

NAATBatt International

Detailed Submission – Effects on the U.S. Economy of Revoking China’s Permanent Normal Trade Relations (PNTR) Status

USITC Investigation No. 332-609

I. Introduction

NAATBatt International is North America's premier trade association for the advanced battery industry, representing more than 380 companies and research institutions active across the lithium-ion battery ecosystem, including battery materials producers, cell manufacturers, pack integrators, recyclers, and technology developers.

NAATBatt appreciates the Commission’s investigation into the potential economic effects of revoking China’s Permanent Normal Trade Relations (PNTR) status. This is exactly the right question to ask, and the answer requires a clear-eyed assessment of where the U.S. battery industry stands today, what it would take to build true independence from Chinese supply chains, and how policy can accelerate that outcome rather than derail it.

NAATBatt’s members share the Administration’s goal: an American battery industry that is dominant, secure, and free from dependence on insecure supply chains. The purpose of this submission is to provide the Commission with the technical and economic information needed to recommend a path that achieves that goal on a timeline that allows American industry to win, not just survive.

That investment is already taking root across America. Major gigafactory projects are currently under development or in production in states including Ohio, Georgia, Kentucky, Tennessee, Nevada, and Texas, bringing thousands of manufacturing jobs and billions in capital investment to communities across the country. The policy decisions under consideration in this investigation will directly determine whether that investment succeeds or stalls.

II. China’s Dominance in the Battery Supply Chain

Any serious policy discussion of lithium battery supply chains must begin with an unvarnished assessment of current market realities. China does not merely participate in the global battery supply chain — it controls it.

According to the International Energy Agency (IEA), China controls approximately 65–70% of global lithium chemical conversion capacity, more than 75% of cathode material production, and approximately 90% of graphite anode processing capacity. China also produces roughly 75–80% of global lithium-ion battery cells.

This dominance is not accidental. It reflects more than 20 years of coordinated direct and indirect investment, estimated at more than \$100 billion annually, that created a self-reinforcing industrial ecosystem linking materials processing, cell design, manufacturing equipment, and production scale. China's battery ecosystem now rivals the scale and complexity of the U.S. petroleum refining industry.

China's control extends indirectly through global supply chains as well. Chinese firms have established long-term investments in overseas mining projects, ownership or financing of processing facilities in third countries, and vertically integrated battery manufacturing operations worldwide. As a result, even batteries manufactured outside China frequently depend on materials that were processed or refined within Chinese supply chains.

This is precisely the vulnerability identified in **Executive Order 14272 (April 2025)**, which found that "critical mineral oxides, oxalates, salts, and metals, as well as their derivative products, the manufactured goods incorporating them, are foundational to United States national security and defense," and that "significant global supply chain vulnerabilities and market distortions" from reliance on a small number of foreign suppliers have led to dangerous U.S. import dependencies. NAATBatt's analysis confirms this finding in the battery sector specifically.

III. Batteries Are a National Security Product

The Commission is directed to analyze an alternative scenario involving revocation of PNTR for a subset of national security products. NAATBatt submits that lithium-ion batteries and the critical materials from which they are made (graphite, lithium chemicals, cathode precursors, and electrolyte materials) are unambiguously national security products, and should be treated as such in the Commission's analysis.

Lithium batteries are now essential infrastructure for:

- Military systems: from portable soldier power to autonomous vehicles, drone platforms, submarines, and grid storage at forward operating bases
- National defense manufacturing: electric vehicles and equipment in the defense industrial base
- AI and data center infrastructure: grid-scale battery storage is increasingly essential to power the compute facilities that the Administration has identified as a national priority in EO 14318 and EO 14307
- Energy grid reliability: battery storage is central to the grid security goals of EO 14262
- Advanced mobility: drones, autonomous systems, and electric vertical takeoff and landing (eVTOL) aircraft all depend on high-performance lithium batteries

The Administration has already recognized this reality across multiple executive actions:

EO 14241 (Increasing American Mineral Production, March 2025): Declares that "national and economic security are now acutely threatened by our reliance upon hostile foreign powers' mineral production" and directs immediate action to facilitate domestic mineral production. Battery-grade graphite and lithium chemicals fall squarely within this mandate.

EO 14272 (Section 232 — Critical Minerals, April 2025): Invokes national security authority over processed critical minerals and their derivative products, identifying supply chain concentration as a direct threat to U.S. defense. Battery materials are derivative products of critical minerals.

EO 14265 (Defense Modernization, April 2025): Commits to delivering “state-of-the-art capabilities at speed and scale” — an objective that requires assured domestic battery supply for military platforms.

EO 14307 (Drone Dominance, June 2025): Identifies UAS as essential to national security and directs domestic drone production scale-up, impossible without domestic battery supply.

NAATBatt urges the Commission to reflect this national security designation clearly in its report and to frame any PNTR scenario analysis accordingly.

IV. Economic Impacts of PNTR Revocation

Based on U.S. International Trade Commission import data, the United States imported approximately \$13-14 billion in lithium-ion batteries, battery components, and critical battery materials from China in 2023. A tariff increase of 25–45% on these imports, the range associated with PNTR revocation, would increase annual input costs by an estimated \$2.7 to \$5.5 billion, with the greatest exposure in battery cells, components, and graphite-based anode materials.

Industry analyses, including Bloomberg NEF estimates, suggest battery pack costs could increase 5-20% depending on supply chain exposure. These cost increases would flow directly into:

- U.S. defense procurement and military readiness costs
- Data center and AI infrastructure capital expenditure
- Energy storage projects supporting grid reliability
- Transportation electrification programs
- Consumer electronics pricing

Without sufficient alternative processing and manufacturing capacity available at the time of tariff imposition, these cost increases would not redirect demand to domestic producers as there are none operating at the required scale. Instead, they would reduce American access to battery technology while doing little to dislodge China’s structural position in the supply chain.

V. Retaliation Risk: This Is Not Theoretical

China’s position in the battery supply chain creates meaningful leverage for retaliation that could rapidly escalate beyond tariff reciprocity. Specific risks include:

- Expansion of existing graphite export licensing controls to restrict supply of battery-grade anode materials to Western manufacturers
- Licensing constraints on battery cell supply, targeting U.S. defense and industrial customers

- Restrictions on tooling and manufacturing equipment, for which China is also a dominant supplier
- Coordinated action across Chinese-controlled overseas processing facilities to restrict material flows

These risks are not speculative. China has already deployed graphite export controls as a diplomatic and economic instrument. In extreme scenarios, coordinated Chinese restrictions on battery-grade materials could disrupt production at U.S. battery manufacturing facilities, jeopardizing the billions of dollars already committed by the federal government and private investors to build a domestic battery ecosystem, the very investment base that EO 14241 and the Administration's broader industrial policy are designed to protect.

PNTR revocation without a clear transition framework does not reduce this risk, it increases it by provoking Chinese countermeasures before U.S. alternatives exist.

VI. Supply Chain Transition: The Timeline Is Not Negotiable

The single most important fact the Commission should incorporate into its analysis is this: battery supply chains cannot be rebuilt quickly. The timelines are not a matter of political will or regulatory streamlining; they are physical and economic realities.

U.S. Department of Energy data establishes the following minimum development timelines:

- Lithium refining facilities: 5-7 years from project initiation to commercial operation
- Cathode and anode material facilities: 3-5 years
- Full integrated ecosystem buildout: 7-10+ years

These timelines assume no major permitting delays, an assumption that does not hold in practice. Real-world constraints compound the challenge:

- Permitting: Hazardous chemical processing facilities typically require 1-2 years for site selection and permitting, and frequently encounter community opposition
- Construction: Approximately 3 years to build and commission a facility at scale, with long lead times for steel, switchgear, and other critical components
- Capital: Cell assembly requires approximately \$100-\$200M per GWh; materials processing adds another \$100-\$200M per GWh; power infrastructure adds ~\$100M per GWh
- Workforce: The United States faces critical shortages of experienced process engineers, manufacturing specialists, toolmakers, and trained chemical plant operators

EO 14241 acknowledged this reality by calling for expedited permitting and streamlined federal review for critical mineral projects. EO 14318 similarly recognized that data center and energy infrastructure development requires regulatory acceleration. The same logic applies to battery materials processing, which is equally critical to national security and equally constrained by the current regulatory environment.

NAATBatt estimates that building competitive materials processing, cell manufacturing, and supporting infrastructure at meaningful scale will require approximately \$500M per GWh in total investment across facilities, processing, and power. For a supply chain of the scale necessary to meaningfully reduce U.S. dependence on China, this implies tens of billions of dollars of sustained investment over the coming decade.

Investors will commit to these projects only if policy provides durable certainty, predictable market conditions, and incentives that make North American projects globally cost-competitive with Chinese alternatives.

VII. The National Security Scenario: Five Years Is Not Enough

The Commission has been directed to analyze an alternative scenario in which Congress revokes PNTR treatment with a five-year phase-in of tariffs on a subset of national security products. NAATBatt addresses this scenario directly.

Lithium-ion batteries and battery materials are national security products. NAATBatt supports targeted action to reduce U.S. dependence on Chinese-controlled supply chains for these materials. However, based on the supply chain development timelines described above, a five-year phase-in is insufficient to allow alternative domestic or allied-nation capacity to reach meaningful scale before tariffs impose their full economic burden.

A five-year timeline for battery materials would mean:

- Year 1-2: Site selection, environmental review, permitting — no capacity added
- Year 3-5: Construction and commissioning — limited capacity, high cost
- Year 5: Full tariffs imposed — domestic alternatives still at early commercial stage

The result would be a gap, potentially measured in years, during which U.S. industry bears the full cost of tariffs without access to domestic alternatives. This gap would not be absorbed by corporate margins; it would be passed through to defense procurement, infrastructure projects, and American consumers.

NAATBatt's recommendation for the national security scenario: a minimum 10-year phase-in for battery materials, with annual tariff step-ups, beginning no earlier than Year 3, explicitly tied to verified milestones in domestic and allied-nation processing and manufacturing capacity. Tariff increases should pause or slow if capacity milestones are not met, preventing the worst-case scenario of full tariffs with no viable alternative supply.

VIII. Policy Recommendations

NAATBatt respectfully submits the following recommendations for the Commission's consideration:

Recommendation 1: Establish Battery Materials as National Security Products

The Commission's report should explicitly identify lithium-ion battery materials including battery-grade graphite, lithium chemicals, cathode precursor materials, and electrolyte

components as national security products for purposes of any PNTR scenario analysis. This designation is supported by multiple Administration executive orders and reflects the operational dependency of U.S. military, energy, and digital infrastructure on these materials.

Recommendation 2: Require a Minimum 10-Year Phase-In for Battery Materials

Any revocation of PNTR treatment affecting battery materials should incorporate a phased tariff implementation of no less than 10 years, with annual step-ups tied to verified domestic and allied-nation capacity milestones. Tariff escalation should pause if capacity targets are not met, preventing economic disruption without supply alternatives.

Recommendation 3: Pair Trade Action with Investment in Domestic Capacity

Trade policy alone cannot build a battery supply chain. The Commission's report should recommend that any PNTR changes be paired with:

- Expedited permitting for battery materials processing facilities, consistent with EO 14241
- Investment incentives that make North American battery projects cost-competitive with Chinese alternatives
- Allied-nation supply chain agreements to develop parallel sources of battery materials outside China
- Workforce development programs targeting process engineering, chemical manufacturing, and battery production, consistent with EO 14278

Recommendation 4: Initiate Section 232 Investigation of Battery-Grade Graphite and Cathode Materials

The Administration already has authority under Section 232 and EO 14272 to investigate national security impacts of import dependence on battery-grade graphite and cathode precursor materials. NAATBatt recommends the Commission note this authority and encourage its use as an immediate, targeted instrument — better calibrated than broad PNTR revocation for addressing the specific supply chain vulnerabilities in battery materials.

Recommendation 5: Protect Existing Domestic Battery Investment

More than \$100 billion in announced battery investment is committed across the United States, Canada, and Mexico. Any PNTR policy must be designed to protect, not undermine, this investment base. Abrupt tariff increases that raise input costs before domestic alternatives exist would reduce returns on committed capital, delay future investment decisions, and slow, rather than accelerate, the development of the domestic battery industry.

IX. Conclusion

NAATBatt's members are committed to building a world-class American battery industry that is strategically independent, technically competitive, and capable of powering U.S. defense, infrastructure, and economic leadership for decades to come. That goal is fully

aligned with the Administration's own priorities as expressed in its executive actions on critical minerals, energy security, defense modernization, and AI infrastructure.

The question before the Commission is not whether the United States should reduce its dependence on China-based battery supply chains. It should, and it must. The question is how to do so in a way that builds American strength and attracts private sector investment rather than creating a self-inflicted wound.

The answer requires a transition framework calibrated to supply chain realities: a phased approach with adequate lead time, incentives for substantial new investment, and policy certainty that gives American industry the foundation to compete and win. NAATBatt urges the Commission to recommend exactly that — a strategy worthy of the goal.

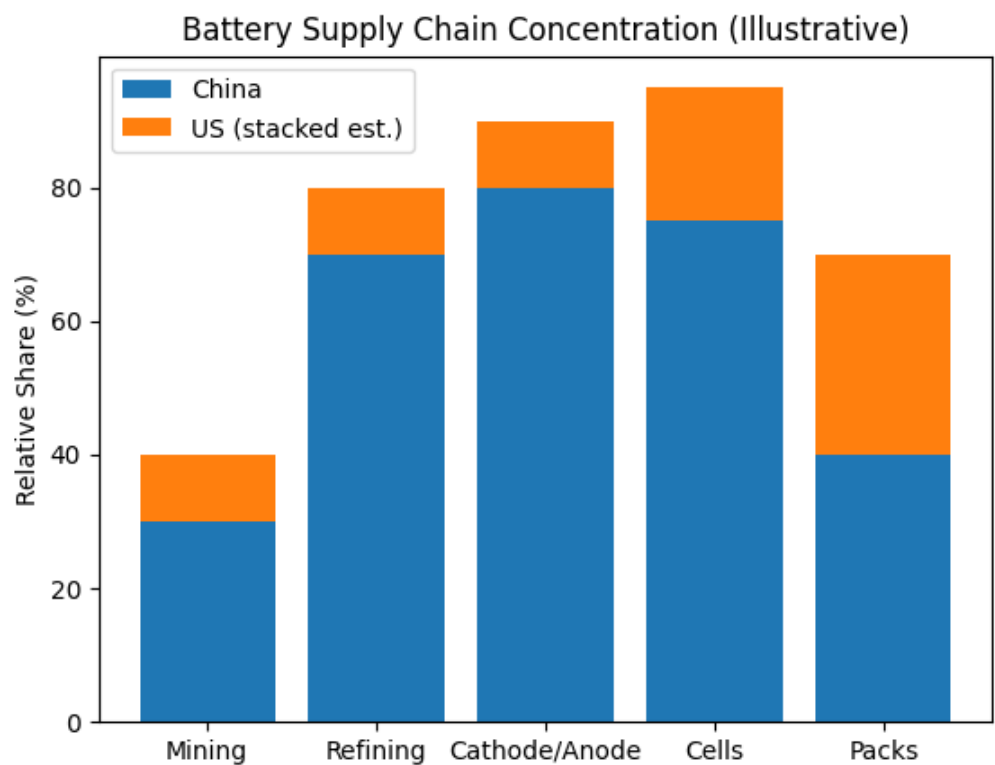
About NAATBatt International

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NAATBatt PNTR Strategic Visual Addendum

1. Supply Chain Choke Points

Illustrates concentration of supply chain control and key vulnerabilities.



2. PNTR Impact Scenarios

Illustrates potential cost impacts under different disruption scenarios.

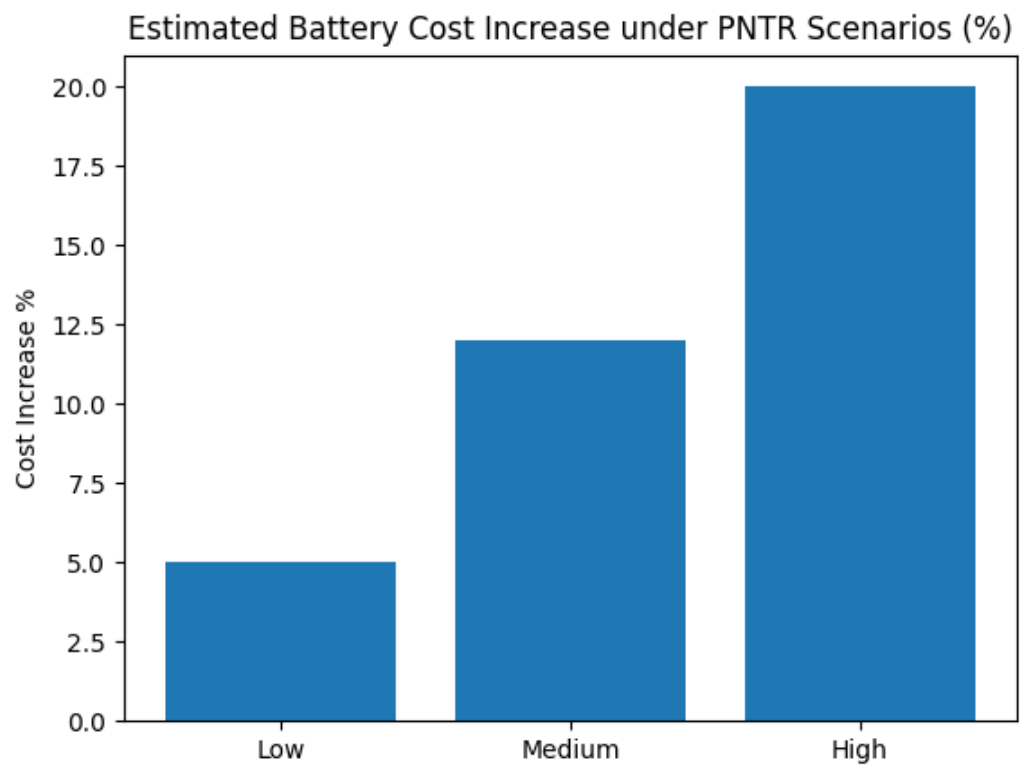


Table A — U.S. Battery Import Exposure to China

HTS Code	Product Description	Total U.S. Imports (\$B)	Imports from China (\$B)	China Share (%)	Current Duty (%)	Proposed Duty (%)	Incremental Tariff (%)
8507.60.0010	Li-ion batteries (EV)	8.5	2.8	33%	7.5%	35%	27.5%
8507.60.0020	Li-ion batteries (non-EV)	10.0	4.2	42%	7.5%	35%	27.5%
8507.90.8000	Battery parts	7.0	3.5	50%	5%	35%	30%
2825.20	Lithium compounds	3.2	1.6	50%	3%	25%	22%
3801.10 / 2504	Graphite	1.8	1.4	78%	0–3%	25%	22%
TOTAL	Battery-related imports	30.5	13.5	~44%	—	—	—

Table B — Estimated Annual Tariff Cost Impact

HTS Code	Imports from China (\$B)	Incremental Tariff (%)	Gross Tariff Cost (\$B)	50% Pass-Through	75% Pass-Through	100% Pass-Through
Li-ion batteries (total)	7.0	27.5%	1.93	0.97	1.45	1.93
Battery parts	3.5	30%	1.05	0.53	0.79	1.05
Lithium compounds	1.6	22%	0.35	0.18	0.26	0.35
Graphite	1.4	22%	0.31	0.16	0.23	0.31
TOTAL	13.5	—	3.64	1.82	2.73	3.64

Table C — Supply Chain Concentration by Segment

Segment	China Share (%)	U.S. Share (%)	Import Dependence	Substitution Difficulty	Timeline
Lithium refining	65–70%	<5%	High	High	5–7 yrs
Cathode materials	>75%	<10%	High	High	3–5 yrs
Graphite/anodes	~90%	~0%	Extreme	Very High	5–10 yrs
Cell manufacturing	75–80%	growing	Medium	Medium	3–5 yrs

Table D — Downstream Sector Impact

Sector	Battery Dependence	Est. Cost Increase (\$B)	Sensitivity	Replacement Feasibility	Risk
EV / commercial vehicles	High	1.2–2.0	High	Medium	High
Grid storage	High	0.8–1.5	High	Low	High
Data centers	Growing	0.5–1.0	Medium	Low	Medium-High
Defense / robotics	Strategic	0.3–0.6	High	Very Low	High

Table E — PNTR Scenario Summary

Scenario	Tariff (%)	Import Exposure (\$B)	Annual Cost Increase (\$B)	Impact Level
Low	10%	13.5	1.3	Manageable
Medium	25%	13.5	2.7	Significant
High	35–45%	13.5	3.6–5.5	Severe disruption