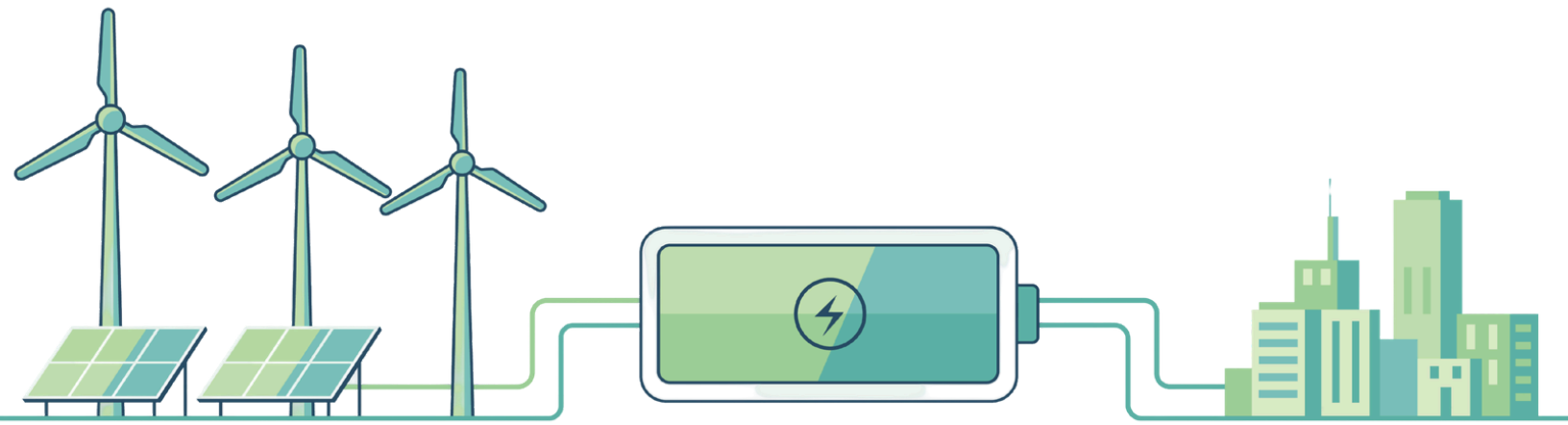
RENEWABLE NORTHWEST

Battery Energy Storage System Decision-Maker Guide

Key questions to consider when evaluating a BESS project



What is BESS?

Battery energy storage systems, often referred to as BESS, store electricity for later use. When electricity generation exceeds demand, electricity from all energy sources, including wind, solar, hydropower, geothermal, and natural gas, can be stored in batteries and discharged when additional power is needed.

Why BESS Matters Now

Across the Pacific Northwest, utilities and grid operators are planning for growing electricity demand, aging infrastructure, changing weather patterns, and the need to keep power reliable and affordable.

BESS is one tool that can help in the near term. It can make better use of existing infrastructure, support a more flexible grid, and work alongside longer-term investments in generation, transmission, energy efficiency, and other resources.

No two BESS projects or communities are exactly alike. Local leaders do not need to become battery experts, but they do need a clear process for asking the right questions, engaging the right reviewers, and understanding how a proposed project fits local priorities and regional energy needs.

At-a-Glance Review Checklist

When reviewing a BESS proposal, decision-makers should look for clear information in these areas:

- [ ] **Need and grid role:**
  The project's purpose and role in meeting local or regional energy needs
- [ ] **Site fit:**
  Why the location was selected and how it relates to existing infrastructure and nearby uses
- [ ] **Design and local impacts:**
  How setbacks, screening, lighting, noise, access, stormwater, construction impacts, and maintenance will be addressed
- [ ] **Safety and emergency response:**
  How the project meets current standards and how emergency responders have been engaged
- [ ] **Community value:**
  What local benefits may result and how they are documented
- [ ] **Long-term responsibility:**
  Who is responsible for operations, monitoring, maintenance, emergency coordination, and decommissioning

Key Questions for Project Review

Decision-makers do not need to answer every technical question themselves. Their role is to confirm that the right information has been provided, the right reviewers have been engaged, and the project has been evaluated against adopted standards and local priorities.

Need and Grid Role	• What grid or local reliability need is the project intended to serve? • How would the project work alongside longer-term investments in generation, transmission, energy efficiency, and other grid resources? • Has the local utility, rural electric cooperative, transmission provider, or grid operator explained the project's role in meeting local or regional energy needs?
Site Fit	• Why was this location selected? • Is the project located near existing electrical infrastructure, such as a substation, transmission line, or distribution infrastructure? • What nearby homes, farms, businesses, roads, waterways, or growth patterns should shape site review? • Does the location align with local planning, zoning, and land use goals?
Design and Local Impacts	• What setbacks or separation distances are proposed, and how do they align with NFPA 855, local code, and site-specific conditions? • What screening, landscaping, lighting, or noise mitigation measures, if any, are proposed or appropriate for the site? • How will construction traffic, stormwater, vegetation, emergency access, and site maintenance be addressed?



Focus On Outcomes

A strong BESS proposal should be able to show why the site makes sense, how impacts will be managed, how safety will be addressed, and what long-term value it offers. When communities focus on fit, design, oversight, and outcomes, they are better positioned to evaluate projects on their merits and make decisions that support both local values and future energy needs.

Key Questions for Project Review

Safety and Emergency Response

- Does the proposed system meet current fire, electrical, building, and energy storage safety standards?
- Has the project team provided applicable NFPA 855, UL 9540, and UL 9540A information?
- Have emergency responders, including the fire district, fire marshal, emergency management staff, or Authority Having Jurisdiction, reviewed the project?
- Has a site-specific emergency response plan been developed?
- Who is responsible for monitoring the facility and responding to alarms or abnormal conditions?

Community Engagement and Local Benefits

- How has the project team engaged neighboring property owners, residents, businesses, and community organizations?
- What concerns have been raised, and how have they been addressed?
- What local benefits may result, such as tax revenue, local contracting, reliability benefits, or better use of existing infrastructure?

Operations and Decommissioning

- Who will own, operate, maintain, and monitor the facility?
- What training, site information, or walk-throughs will be provided for emergency responders?
- What decommissioning requirements apply, and what financial assurances are in place?

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SOURCES:

- University of Michigan Center for EmPowering Communities, Planning & Zoning for Battery Energy Storage Systems: A Guide for Michigan Local Governments
- Pacific Northwest National Laboratory, Energy Storage in Local Zoning Ordinances
- National Renewable Energy Laboratory, Battery Storage for Resilience
- NY-BEST, Energy Storage Safety FAQ
- National Fire Protection Association, Energy Storage Systems
- U.S. Energy Information Administration, Battery Storage in the United States
- Princeton University, The Impact of Utility-scale Battery Energy Storage System Projects on Property Values

QUESTIONS?

Contact renewables@renewablenw.org

