Burt Culver

To the SEPA Responsible Official and BESS PEIS Scoping Team:
I am submitting these scoping comments regarding the development of the Programmatic Environmental Impact Statement (PEIS) for Battery Energy Storage Systems (Publication 26-06-017).
While the PEIS is intended to streamline clean energy deployment, an environmental review that analyzes battery hazards in isolation will inadvertently protect incumbent fossil fuel generation. Utility-scale energy storage is the direct technological replacement for fossil-fueled peaker plants. If this PEIS establishes broad, duplicative hurdles, treats all battery technologies as having uniform thermal hazards, or evaluates storage without comparing it to fossil baselines, it will delay grid decarbonization and entrench fossil assets, contrary to the Clean Energy Transformation Act (CETA).
To ensure an accurate, technology-inclusive, and legally defensible scope under SEPA, I request that Ecology incorporate the following requirements into the final PEIS:
1. Differentiate Next-Generation Chemistries with Negligible Thermal Hazards
Ecology must not treat "BESS" as synonymous with legacy, first-generation lithium-ion configurations. Siting, setback, and fire suppression mitigation measures must not be applied as blanket mandates across vastly different cell chemistries.
Sodium-Ion (Na-ion): Rapidly entering utility-scale commercialization, sodium-ion cells exhibit significantly higher thermal stability, lower risk of thermal runaway, and can be transported and stored at 0 volts (zero state of charge), practically eliminating transport and construction hazard baselines.
Iron-Air and Aqueous/Flow Chemistries: Long-duration storage systems—such as iron-air and non-flammable flow batteries—operate using water-based electrolytes with virtually zero risk of fire propagation or toxic deflagration gas release.
Tiered Regulatory Pathways: The PEIS must establish tiered mitigation frameworks where inherently safe, non-propagating, or low-fire-risk chemistries qualify for expedited, minimal SEPA review rather than being forced into the heavy mitigation envelopes designed for older chemistries.
2. Mandate an "Avoided Fossil Emissions" Lifecycle Baseline
Under SEPA, the environmental impact of non-emitting grid infrastructure must be measured against real-world grid operations:
The PEIS must quantitatively model the net displaced emissions achieved by energy storage, including avoided greenhouse gases, upstream methane leakage, and localized criteria pollutants (\text{NO}_x, VOCs, and PM2.5) that occur when gas peakers dispatch during peak demand.
The PEIS must not evaluate worst-case, low-probability localized incidents (e.g., thermal runaway or fire water runoff) without directly weighting those risks against the known, continuous public health and environmental damage of fossil fuel combustion.
3. Accurately Model the Environmental Damage of the "No Action Alternative"
Treating the "No Action Alternative" as an environmentally benign baseline is factually flawed: In the Northwest power grid, failing to deploy adequate utility-scale storage requires maintaining, running, and extending the operational lives of fossil-fueled generation to satisfy resource adequacy requirements.
The PEIS must explicitly state that the "No Action Alternative" prolongs fossil reliance, increases long-term regional carbon intensity, and directly impedes compliance with Washington's statutory decarbonization mandates.
4. Ensure the PEIS Serves as a Streamlining Mitigation Menu, Not a Moratorium Tool

Across the Pacific Northwest, open-ended environmental review processes are routinely co-opted at the municipal and county levels to justify blanket moratoria or arbitrary Special Use Permit denials under the premise of "waiting for state guidance."
The PEIS must be explicitly defined as a non-mandatory, non-exclusive mitigation menu designed to help local lead agencies rapidly complete project-level SEPA checklists.
For projects sited in appropriate areas—such as industrial zones, brownfields, or land immediately adjacent to existing electrical substations (where fossil peakers have traditionally operated)—the PEIS should provide streamlined, categorical evaluation paths.
5. Ground Hazard Assessments in Modern Design Codes (NFPA 855 / UL 9540A)
For chemistries where thermal hazards are present, safety assessments must reflect current code-compliant engineering rather than legacy failures:
Evaluations must assume compliance with modern standards including NFPA 855, UL 9540, and UL 9540A testing, which require unit-level separation, gas detection, deflagration venting, and multi-tier Battery Management Systems (BMS).
Risk modeling must account for standard utility adoption of Lithium Iron Phosphate (LFP) over older Nickel Manganese Cobalt (NMC) chemistries, reflecting LFP's higher thermal stability and resistance to self-sustaining fire.
Ecology must ensure this PEIS fulfills its mandate: accelerating the safe, timely, and rational transition to a zero-emissions grid, rather than giving incumbent fossil generation a procedural shield against clean storage competition.
Thank you for your consideration of these scoping comments.