More Challenges Ahead for Battery Energy Storage Systems: US Anti-Dumping Tariffs on BESS Components

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New U.S. Anti-Dumping Measures Targeting BESS Components (July 2025) On July 17, 2025, the U.S. Department of Commerce issued preliminary anti-dumping (AD) tariffs of 93.5% on imports of active anode-grade graphite from China. This material is foundational to lithium-ion battery production, including lithium iron phosphate (LFP) chemistries commonly used in utility-scale BESS. Because most battery cells in today's U.S. storage projects are either sourced from China or contain Chinese-sourced graphite, these duties have direct implications for a project's equipment costs, supply chain reliability, and financing assumptions.

The finding that the graphite material was sold at "less than fair value" triggered trade penalties that now may impact nearly every U.S. BESS developer. The duty applies to anode active material (both synthetic and natural graphite with ≥90% carbon purity by weight) used in battery energy storage systems (BESS) and electric vehicles. It covers standalone graphite as well as graphite contained in downstream products, such as battery electrodes or cells (though only the graphite portion is subject to the duty). In 2023, the U.S. imported roughly $347 million of such graphite from China.

China is the primary country targeted by this regulation, and the tariff is broad-based – a single 93.5% dumping margin has been assigned to all Chinese producers of the subject graphite. Notably, this trade action stems from a formal case initiated by the U.S. Department of Commerce in January 2025, following petitions alleging unfair pricing and subsidies on Chinese exports of "Active Anode Material." The investigation specifically targets graphite-based battery anode materials and named two major Chinese producers – Contemporary Amperex Technology Co. (CATL) and BTR New Material Group – as mandatory respondents. The U.S. Department of Commerce determined that these firms were under the influence of the Chinese government and denied them eligibility for a separate, lower duty rate, effectively subjecting them to the full China-wide duties.

In a parallel countervailing duty (anti-subsidy) investigation completed in May 2025, most Chinese graphite producers were also hit with preliminary subsidy tariffs of 6.55%, while two companies (Huzhou Kaijin and Shanghai Shaosheng Knitted Sweater) received punitive subsidy rates above 700%. These anti-dumping and countervailing duties (CVD) are preliminary; final determinations are due by December 5, 2025. If finalized, the tariffs could remain in effect for years. For now, importers must post cash deposits equal to the AD/CVD rates, immediately raising the costs for Chinese-sourced battery materials.

The petition for relief was brought by a coalition of U.S. anode manufacturers (American Active Anode Material Producers), reflecting U.S. industry's push to curb China's dominance in the battery supply chain.

Scope and Scale

The anti-dumping tariff of 93.5% is a preliminary figure, calculated based on the petitioners' data and applies uniformly to Chinese exporters who did not secure a separate rate. The U.S. Department of Commerce also set a higher China-wide rate of 102.72% for any Chinese firms that failed to cooperate fully (using adverse facts avail-

able). When combined with the parallel CVD and existing tariffs on Chinese goods, the total import duty burden is enormous. Industry sources note that effective tariffs on Chinese battery anode material now approach ~160% when stacking the 93.5% dumping duty with earlier measures (e.g. ~11% CVD, plus separate Section 301 and presidential tariffs on Chinese imports). In extreme cases (for the two Chinese firms with >700% subsidy rates), total duties could even exceed 800% if the preliminary findings hold.

The aggressive scope of these tariffs underscores U.S. intent to penalize Chinese suppliers and incentivize domestic or non-Chinese sourcing for battery materials.

Battery Chemistries Affected

Because virtually all conventional lithium-ion batteries use a graphite-based anode, this measure impacts all Li-ion BESS chemistries, including those most popular in utility-scale storage. For example, lithium iron phosphate (LFP) batteries – a preferred chemistry for grid storage – use graphite in the anode, so they fall under the scope. The investigation specifically encompasses graphite anodes, whether imported individually or incorporated into a battery cell/module. (The U.S. Department of Commerce clarified that if a battery or sub-assembly is imported, only the value of the anode material is subject to the dumping tariff, not the entire battery.) In short, any utility-scale BESS that relies on Chinese-made lithium-ion cells or anode materials will be subject to these new import penalties.

Implications for Utility-Scale BESS Project Financing

The introduction of these steep trade barriers in an already volatile policy environment is expected to have a significant impact on the financing and development of utility-scale battery storage projects. Key anticipated impacts include:

- Rising Capital Costs

Tariffs on a core battery component will likely drive up upfront costs for BESS projects. Developers now face significantly higher prices for Chinese-sourced battery cells and materials, or must switch to costlier alternatives. According to Wood Mackenzie, in a worst-case "trade war" scenario with maximal tariffs, utility-scale battery storage costs could jump nearly 50% (versus a ~12% increase under more moderate trade measures). Even a more likely tariff scenario (around 150% combined AD/CVD on Chinese anodes, plus other import taxes) would raise total system costs on the order of 5% or more for grid-scale storage.

This is significant for an industry that, until recently, had enjoyed rapidly falling battery prices.

Brian Pezzetti, Senior Director for Strategic Procurement at EDF Renewables, noted that new import duties are "driving up the price of equipment for developers as well as the price of energy storage for offtakers,"" directly eroding cost reductions achieved in recent years. Higher capital expenditures may squeeze project margins and necessitate larger financing commitments, making some projects less economically attractive or requiring re-negotiation of contracts.

- Investor Sentiment and Uncertainty

These trade actions have injected substantial uncertainty into the market, affecting investor and lender confidence. The abrupt policy shifts in 2025 – including the new battery tariffs – created what one industry procurement director called "a significant amount of uncertainty for projects in development" across the storage value chain.

Stock analysts have reportedly soured on import-reliant storage OEMs, and some project developers are deferring investment decisions until there is more clarity on long-term import costs. Bloomberg NEF observed that the average U.S. tariff on Chinese imports had skyrocketed to ~124% by mid-2025 (six times higher than a year prior), which already pushed U.S. battery system costs above 2023 levels and prompted expectations that installation rates will "plummet in the near term." Investors anticipate a near-term downside, including higher-than-expected costs, policy volatility, and the risk of further escalations. This may raise the cost of capital for BESS projects or delay investments until the trade situation stabilizes.

• Project Timeline and Development Risks

The tariff changes introduce significant timeline risks for projects in development. Many storage developers had been rushing to procure equipment and complete projects in 2025 to beat anticipated tariff increases (e.g., a pre-scheduled Section 301 tariff hike from 7.5% to 25% in 2026). Now, with steep duties taking effect immediately, projects that did not lock in inventory are facing delays.

Some developers – especially merchant (no-offtaker) projects – may pause construction entirely. Projects with power purchase agreements (PPAs) or resource adequacy contracts may be able to renegotiate terms to reflect the tariff burden. A prime example is Intersect Power's Aramis solar+BESS project in California, where tariffs made construction uneconomical until the offtaker agreed to revise the contract price.

Timeline uncertainty may also impact financing milestones, delay debt drawdowns, or push projects past eligibility windows for federal tax incentives such as the Investment Tax Credit (ITC).

• Supply Chain and Procurement Uncertainty

The tariffs have caused volatility across BESS supply chains. The U.S. continues to rely heavily on Chinese battery imports, and domestic production remains limited. Even non-Chinese suppliers often source raw materials (like graphite) from China. Thus, the duties ripple through the entire supply chain – even affecting U.S.-assembled batteries if they contain Chinese inputs.

Developers are now seeking to:

- Qualify new suppliers.
- Shift sourcing to allies (e.g., Korea, Japan, Southeast Asia).
- Build buffer inventories.
- Negotiate price-adjustable contracts.

These changes add complexity to procurement and increase the due diligence burdens for project financiers, who must assess exposure to tariff risk and sufficiency of contingency budgets.

• Industry Responses and Commentary

Major developers and financiers have flagged tariff risk as a top concern in 2025. EDF Renewables, Engie, and others have publicly warned that BESS project timelines, costs, and financing are under strain. Storage integrators have described the current tariff regime as "chaotic," and project developers have slowed contracting while waiting for policy clarity.

Some have compared the situation to earlier solar PV trade disputes and are applying similar mitigation strategies (e.g., inventory stockpiling, renegotiated PPAs). Still, many BESS deals now require more complex structuring to address tariff risks, shifting some cost burden to offtakers or increasing equity return thresholds.

About the author:

Lucian Gavriliuc is Executive Director of E3's Energy Storage Practice where he provides owner's and independent engineering services. He has more than two decades of experience in the power industry, with expertise in utility-scale battery storage, electrical system design, and O&M planning. Prior to E3, he was Senior Project Engineering Manager at Trina Storage, where he led BESS project delivery and vendor assessments. Lucian holds a BS in Electrical Technology from the University of Houston and an MBA from the University of Georgia. He is an active IEEE member.

If you are launching a new energy storage iniative, or exploring ways to reduce project risk, we would welcome the opportunity to discuss. Please feel free to reach out to Lucian at Lucian.gavriluic@e3co.com or 425-393-3598.

Sources:

- Reuters – “US Commerce Dept sets 93.5% anti-dumping tariff on Chinese anode graphite” (July 17, 2025)
- Mercom India – “US Slaps 93.5% Anti-Dumping Tariff on Chinese Anode Graphite Imports” (July 21, 2025)
- Holland & Knight – “New AD/CVD Investigations May Impact Imported Li-Ion Batteries” (Jan. 14, 2025)
- NOVONIX Ltd. – Press Release: “Commerce to Place 93.5% AD Tariffs on Chinese Graphite (effective rate 160%)” (July 18, 2025)
- Energy-Storage.news – “Intersect Power renegotiates BESS deal to mitigate tariff uncertainty” (July 18, 2025)
- Reuters Events – “Trump tariffs, orders rein in thriving battery storage sector” (Mar. 10, 2025) – quoting Brian Pezzetti, EDF Renewables
- Utility Dive – “Will tariffs help or hurt the US energy storage industry? It’s complicated” (May 1, 2025), featuring BloombergNEF analyst Isshu Kikuma on tariff impacts
- PV Magazine – “Tariff uncertainty grips U.S. battery development” (Apr. 23, 2025)