Caitlin McIntyre

Dear Policymakers:

I write to provide public comment in response to the Scoping Meeting for Battery Energy Storage Systems and the associated Programmatic EIS. I write to raise concerns over the proposed and existing siting standards for Battery Energy Storage Systems (BESS) and microgrids and the State's environmental noise standards governing school sites under WAC 246-366-030. While I support clean-energy goals, I believe the current 100-foot minimum separation standard for siting BESS near sensitive uses — including schools — was developed primarily to address fire and life-safety hazards, and has not been independently evaluated against the acoustic thresholds that school sites are separately required to meet. This gap creates real risk of unfunded mitigation burdens for school districts and, ultimately, local taxpayers.

1. Regulatory Background

1.1 State Noise Standard for School Sites

WAC 246-366-030(3) provides that noise from any source at a proposed site for a new school, an addition to an existing school, or a portable classroom shall not exceed an hourly average of 55 dBA (Leq, 60 minutes) and shall not exceed an hourly maximum (Lmax) of 75 dBA during the time of day the school is in session. Sites that exceed these levels remain permissible only if a sound-reduction plan is included in the construction proposal and approved by the local health officer. This standard was confirmed as currently applicable in a November 2025 presentation by the Tacoma-Pierce County Health Department, which continues to apply this citation in its review of school site approvals.

1.2 Pierce County BESS Siting Standard

One example of a local jurisdiction's siting distances is Pierce County's current BESS regulatory framework, which designates any location within 100 feet of sensitive uses — including schools, childcare facilities, and medical facilities — as an area excluded from consideration for BESS siting through the conditional use permit process. A BESS or microgrid facility may be sited as close as 100 feet from a school property line. The County has described the purpose of this exclusion as prioritizing public safety by reducing potential exposure to hazards and ensuring appropriate separation from vulnerable populations. Notably, this rationale is framed entirely around fire and hazard safety; it does not reference or appear to account for the acoustic thresholds school sites must independently satisfy under WAC 246-366-030.

2. Noise Propagation Analysis

Manufacturer and industry data indicate that BESS enclosures produce average sound levels ranging from approximately 70 to 92 dBA at a distance of 1 meter (3 feet), driven primarily by continuous cooling-fan operation. Using standard point-source spherical-spreading attenuation ($20 \cdot \log_{10}(d_2/d_1)$ — equivalent to roughly 6 dB reduction per doubling of distance), it's estimated sound levels at increasing distances from the enclosure under idealized free-field conditions (hard ground, no barriers, no atmospheric absorption, single unit only). This method represents a best-case propagation scenario; real-world levels could be higher where multiple units operate simultaneously or where reflective surfaces are present, or lower where soft ground, vegetation, or terrain provide additional attenuation.

Distance from enclosure	Low estimate (70 dBA @ 1m)	High estimate (92 dBA @ 1m)
1 m (3 ft)	70 dBA	92 dBA
3 m (10 ft)	60.5 dBA	82.5 dBA
10 m (33 ft)	50.0 dBA	72.0 dBA
30 m (100 ft) — Pierce Co. minimum setback	40.3 dBA	62.3 dBA

61 m (200 ft) 34.3 dBA 56.3 dBA
91 m (300 ft) 30.8 dBA 52.8 dBA
152 m (500 ft) 26.3 dBA 48.3 dBA

Figure 1. Estimated BESS sound level vs. distance under idealized free-field spherical spreading, relative to the WAC 246-366-030 Leq/Lmax thresholds and the County's 100-foot minimum setback.

This analysis indicates that at this County's 100-foot minimum setback, equipment operating at the upper end of the stated emission range (92 dBA at 1 meter) would be expected to generate approximately 62 dBA at the property line — roughly 7 dBA above the 55 dBA hourly Leq threshold required at school sites under WAC 246-366-030(3). Solving the same relationship in reverse, compliance with the 55 dBA Leq threshold is not reached until approximately 230 feet from a source at the top of the stated range — more than double the County's current minimum setback.

In practical terms, this means this example County's current setback may be substantially insufficient for higher-emission installations, and does not provide school districts or the health officer reviewing school site applications with confidence that a nearby BESS facility will not push a school site out of noise compliance.

3. Cost-Shifting Concerns

I am also concerned about where the financial burden of noise mitigation falls under the current framework. As a matter of general practice, the cost of mitigating an environmental impact is typically borne by the party that creates it. Highway noise walls are funded as part of the roadway project that generates the excess noise, not by adjacent property owners. Industrial and utility siting permits routinely condition approval on the applicant funding acoustic enclosures, buffers, or setbacks. Environmental review under SEPA generally requires mitigation to be funded by the project proponent, not by third parties.

School districts already bear this obligation for noise originating from conditions outside their control — WAC 246-366-030(3) requires the district applying for site approval to fund the noise study and any needed mitigation for its own proposed site. That allocation is reasonable when the district is choosing where to build near pre-existing conditions. It is a different matter when a new, avoidable industrial noise source is permitted after a school already exists, or after a district has an adopted capital facilities plan identifying a future site, at a distance the County itself controls and allows. In that scenario, the district — and ultimately local taxpayers, through capital levies and bond funds — bears the cost of a problem it did not create and had no opportunity to prevent through site selection.

I recommend policy makers consider the following to better align responsibility with cause:

● Require BESS/microgrid developers to submit a pre-siting acoustic analysis showing expected sound levels at the nearest existing or planned school property line as part of the conditional use permit application.

● Where a proposed BESS site would foreseeably push a nearby school site out of compliance with WAC 246-366-030, require the developer — not the school district — to fund necessary mitigation (acoustic enclosures, barriers, or an increased setback).

● Alternatively, increase the presumptive minimum setback between BESS facilities and school properties (existing or planned) to a distance informed by the full stated emission range of this equipment, so that noise-driven mitigation is rarely triggered in the first place.

4. Conclusion

A 100-foot BESS setback appears to have been calibrated to address fire and hazard safety, not acoustic compliance, and my analysis suggests it may leave a meaningful gap between what the County allows and what state law requires at school sites. I ask policymakers to evaluate the acoustic adequacy of the current setback standard, particularly for higher-emission BESS installations, and to consider mechanisms that place the cost of any needed noise mitigation on the party introducing the noise source rather than on school districts and local taxpayers. I appreciate the DOE's attention to this issue and welcome the opportunity to discuss these concerns further.

Respectfully submitted,

Caitlin McIntyre

Sources

● WAC 246-366-030 — Site Approval (Washington State Board of Health).

● Tacoma-Pierce County Health Department, "Noise From a Local Health Jurisdiction Perspective," School Workshop presentation, November 6, 2025.

● Washington State Board of Health, Rules Hearing Cover Memo — Repeal of Chapter 246-366A WAC, June 4, 2025.

● Pierce County Planning & Public Works, "Solar in County Code" / BESS exclusion area map and Solar Energy & BESS presentation, March 24, 2026.

● Noise-propagation estimates calculated by the authors using standard point-source spherical-spreading attenuation (20·log10(d2/d1)) from manufacturer-reported BESS enclosure sound levels of 70–92 dBA at 1 meter.

Attached is a local news station's report that demonstrates how loud these mini grids can sound to the adjacent neighbors.

Author: **Eric Wilkinson**
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SAMISH ISLAND, Wash. — A Samish Island couple believes a Puget Sound Energy microgrid built near their property line violates noise ordinances and has forced them to put plans for their dream home on hold.

Zac Small and Kathleen Maloney bought property on Samish Island in 2019, envisioning it as their "happy place." Four years later, Puget Sound Energy built a microgrid next to their land to power an adjacent fire station and three homes during power outages.

The couple says the unit's noisy cooling fans run intermittently throughout the day and night, violating Skagit County's noise ordinance.

"It sounds like a little mini jet engine," Small said.

"We moved out here to get some peace and quiet, have a little bit of acreage. And we get worse noise than we do in the city," Maloney said.

The couple told KING 5 they were given no advance notice about the project.

"There was no opportunity to ask questions or communicate in any way about what to expect here," Small said.

A PSE-commissioned noise study recommended building a 14-by-18-foot wall to block the sound. That recommendation was made in October 2025, but construction has not begun.

A PSE spokesperson said the wall option could take months or even years to design, permit and construct, adding, "We have installed improvements and are actively pursuing additional upgrades to the HVAC to reduce the noise. This has taken longer than anticipated due to unforeseen delays but is a priority to resolve. We are committed to being a good neighbor."

In the meantime, the couple says they have put plans to build their dream home on hold.

"I've spent a lot of time working toward this goal and to have it interrupted like this is very disappointing," Small said.