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*Managing Vice President,
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April 1, 2025

The Honorable Howard Lutnick
Secretary
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

Re: BIS-2025-0010, X-RIN 0694-XC116; Request for Public Comments on Section 232
National Security Investigation of Imports of Copper

Dear Secretary Lutnick,

The National Association of Manufacturers is the largest manufacturing association in the United States, representing 14,000 manufacturers of all sizes, in every industrial sector, and in all 50 states. Manufacturing employs nearly 13 million people, contributes \$2.93 trillion annually to the U.S. economy and accounts for more than 53% of all private-sector research.

The NAM appreciates the opportunity to submit comments on the Bureau of Industry and Security's Request for Public Comments on Section 232 National Security Investigation of Imports of Copper.

I. Copper is a Critical Input to Energy and Manufacturing

Copper is a critical material for manufacturing – both as a raw material input to products and industrial machinery, and to the energy manufacturing, generation and delivery which manufacturers help build and rely upon for their operations. Copper is especially vital as the U.S. continues to work to outcompete China to achieve energy dominance.

In a typical electric transformer, for instance, approximately 20% of the components by weight are copper. And S&P Global research shows that “copper use in power transmission and distribution application represents close to 20% of current copper demand.”¹ Additionally, copper is a critical input in many forms of energy production and distribution – including copper pipes for home gas distribution and potable water distribution, as well as copper-nickel alloys in gas and nuclear power generation², and additional applications in advanced batteries³. A strong, affordable, and reliable energy generation mix is a key component for manufacturing success – especially as the administration continues to bring back traditional manufacturing and support advanced manufacturing in semiconductors and AI data centers. A study of just one data center facility in Chicago showed that the facility used the equivalent of 27 tonnes of copper for every megawatt of applied power, meaning it required a total of 2,177 tonnes of copper for construction of just this one

¹ S&P Global, “The Future of Copper: Will the looming supply gap short-circuit the energy transition,” July 2022, https://cdn.ihsmarkit.com/www/pdf/0722/The-Future-of-Copper_Full-Report_14July2022.pdf

² Copper Development Association Inc., “Power Generation,” Accessed Mar. 26, 2025, https://www.copper.org/applications/marine/cuni/applications/power_generation/

³ ElectraMet, “Unlocking Copper Recovery: How Much Copper is in Lithium-Ion Batteries?,” Accessed Mar. 26, 2025, <https://electramet.com/blog/unlocking-copper-recovery-how-much-copper-is-in-lithium-ion-batteries/>

facility.⁴ And one global mining company estimates that “copper used in data centers globally will grow six-fold by 2050” from half a million tonnes in 2025 to approximately 2 million tonnes in 2050.⁵

Without a robust copper supply chain in the short- and medium-terms, manufacturing in America will not be able to reach its potential.

According to the Copper Development Association, however, the U.S. copper industry’s vertical supply chain is only capable of meeting 53% of domestic demand for refined copper cathode. As such, manufacturers in the U.S. are currently heavily reliant on imports of copper. Manufacturers support the administration’s goal of expanding domestic copper production and capacity, as well as ensuring a reliable, secure and resilient domestic supply chain—but we also recognize that this will take time, access to capital, and investment in the industry.

To support manufacturers’ efforts to expand domestic timber production, the NAM respectfully encourages the administration to pursue a comprehensive manufacturing strategy that will create predictability and certainty to invest, plan and hire in America. This strategy should focus on making pro-growth tax reforms permanent, expediting permitting reform, restoring regulatory certainty, strengthening the manufacturing workforce, and implementing effective trade policy.. With respect to permitting reform, manufacturers have called for much-needed changes that would make it more time- and cost-efficient to invest in the production and refinement of critical materials like copper. However, as manufacturers make these investments in increasing domestic capacity, manufacturers would encourage the administration to preserve the industry’s ability to access copper on a tariff-free basis in order to prevent supply chains from being disrupted and manufacturers from being penalized for using inputs that simply do not exist domestically in sufficient supply at this time. Avoiding tariffs on industrial inputs like copper would mitigate unnecessary scarcity and shortages as manufacturers in the U.S. take steps to ramp up domestic production.

II. The Need for Domestic Reforms and Key Incentives

Manufacturing in the United States requires access to natural resources, such as natural gas, oil, coal, critical minerals and materials, and rare earth elements to produce products that are vital to the U.S. economy and to ensuring energy security. Capitalizing on natural resource potential is critical to both competitiveness and improved performance, contributing to increased productivity, lower costs, value-added, and new products.

Unfortunately, outdated permitting laws and procedures are holding back progress and restricting our country’s ability to mine and process resources, modernize our infrastructure, support research and development, shore up our supply chains and increase American competitiveness. Specifically, to unlock expanded mine development and production in the U.S., manufacturers respectfully encourage the administration to:

- Address unreasonably long timeframes for the consideration of land and water use permits under the Federal Land Policy and Management Act and the Clean Water Act;
- Ensure that permitting deadlines, designating a lead federal agency, page counts, and the use of categorical exclusions as required by the Fiscal Responsibility Act of 2023 are followed across agencies; and
- Work with Congress to address and enact critically needed reforms to judicial review under the National Environmental Policy Act.

⁴ Bruno Venditti, “Why Copper Is Critical for Data Centers,” Elements, Oct. 17, 2023, <https://elements.visualcapitalist.com/why-copper-is-critical-for-data-centers/>

⁵ BHP, “Why AI tools and data centres are driving copper demand,” Jan. 20, 2025, <https://www.bhp.com/news/bhp-insights/2025/01/why-ai-tools-and-data-centres-are-driving-copper-demand>

Along with unlocking more access to raw materials and mining through permitting reform, the U.S. is in dire need of easing unreasonable restrictions that have caused a massive drop in domestic smelting and refining capacity over the past few decades. As China has developed low-cost smelters, the U.S. has missed opportunities to bolster domestic refining capacity. ⁶ The smelting and refining processes involve the removal of impurity elements from copper ore in order to prepare it for use in manufactured products. Currently, there are only two operational copper smelters in the United States. One is located in Arizona, and another is located in Utah.

For too long, permitting barriers and burdensome air regulations have made it commercially infeasible for manufacturers to invest in constructing and operating new smelters. While there have been positive developments in restarting operations at previously mothballed smelters, there remain significant regulatory and financial barriers to boosting capacity within a timely manner to avoid supply chain disruptions. The administration has the opportunity to take further steps to drive down costs associated with long, uncertain permitting timelines in the U.S. so that manufacturers in America can more efficiently compete with Chinese smelters.

Granting manufacturers access to critical financial tools will help reduce the cost of mining and processing capital projects within the United States. U.S. copper mines currently in operation, which due to how long they have been in production are seeing lower ore-grades and therefore lower margins, must compete with lower cost, higher-margin mines abroad. The NAM applauds the Trump administration's recent executive action entitled "Immediate Measure to Increase American Mineral Production," which invoked the Defense Production Act to make available new loans, loan guarantees, offtake agreements, grants, investments, and other financial instruments to boost domestic mineral production. This is an important step to unlocking federal financial resources to help realize American resource dominance and make domestic mining and processing cost competitive.

Another tool that would be a game changer for copper development in the United States is the Section 45X Advanced Manufacturing Production Tax Credit. This tax incentive is designed to incentivize the production and sale of eligible energy components and systems, including renewable energy components, inverters, qualifying battery components and applicable critical minerals. The Section 45X credit is key to the United States' competition with China, which has dominated the manufacturing of key components like batteries and critical minerals. Unfortunately, copper was not included as a qualifying mineral when 45X was first passed into law. The NAM would support the Trump administration working with Congress to make changes to the Section 45X incentive to ensure manufacturers that produce and refine copper would be eligible to receive it.

III. Key Trade Policy Opportunities to Boost Copper Manufacturing in America

The NAM offers ideas for some ways to approach trade negotiations to strengthen America's economic might, including critical mineral production, in the world – while preserving the predictability and certainty that powers U.S. manufacturers' ability to access the inputs they need to expand manufacturing at home. This can be achieved by scoping tariff initiatives to avoid increasing the cost of inputs such as copper that are not sufficiently available in the U.S. today, by preserving reciprocity manufacturers have today under our FTAs, by negotiating zero-for-zero tariffs in the manufacturing sector with non-FTA key trading partners, and by providing opportunities for manufacturers to offset any tariff costs as they invest in their operations in the U.S.

⁶ Wood McKenzie, "Securing Copper Supply, no China no Energy Transition"
<https://www.woodmac.com/horizons/securing-copper-supply-china-energy-transition/>

1. Ensure tariff-free access to foundational manufacturing inputs – particularly critical minerals like copper – until major U.S. investments in production of these items bear fruit.

A key trade negotiation priority should include seeking to achieve reciprocity while not impairing the ability to expand manufacturing in the U.S. To deconflict these objectives, it will be important to take out of scope products like copper and copper derivatives from new tariffs.

There are a variety of critical minerals like copper, and other industrial inputs, that either cannot be sourced in the U.S. or cannot be sourced to meet domestic demand. The U.S. copper industry's supply chain can only meet 53% of domestic demand for refined copper.⁷ The remainder of needed demand is met by importing refined copper from U.S. FTA partners, such as Mexico, Canada, Chile and Peru. Refined copper and alloy imports from these countries represent 95.5% of worldwide refined copper and alloy imports to the U.S.⁸

Preserving access to these inputs, as well as scrap, on a tariff-free basis would prevent supply chains from being disrupted and manufacturers from being penalized for using inputs that cannot be sourced in sufficient quantity in the U.S. Avoiding tariffs on such industrial inputs would mitigate unnecessary scarcity and shortages as manufacturers in the U.S. take steps to ramp up domestic refining and smelting capacity.

2. Maintain reciprocal zero-tariff treatment with current FTA partners, including for inputs such as copper that is critical to manufacturing in the U.S.

Manufacturers in the U.S. trade to a high degree with existing U.S. trade agreement partners. In the case of North American trade, approximately 56.8% of imports from Canada and Mexico represents trade among related parties, according to Census Bureau data.⁹

Manufacturers import a variety of copper products, including refined and unrefined copper, copper concentrates, and scrap material, from FTA trading partners. Furthermore, the top seven exporters of copper scrap materials to the U.S. are all FTA partners.¹⁰ Affordable access to these imports is crucial to maintaining manufacturing activity and expanding investment and jobs in America. Maintaining reciprocal zero-tariff treatment with FTA partners also supports increased exports of American-manufactured goods so the U.S. can preserve the market access for U.S. goods already built into our existing FTAs.

3. As a priority for the manufacturing sector, negotiate reciprocal zero-for-zero tariff terms.

In 2024, the U.S. imported more than \$27 billion in copper products, with the largest shares consisting of refined copper and alloy (31.7%), copper wire (9.4%), and copper tubes and pipes (4.4%). Improving the terms of trade for manufacturing exports, therefore, is vital for overall U.S. economic health. Manufacturers would benefit from reciprocal tariffs with key non-FTA partners, including Malaysia and Thailand. For example, Malaysia's tariffs on copper goods range from 0% to 25%. The trade-adjusted tariff rate for goods imported from Malaysia to the U.S. is 0.4%. Thailand's tariffs on copper goods range from 0% to 20%. The trade-adjusted tariff rate for goods imported from

⁷ S&P Global, "The Future of Copper: Will the looming supply gap short-circuit the energy transition," July 2022, <https://cdn.ihsmarkit.com/www/pdf/0722/The-Future-of-Copper-Full-Report-14July2022.pdf>

⁸ U.S. Census Bureau, "State Imports by HS Commodities," USA Trade Online, <https://usatrade.census.gov/>

⁹ U.S. Census Bureau, "U.S. Goods Trade: Imports And Exports By Related-Parties, 2022," Sept. 2023, U.S. Department of Commerce, https://www.census.gov/foreign-trade/Press-Release/related_party/rp22.pdf

¹⁰ U.S. Census Bureau, "State Imports by HS Commodities," USA Trade Online, <https://usatrade.census.gov/>

Thailand to the U.S. is 2.2%.¹¹ Manufacturers encourage the administration to negotiate reciprocal zero-for-zero tariff terms with non-FTA trading partners like these.

4. Provide opportunities for manufacturers to offset costs as they invest in their

To the extent that manufacturers in the U.S. experience increased costs as a result of tariff policies, the administration has the opportunity to help the industry offset these costs when companies act to invest and grow here in the U.S. For example, increasing access to capital would empower established manufacturers seeking to expand domestic operations, nascent businesses starting production, and firms considering relocating operations to the U.S. The administration could also consider a general license process available to manufacturers that invest above a certain threshold for larger manufacturers or scaled to the size of the firm to address the needs of small and medium-sized manufacturers, covering investments planned for the next three years and/or involving equipment contracted but not received prior to 2025 tariff modifications. A more complex approach could undertake creation of an importer-specific tariff “rebate” scheme. These policy approaches would minimize disruption and cost increases for manufacturers while supporting companies’ efforts to invest in America.

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The NAM thanks the administration for the opportunity to provide input into its Section 232 investigation into copper imports. Manufacturers look forward to working with the Department on this important issue and encourage the administration to focus on revitalizing the American copper industry through a comprehensive manufacturing strategy, including pro-growth tax reforms permanent, expediting permitting reform, restoring regulatory certainty, strengthening the manufacturing workforce, and implementing effective trade policy, while preserving tariff-free access to critical inputs as U.S. manufacturers ramp up domestic production.

Sincerely,



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¹¹ <http://tariffdata.wto.org/default.aspx>