

BATTERY ENERGY STORAGE SYSTEM (BESS)

BESS is a type of energy storage system that uses batteries to store and distribute energy in the form of electricity.

At its most basic level, a BESS consists of one or more batteries that store electrical energy for use at a later time.

It provides advantages over other energy storage systems, including greater efficiency and flexibility, faster response times when powering equipment or devices, and lower costs overall

EUCG BESS WORKING GROUP

MISSION:

Maximizing the safety, efficiency, reliability, and value of Utility Scale BESS technology through standardization of O&M best practices and performance measures

VISION:

Capture and share existing O&M best practices through regular contact and benchmarking among utilities to maximize the safety, effectiveness, and value of BESS technology

Message from the Chairs:

We are very excited to introduce the **“New” BESS Working Group** to EUCG’s family of electric utility members. Our core team have made great progress in the standardization of BESS performance measures via a benchmark database framework. We are committed to building new partnerships and strengthen existing ones by leveraging our diverse backgrounds and experiences to improve operational and financial performance of BESS technology.



BESS WORKING GROUP MEMBER BENEFITS:

Member Benefits

- **Key Performance Indicators (KPIs)** – Standardized financial and plant performance measures for consistent benchmarks between committee members
- **Peer Networks** - Provides opportunities for industry professionals to share knowledge regarding lessons learned, O&M costs, and best practices
- **Member Driven** - Empowers Committee members to determine the content and direction of the committee to meet the needs of the evolving industry
- **Workshops** - Semi-annual workshops that fosters interactive discussions between members regarding current and emerging issues facing the industry

Products and Services

- **BESS Information Database** - Collection of data from Key Performance Indicators (KPI's) that enables users the flexibility to perform customized data analytics to compare performance amongst peers
 - Plant Profile (Application, Manufacturer, Model, etc.,)
 - Staffing Levels and Makeup
 - Safety Performance and Case Studies
 - Cost Efficiency Measures - \$O&M/kw/MW
 - Capital Investment Measures
 - Operations Performance Metrics – Storage Capacity, Energy Density, Power Density, Storage Efficiency
- **Data Repository** - Provides reference materials that contains information on topics regarding Operations and Maintenance of BESS infrastructure
- **BESS O&M Best Practices** – Knowledge sharing with industry professionals to improve safety, work practices and efficiencies, and value proposition of BESS technology
- **Data Integrity Reviews** – Provides a platform to validate data consistency amongst members and arms members with a high level of confidence to share results with benchmark sponsors.

BESS WORKING GROUP COMMITTEE LEADERSHIP

Committee Leadership

- Billy Sabin, Tennessee Valley Authority
wtsabin@tva.gov
- Andrew Goebel, CenterPoint Energy
andrew.goebel@centerpointenergy.com
- Matthew Morgan, Arizona Public Service
Matthew.morgan@aps.com



BESS Working Group Members

Ameren | USA
Arizona Public Service | USA
CenterPoint Energy | USA
Consumers Energy Company | USA
Dominion | USA
Duke Energy | USA
Energy | USA
Exelon Utilities | USA
Lower Colorado River Authority | USA
NipSCO | USA
OPPD | USA
Pacific Hydro | Chile
Pacific Gas & Electric | USA
PSEG | USA
Salt River Project | USA
Southern Company | USA
Southern California Edison | USA
Tennessee Valley Authority | USA
Tampa Electric | USA
Volta River Authority | Ghana

OUTLOOK

Our outlook will be focused on a successful launch and implementation of EUCG's newest user group the BESS Committee.

A successful launch will deliver all of the major milestones identified in our implementation schedule, including membership growth through solicitation of existing EUCG members who own BESS and existing contacts.

The group had their first meetings at EUCG's 2023 Spring and Fall Benchmark Workshops in a limited capacity as a new user group.

Again, we look forward to growing our partnership with EUCG and its members.