



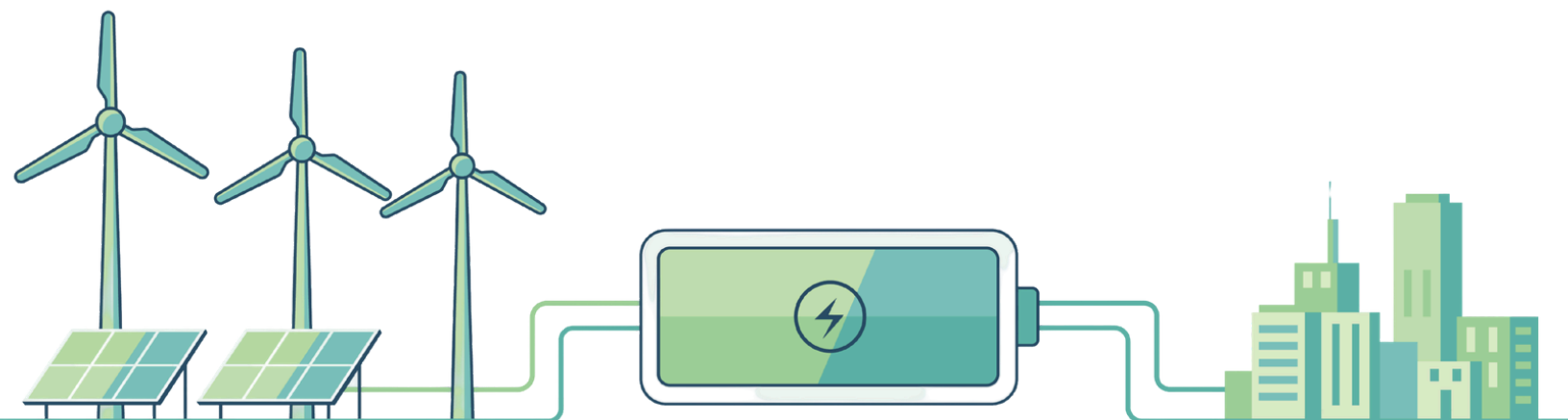
RENEWABLE
NORTHWEST

BESS Acronym and Terms Guide

Common terms used throughout the BESS Toolkit

Battery energy storage projects involve a mix of energy, safety, regulatory, and land-use terminology.

This guide provides plain-English definitions of the acronyms and technical terms used most often throughout the toolkit.



Organizations and Agencies

ACP	American Clean Power A national trade association representing companies across the clean energy industry.
AHJ	Authority Having Jurisdiction The local agency or official responsible for interpreting and enforcing applicable codes. For BESS projects, this may include a fire marshal, fire district, building official, or other designated authority.
BPA	Bonneville Power Administration A federal agency that owns and operates much of the high-voltage transmission system in the Pacific Northwest.
EPRI	Electric Power Research Institute An independent research organization that studies the electric power system. EPRI maintains a database of publicly reported BESS failure incidents.
EFSC	Energy Facility Siting Council The Oregon body responsible for reviewing and permitting certain large energy facilities. Depending on project size and configuration, a BESS project may instead be reviewed through local land-use and permitting processes.
NFPA	National Fire Protection Association A nonprofit organization that develops fire and life-safety codes and standards.
NREL	National Renewable Energy Laboratory A U.S. Department of Energy national laboratory that conducts research on renewable energy, energy storage, resilience, and related technologies.
PNNL	Pacific Northwest National Laboratory A U.S. Department of Energy national laboratory that conducts research on the electric grid, energy storage, reliability, and local planning.
PUC/ PSC	Public Utility Commission / Public Service Commission A state regulatory body that oversees investor-owned utilities and may review utility planning, rates, procurement, and other energy matters. The title varies by state.

Organizations and Agenices

PUD	Public Utility District A publicly owned utility that provides electricity or other services to customers within a defined area.
UL	UL Solutions An independent safety science organization that develops testing and certification standards for products and systems.

BESS Technology and Energy Terms

BESS	Battery Energy Storage System A system that stores electricity for later use and delivers it when additional power is needed.
GW	Gigawatt A unit of electric power equal to 1,000 megawatts.
GWh	Gigawatt-hour A unit of energy equal to 1,000 megawatt-hours. It measures the amount of electricity generated, stored, or used over time.
MW	Megawatt A unit of electric power. For BESS, MW describes how much power a system can deliver at one time.
MWh	Megawatt-hour A unit of energy. For BESS, MWh describes how much electricity a system can store or deliver over a period of time.
MW vs. MWh	Think of MW as the rate at which power can be delivered and MWh as the total amount of electricity available. For example, a 100 MW, four-hour BESS can deliver 100 MW of power for approximately four hours, representing 400 MWh of stored energy.

Safety Standards and Testing

NFPA 855	Standard for the Installation of Stationary Energy Storage Systems. The primary national standard addresses BESS installation, including equipment location, separation, fire protection, ventilation, emergency planning, and coordination with emergency responders.
UL 9540	Energy Storage Systems and Equipment. A safety standard used to evaluate and certify complete energy storage systems and equipment.
UL 9540A	Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems. A testing method used to evaluate how battery equipment behaves during thermal runaway. Results help inform system spacing, ventilation, fire protection, and emergency-response planning.
Thermal runaway	A serious condition in which a battery cell overheats and generates additional heat in a self-reinforcing cycle.

Planning and Review

SEPA	State Environmental Policy Act. Washington's process for identifying and evaluating the environmental impacts of certain proposed actions and projects.
Interconnection	The technical process used to determine whether and how a BESS project can safely connect to the electric grid.
Transmission	The high-voltage system that moves large amounts of electricity over long distances.
Distribution	The local system of lower-voltage power lines and equipment that delivers electricity to homes, farms, and businesses.
Decommissioning	The process for closing a BESS facility at the end of its useful life, including equipment removal, recycling or disposal, site restoration, and any required financial assurances.
Four-hour battery system	A BESS designed to discharge at its rated power level for approximately four hours before needing to recharge.