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Comment Received From: Neil Serr
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Advocacy for Safer, Advanced Energy Storage Technologies

Dear Commissioners,

I am writing to formally oppose the proposed Corby Battery Energy Storage System (BESS) project, on the grounds that emerging and inherently safer energy storage technologies now offer viableâ€”and often superiorâ€”alternatives to traditional lithiumâ€‘ion battery systems.

Why This Matters

Lithiumâ€‘ion batteries, while effective, carry notable fire risks, thermal runaway potential, and rely on scarce, geopolitically sensitive materials. Given the urgency of clean energy growth, deploying inherently safer, scalable alternatives is both prudent and aligned with long-term sustainability.

Proven and Emerging Safer Alternatives

1. Sodium-Ion Batteries

Use abundant, affordable sodium instead of lithium, minimizing resource constraints and supply chain risks.

Demonstrated safety advantagesâ€”including lower flammabilityâ€”and improved cold-weather performance
NenPower
Simon Elstad
Battery Tech Association
.

Already deployed at grid scale: Chinaâ€™s Qianjiang project (50â€¯MW/100â€¯MWh) and first installations in Nanning validate commercial viability

Domestic U.S. manufacturing is scaling up: Natron Energy began production in Michigan (2024), meeting ULâ€¯1973 safety standards, and is planning a $1.4â€¯billion gigafactory in North Carolina
Wikipedia
+1
The Wall Street Journal
TIME
.

2. Vanadium Redox Flow Batteries (VRFBs)

Use a non-flammable, aqueous electrolyte, offering inherently safer operation
Wikipedia
pv-magazine-australia.com
Energy-Storage.News
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Long service lifeâ€”10â€“20 years, up to 20,000 cyclesâ€”and decoupled control of power and energy make them ideal for flexible, long-duration storage
Wikipedia
pv-magazine-australia.com
.

Already deployed in stationary grid-scale applications globally (e.g. UK, Australia)
Energy-Storage.News
pv-magazine-australia.com
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3. Zinc-Based Flow Batteries (e.g., Zinc-Bromine)

Use abundant, non-toxic materials with recyclable components and no fire risk.

Especially valuable for large-scale or off-grid BESS deployments where safety and low environmental impact are priorities.

4. Iron-Air & Other Emerging Tech

Iron-air batteries offer multi-day discharge at significantly lower cost, designed to complement lithium-ion but well suited to long-duration storage
pv-magazine-australia.com

Metal-hydrogen (Niâ€“Hâ‚‚) batteries deliver over 30,000 cycles, operate safely in extreme conditions, and have decades-long lifespans with minimal ongoing maintenance and environmental impact
AltEnergy Magazine

Gravity-assisted (mechanical) energy storageâ€”lifting heavy masses instead of chemical reactionsâ€”offers grid-scale reliability without chemical risks
AltEnergy Magazine

5. Advanced Solid-State & Aqueous Tech

New solid-state electrolytes (e.g., from University of Liverpool) resist short circuits and heating, greatly improving safety over traditional lithium-ion.

Water-based aqueous batteries using iodine/bromine chemistry achieve very high energy density with lower flammability.

Request for Commission Action

Given these alternatives:

Deny the Corby BESS project in its current lithium-ionâ€“based design.

Require a comprehensive alternatives analysis evaluating safety, cost, lifecycle emissions, and scalability.

Prioritize inherently safer technologies such as sodium-ion, VRFB, zinc-flow, or emerging hydraulic/solid-state systems in future approvals.

Incorporate robust life-cycle and public safety assessments into all BESS project evaluations moving forward.

Californiaâ€™s commitment to clean energy should be matched by an equally strong commitment to public safety, resilience, and long-term innovation.

Thank you for your consideration and leadership in guiding responsible energy infrastructure development for all Californians.

Sincerely, Neil Serr