date
    - Examples of successful uses

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Questions for the Panelists

- What is your utility's policy towards using standard communications protocols?
  - Why is it that way?
  - Is it evolving and how?
- Do you mandate the use of OpenADR? If yes, for what applications and why? If not, why not?
- If you require the use of OpenADR, do you require certified products?   Why or why not?
- What would be most valuable to your utility from the OpenADR Alliance over the next 2-3 years?   Value can be technical, policy, education or?

Panelist: Angie Eide, HECO

- Angie is the Senior Program Engineer for Hawaiian Electric Companies' DR programs.

- She is currently heavily involved in the Companies' DRMS/DERMS implementation project.

- Angie is also responsible for managing existing program technology and supporting the expansion of the Fast DR program to Maui.

- Prior to Hawaiian Electric, Angie was at Puget Sound Energy in a variety of roles involving system operations support, federal regulatory policy, and as EMS/SCADA consultant.

Panelist: Denver Hinds, SMUD

- R&D Project Manager, **Sacramento Municipal Utility District (SMUD)**

- Denver Hinds manages smart energy device testing and integration efforts for many pilots and programs at SMUD as the DER Interoperability Laboratory manager and Connected Customer Technology lead.

- Denver has a diverse background in electronic product design and systems engineering. He holds a Master of Science degree in Mechanical Engineering from Stanford University, a Bachelor of Science degree in Electrical Engineering from University of the Pacific, and a Project Management Professional Certificate from the Project Management Institute

Panelist: Jason Delaney, APS

- Jay is a Program Consultant for the Technology Assessment team at APS. In his current role, Jay's primary focus is on scoping requirements for APS's various DER control platforms.

- He also manages the second phase of the Solar Partner Program centered on the coordinated operation of storage, line devices and smart inverters.

- Previously, Jay was the Director of Application Engineering for Innovari and Operations Engineering Manager for Gridpoint. In addition, Jay has owned and operated a local electrical, low voltage and PV installation company

Marketing Chair

- James Mater, General Manager, Smart Grid, QualityLogic

*_The MWG Committee has bi-weekly calls on Fridays at 11am-11:45am. Next call May 4th ._

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- Session Objectives: Update on the direction, progress and opportunities that OpenADR has with respect to DER communications.

- The fundamental differences between managing DR resources and DER resources are
  - DER supplies energy back to the grid under regulations to insure grid reliability while DR resources are governed differently;
  - The utility organizations that deal with DR are usually customer-oriented teams with little to do with grid operations while DER is under operational teams concerned with protection, control and grid reliability.
  - DR is focused on informing and incentivizing load management behaviors.
  - DER messaging is more focused on individual device control which implies device discovery of capabilities, status, and performance and detailed device control instructions.

- OpenADR was designed for the DR model.   Adapting to DER (or DER to OpenADR) is the subject of this session.

Today's Panel

- ***Larsh Johnson, Stem***.   "Using OpenADR for Storage Management and What is a DERMS".

- ***Albert Chui, PG&E***.   "CA Vehicle-Grid Integration Communication Protocol Working Group.   The CA Thinking About EV Communications". .

- ***Rolf Bienert, OpenADR Alliance***. "OpenADR Alliance DER Initiatives".

- ***Walt Johnson, EPRI***. "A Group Management/Smart Aggregator Approach to DER Management: IEC 61968-5".

Panelist: Larsh Johnson, Stem

- Chief Technology Officer leading hardware and software engineering
- Prior to joining Stem, Larsh was Chief Technology Officer at Siemens Digital Grid, where he led technology development teams
- He joined Siemens via the acquisition of eMeter, (he was a co-founder)
- He co-founded CellNet Data Systems, a pioneer in wireless networks for smart metering and distribution automation and now a unit of Landis+Gyr.
- Larsh was a founding member of the DOE's Gridwise Architecture Council (GWAC) and remains a Member Emeritus. He earned a B.S. and an M.S. in Mechanical Engineering from Stanford University.

Panelist: Albert Chui, PG&E

- Lead Product Manager in the Integrated Demand Side Management (IDSM). He has developed and implemented residential, 3rd party, low income, commercial and local government EE and DR Programs.

- He is the lead of the DR Technology and Solutions Team in the Demand Response Emerging Market Department

- Also responsible for all Auto DR/PLS technologies development and implementation.

- Albert chairs the OpenADR Task Force at UCAIug and serves at the OpenADR Alliance board of directors.

- He is in multiple Technical Advisor Groups with CA universities and national labs.

Panelist: Rolf Bienert, OpenADR Alliance

- Technical Director of the OpenADR Alliance.
  - Oversees the technical developments and the certification program of the Alliance.
- Technical Manager for Telecom and the Global Competence Center for emerging communication protocols at leading test house.
- Rolf has been an active member of the NIST SGTCC, OpenADR Alliance, USNAP Alliance, SunSpec Alliance, ZigBee Alliance, and other organizations driving the development of new technologies with a specific focus on certification and interoperability.
- Rolf also served as Executive Director at Inventures, managing multiple industry standards.

Panelist: Walt Johnson, EPRI

- Technical Executive at the Electric Power Research Institute (EPRI),
  - Specializes in smart grid technologies, standards, and enterprise architecture.
  - He managed EPRI's Automated Demand Response and Ancillary Services Demonstration Project
  - Currently runs projects to increase production from residential PV using decentralized control of inverters and loads and to create and distribute transactive signals for other CEC projects.
- Prior to joining EPRI, he spent nearly ten years at the California Independent System Operator (CAISO), during which time he served on the Technical Advisory Group for LBNL's original AutoDR/OpenADR 1.0 project.