



**INTERNATIONAL
BROTHERHOOD
OF ELECTRICAL
WORKERS®**

900 Seventh Street, NW
Washington, DC 20001
202.833.7000
www.ibew.org

KENNETH W. COOPER
International President

PAUL A. NOBLE
International
Secretary-Treasurer

September 10, 2024

VIA EMAIL

Mr. Alan Davidson
Assistant Secretary of Commerce
for Communication and Information
National Telecommunications and
Information Administration
1401 Constitution Avenue NW
Washington, DC 20230

**Re: IBEW Comments on August 26, 2024, Policy Notice on Proposed
BEAD Program Alternative Broadband Technology Guidance**

Dear Assistant Secretary Davidson:

On behalf of the International Brotherhood of Electrical Workers (IBEW)'s 838,000 active and retired members, I am writing to respond to the National Telecommunications and Information (NTIA)'s *Policy Notice*¹ regarding the allowing of alternative technologies to end-to-end fiber-optic technology under the Broadband Equity, Access, and Deployment (BEAD) Program established by the Infrastructure Investment and Jobs Act.² The IBEW is very concerned over the notice potentially undermining the BEAD Program's key objective of ensuring broadband infrastructure's resilience for years and decades to come. In addition, the IBEW has concerns about potential negative environmental impacts from at least one alternative technology under consideration as an alternative to fiber-optic technology.

I. Fiber First Policies

The IBEW currently represents approximately 39,000 permanent employees working for telecommunications companies as well as thousands of construction workers who perform contract work for internet service providers. The IBEW has historically served a significant role in the telecommunications industry, as one of the largest labor unions representing workers for incumbent local exchange carrier (ILEC) providers, the largest building trade in the telecommunications sector, and as a labor representative for workers manufacturing and assembling telecommunications equipment.

¹ https://broadbandusa.ntia.doc.gov/policies-waivers/BEAD_Alternative_Broadband_Technology_Policy_Notice

² Pub. L. No. 117-58, 135 Stat. 1195



**INTERNATIONAL
BROTHERHOOD
OF ELECTRICAL
WORKERS®**

Assistant Secretary Davidson
September 10, 2024
Page 2

The IBEW strongly supports policy efforts to ensure all Americans can access affordable, reliable, high-speed broadband, particularly those expanding access for rural, unserved, and underserved communities. Our union reiterates its strong support of NTIA's assertion that fiber provides the premier standard for high-quality, scalable, and long-term broadband access.³ Fiber is the superior technology for our broadband needs for today and tomorrow. Data is sent at the speed of light through fiber-optic lines, much faster than DSL or cable, and is the most resilient, sustainable, and efficient technology available to provide *reliable broadband service*, the underlying objective of the BEAD Program.

The IBEW is deeply concerned that allowing states to use BEAD Program funds for alternative broadband technologies, notably unlicensed fixed wireless and low Earth orbit (LEO) satellite broadband, would undermine the BEAD Program's key objective of providing *reliable broadband service* by deploying unproven and unreliable technologies as opposed to fiber-optic technologies. Specifically, the deployment of low Earth orbit (LEO) satellite broadband undermines the main objective of not only the BEAD Program but its enabling legislation, the Infrastructure Investment and Jobs Act⁴, as low Earth orbit satellite broadband requires *zero* infrastructure investment and therefore only a fraction of the workforce that fiber-optic technology requires.

One scenario that NTIA must seek to avoid is for states and territories to deploy low Earth orbit (LEO) satellite technology only to find the technology unreliable, and then must deploy fiber-optic technologies at a much later date and at additional cost. The IBEW contends any state and territory seeking BEAD Program funds should be required to provide a detailed explanation and financial analysis as to why they are seeking an alternative technology to fiber-optic and how, precisely, fiber is not a feasible technology for the geographic areas that are seeking to acquire broadband access through BEAD Program funds.

II. Environmental Concerns with Low Earth Orbit (LEO) Satellites

One other factor when considering the allowance of low Earth orbit (LEO) satellites for BEAD Program funding is the increasing concern over the negative environmental impacts of the satellites.⁵ The number of LEO satellites is predicted to soon reach many tens of thousands and atmospheric scientists are increasingly concerned about how the LEO satellites might harm the ozone layer

³ Congressional Research Service (CRS) Report "Broadband Equity, Access, and Deployment (BEAD) Program: Issues and Considerations" June 15, 2023.

⁴ Supra, note 2.

⁵ <https://www.washingtonpost.com/weather/2023/03/05/low-orbit-satellites-ozone-layer/>



**INTERNATIONAL
BROTHERHOOD
OF ELECTRICAL
WORKERS®**

Assistant Secretary Davidson
September 10, 2024
Page 3

and allow more dangerous radiation from the sun.⁶ LEO satellites are mostly made of aluminum and contain numerous electronic parts, batteries, carbon fiber, epoxies, and metals, including titanium, cadmium, lithium, nickel, and cobalt — materials that may contribute to ozone depletion as they continuously disintegrate in space and descend into the stratosphere.⁷

The IBEW continues to stand with and support President Joe Biden, Vice President Kamala Harris, and their administration's efforts to ensure all Americans can access affordable, reliable, high-speed broadband, especially in unserved, underserved, and rural communities. I appreciate this opportunity to comment and look forward to assisting the administration in delivering reliable high-speed broadband service to every American household.

Sincerely,

A handwritten signature in black ink, which appears to read "Kenneth W. Cooper".

Kenneth W. Cooper
International President

KWC:mea

⁶ *Id.*

⁷ *Id.*