MESA

Open Standards for Energy Storage

The **Modular Energy Storage Architecture (MESA) Standards Alliance** is an industry trade association of utilities and vendors whose mission is to accelerate the growth of the energy storage industry through the development of open, non-proprietary communication specifications for energy storage systems. Through standardization, MESA accelerates interoperability, scalability, safety, quality, and affordability in energy storage components and systems.

MESA Objectives

- Standardize communication and connections, which will accelerate interoperability and scalability of energy storage systems.
- Give electric utilities more choices by enabling multi-vendor, component-based energy storage systems.
- Reduce project-specific engineering costs, enabling a more robust energy storage market.
- Enable technology suppliers (from software developers to battery suppliers) to focus on their core competencies in producing quality, safe and cost-effective components.
- Reduce training costs and improve safety for field staff through standardization procedures for safety and efficiency.
- Expedite the development and industry deployment of storage-specific communication specifications, before submitting them to appropriate Standards Development Organizations (SDO).

Founding Members

SMUD, LG Chem, Doosan, PSE Puget Sound Energy, Alstom, Seattle City Light, Parker, Snohomish County PUD Public Utility District No. 1, Pacific Northwest National Laboratory Proudly Operated by Battelle Since 1965, UET

Members

ALEVO Redefining Energy, Austin Energy, Blue Pillar, Duke Energy, ViZn Energy, NEC NEC Energy Solutions, greenlots, Amber Kinetics, NextEra Energy Resources, Nuvation Engineering, Win Inertia, GreenCharge, Siemens energy, Sinexcel 盛弘电气, IHI Realize your dreams, Eaton, Samsung SDI

To participate in the technical working groups and develop these industry standards, visit www.mesastandards.org

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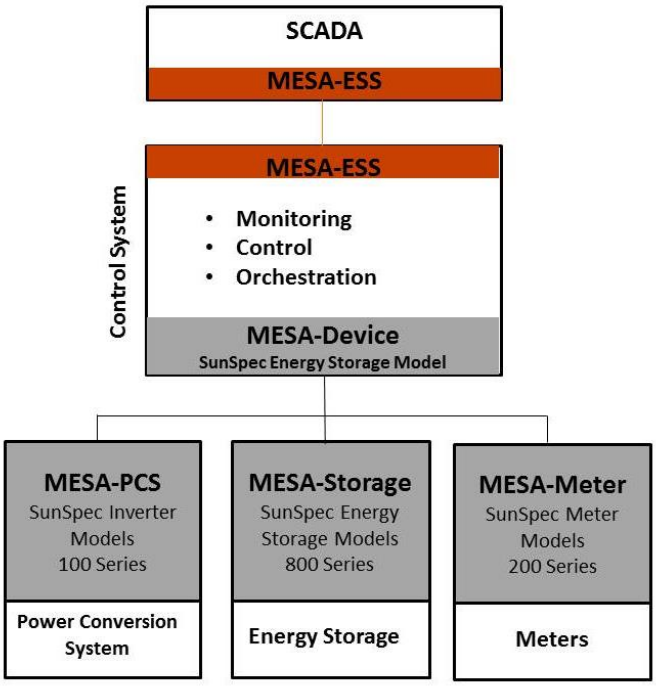
Developing a Standards-Based Control System

MESA's efforts focus on the development of the MESA-ESS and MESA-Device specifications.



MESA-ESS *provides a standard framework for utility-scale energy storage system (ESS) data exchanges. The draft specification addresses ESS configuration management, ESS operational states, and the applicable ESS functions from the IEEE 1815 (DNP3) profile for advanced DER functions.*

MESA-Device *addresses how energy storage components within an energy storage system communicate with each other and other operational components. MESA-Device specifications are built on the Modbus protocol.*

Technical Working Groups:

MESA-ESS – A technical working group was launched in March 2015 to develop the MESA-ESS Specification based on work by the DNP User Group. The draft specification will feed into a larger effort to update the existing DNP3 Application note on distributed energy and storage in 2017. A draft was released for public review and testing in November 2016.

MESA-Device - The Energy Storage Workgroup, run by SunSpec Alliance with contributions from MESA members, worked through 2015 and 2016 to produce an updated draft specification for MESA-Device/SunSpec Energy Storage Specification (Draft 4). The specification was released in DRAFT status for feedback and testing in July 2016.

Join MESA to participate in the technical working groups and guide the development of MESA Specifications.
Membership details at www.mesastandards.org.

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