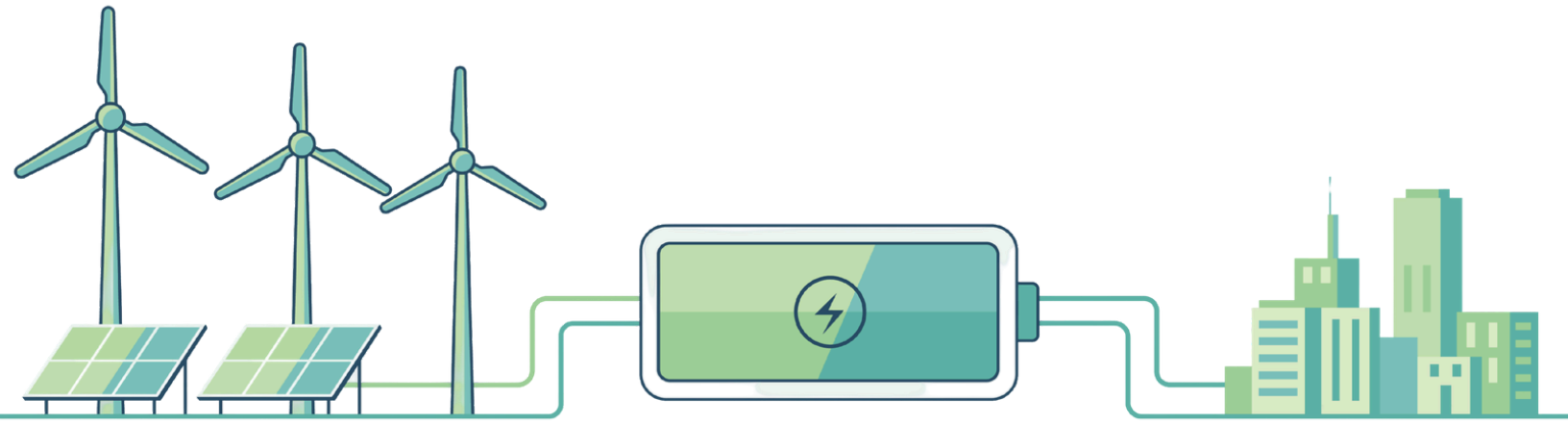
RENEWABLE NORTHWEST

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 Agenices

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.