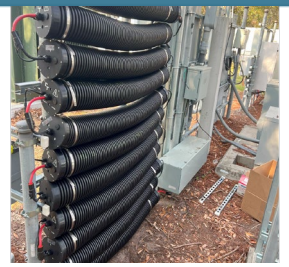
Energy Storage Demonstration Projects Session



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DOE Office of Electricity Peer Review

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Project Overview

Project Goal: ES demonstration projects are strategic instruments for validating performance, de-risking investment, building market confidence, and informing necessary Codes, Standards, and Regulations (CSRs).

Current Practice: Non-National Lab led demonstration projects are often performed in a silo with little to no information flowing to the broader ES community. National Lab led demonstration projects provide unprecedented access to the life-cycle operational and performance characteristics and many other project lessons learned.

Why SNL: SNL's long leadership and experience in ES Demonstration Projects, complementary technical R&D depth with cost competitive materials, power electronics, analytics, and reliability makes SNL a leader in achieving DOE OE's goals.

Innovation: National Lab ES demonstration projects test, validate, and attempt to bridge the "second valley of death" where technologies are too mature for basic research funding but too unproven for private capital.

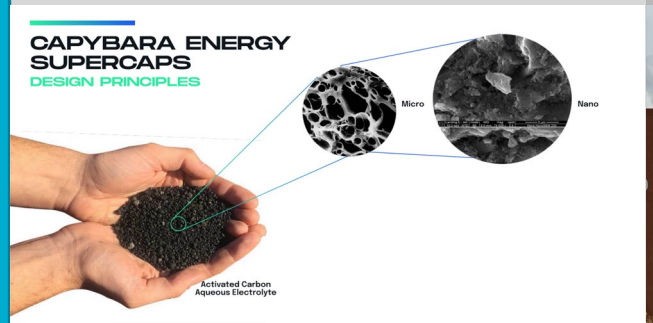
Impact: Demonstration projects have been instrumental in proving ES is a key enabler of enhancing grid stability, improving the efficiency of all generation assets, and improving the overall flexibility of our Nations electric power system.

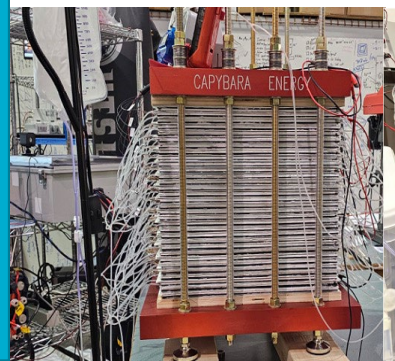
Alignment: ES demonstration projects supports an energy policy of unleashing all forms of reliable, dispatchable American energy that includes job creation in on-shored manufacturing of ES materials, components and systems.

DEMONSTRATION PROJECTS

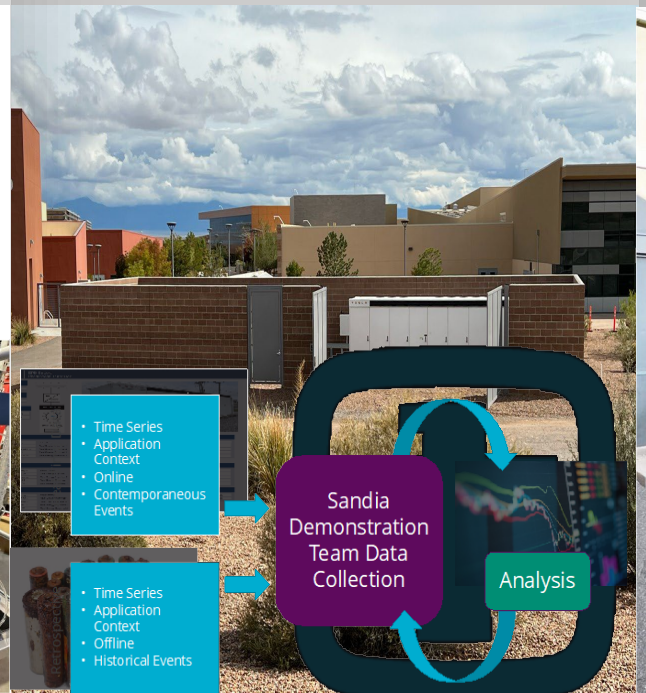
Demonstration Projects

1
Act as a Bridge To Commercialization





2
Validate Technical Models



3
Inform Codes, Standards, & Regulations

4
Increase Stakeholder Confidence

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2025 Year-in-Review

Grid Resilience ES Projects (Poster)

VEC/GMP Commissioning (Poster)

CapyBara Energy (Poster)

Capacitech Energy (Poster)

CEC CRADA (Poster)

Demonstration Projects Session Content

ARES Gravity Energy Storage Analysis

Don Bender

Energy Storage Component & System Level Codes & Standards

David Rosewater

Washington State Dept. of Commerce Energy Storage Deployments

Diane Baldwin

Interconnection Standards for Energy Storage

Michael Ropp

Thanks!

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