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05.15.2026

The Honorable Pete Stauber
Chairman
Subcommittee on Energy and Mineral Resources
Committee on Natural Resources
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Stauber:

Thank you for the opportunity to testify before the Subcommittee on Energy and Mineral Resources at the April 29, 2026 oversight hearing, *“Powering the 21st Century with American Copper.”* I appreciate the Committee’s continued focus on the critical role copper plays in supporting the nation’s energy system, economic growth, and technology leadership.

As highlighted in my testimony, copper is foundational to the infrastructure and technologies that enable electrification, grid modernization, and expanding energy demand across the United States. Ensuring reliable, affordable, and secure access to this critical material remains essential to meeting the nation’s energy and economic objectives. Pursuant to your May 4, 2026 correspondence, please find enclosed my responses to the Questions for the Record submitted following the hearing.

The National Electrical Manufacturers Association (NEMA) and its member companies stand ready to continue working with the Committee to address challenges related to copper supply, infrastructure deployment, and the broader energy policy landscape.

Thank you again for your leadership and for the opportunity to contribute to the Committee’s important work. Please do not hesitate to contact me if I can be of further assistance.

Sincerely yours,

Debra Phillips
President and Chief Executive Officer
National Electrical Manufacturers Association
Enclosure: Responses to Questions for the Record

Questions from Rep. Webster for Ms. Debra Phillips, President & CEO, National Electrical Manufacturers Association.

1. Ms. Phillips, the Artemis II rocket that successfully orbited the moon a few short weeks ago relied on copper wiring, and other critical space infrastructure like satellites rely on copper to function properly. What sort of impacts on science and space exploration do you see in a future with severe copper shortages like those projected in the S&P report “Copper in the Age of AI”?

Representative Webster, as you have correctly noted, the Artemis II spacecraft and the infrastructure that supported its mission – including decades of science and space exploration prior to that mission - relied heavily on copper. Copper is “mission critical” for electrical manufacturers, nearly every electrical product depends on it, and, as I noted in my written testimony, there is no energy system without copper.

NEMA projects electricity demand to rise by approximately 55% by 2050, with data center domestic electricity demand alone increasing by roughly 300% between now and 2035. While NEMA does not represent the aerospace industry, our members products help deliver electricity to a variety of industries across the United States, including space exploration. If copper supply is constrained, the impacts will be felt across the energy system. Project timelines can be delayed, infrastructure buildouts can slow, and the deployment of critical technologies can be deferred.

2. Ms. Phillips, the residents in my district are rightly concerned about keeping the cost of living low. If we’re heading toward sustained shortages and even high copper prices, what does that mean for everyday Americans’ cost of living, especially when it comes to electricity bills, homebuilding, and consumer goods?

NEMA member companies do not set the prices consumers pay for electricity. However, electrical manufacturers build the critical infrastructure and technologies that transmit, distribute and control electricity across our energy system. Surging electricity demand requires a modern, secure, and resilient grid. NEMA encourages Congress to work directly with all stakeholders to address challenges regarding the price of electricity - including developing a long-term plan to modernize and upgrade the grid, and provide policy certainty and predictability for manufacturers who build the critical products that deliver electricity to consumers across the country. Technology solutions such as grid enhancing technologies (GETS), energy storage, demand response, and behind the meter approaches provide opportunities to increase supply and resilience in the short term to meet growing energy needs. All of the technological solutions available today require adequate and long-term access to critical inputs including copper.



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Questions from Rep. Gosar for Ms. Debra Phillips, President & CEO, National Electrical Manufacturers Association.

Domestic copper mining and processing offers benefits to the whole community – including jobs, labor income, federal, state, county, and local taxes. And of course, the private investments these mining companies make. Resolution Copper, for example, signed a Regional Economic Development agreement with the Town of Superior to provide local STEM education and college scholarships.

1. Would this economic boom from domestic mineral leadership help reduce the national debt?

NEMA members manufacture the technologies and infrastructure that transmit, distribute and control electricity. Copper is foundational to virtually every product NEMA members make and simply put, there is no energy system without copper. Further, our industry contributes 1% of U.S. GDP, directly employes more than half a million people across the entire nation and supports more than 2.2 million American jobs across the country. Copper is critical to the success of our industry, the jobs we create, the U.S. energy system and thus the economy as a whole.

2. How do these copper investments fuel solutions to affordability?

Electrical manufacturers build the critical infrastructure and technologies that transmit, distribute and control electricity across our energy system. Surging power demand requires a modern, secure, and resilient grid. NEMA encourages Congress to work directly with all stakeholders to address challenges regarding the price of electricity – including developing a long-term plan to modernize and upgrade the grid, and provide policy certainty and predictability for manufacturers who build the critical products that deliver electricity to consumers across the country. Technology solutions such as grid enhancing technologies (GETS), energy storage, demand response, and behind the meter approaches provide opportunities to increase supply and resilience in the short term to meet growing energy needs. All of the technological solutions available today require adequate and long-term access to critical inputs including copper.



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Questions from Rep. Westerman for Ms. Debra Phillips, President & CEO, National Electrical Manufacturers Association.

1. Ms. Phillips, given your testimony, you stated how copper is central to meeting the growth in electricity and “Without sufficient and reliable supply, the pace at which this infrastructure can be built and brought online will be constrained.” Would you please describe how potential copper constraints and infrastructure delays could ultimately affect electricity prices?

As I shared in my testimony, the United States is entering a new era of electricity demand growth. NEMA expects demand in the United States to rise by 55% by 2050 – and domestic data center electricity demand to increase by around 300% between now and 2035. Meeting this new era of electricity demand will require a major buildout of physical infrastructure and the equipment our members make such as transformers, switchgear, wire and cable, motors and drives, lighting solutions, industrial automation and more. All of these solutions require copper. When copper supply is constrained, it can delay the buildout such critical electrical infrastructure—everything from transmission lines and transformers to distribution systems. These delays slow the pace at which new capacity can be brought online and existing systems can be modernized or expanded.

One of the near-term actions Congress can take to address this challenge is to pass permitting reform to reduce timelines for constructing essential grid, manufacturing, and other critical infrastructure, while maintaining environmental protections. A final permitting reform package should include transmission provisions to ensure our nation is able to modernize and upgrade the grid to meet increased electricity demand. NEMA appreciates your leadership on the SPEED Act – speed matters because demand is accelerating now.



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Questions from Rep. Palmer for Ms. Debra Phillips, President & CEO, National Electrical Manufacturers Association.

1. Ms. Phillips, what challenges are your member companies encountering with copper theft?

Representative Palmer, thank you for this question. Copper theft is a serious and multifaceted concern for NEMA member companies and the electroindustry supply chain.

Since 2023, cargo theft has evolved into a sophisticated, multi-jurisdictional criminal enterprise. NEMA members have experienced an increasing number of cargo thefts, where organized criminals target copper assets in all forms;— anode, cathode, finished goods, and even scrap.

Criminal activity includes fraudulent pickups – where criminals impersonate legitimate carriers, or falsify shipping documents and exploit weaknesses in freight-broker systems to misdirect shipments and rapidly distribute stolen material through illicit resale networks.

Warehouses and distribution centers remain preferred targets of criminal organizations – typically transporting stolen material across state lines.

NEMA members have implemented additional verification measures and incorporated more stringent contractual terms with transporters. However, freight brokers and carriers continue to fall victim to fraudulent pickups and in-transit theft.

NEMA stands ready to work with Congress and the Administration to address this serious issue.