

Appliance Standards Awareness Project
Consumer Federation of America
Earthjustice
National Consumer Law Center

July 15, 2026

Mr. Jeremy Dommu
U.S. Department of Energy
Office of Critical Minerals and Energy Innovation
Building Technologies Office, CM-5B
1000 Independence Avenue SW
Washington, DC 20585

RE: Docket Number EERE-2026-BT-STD-0133: Energy Conservation Standards for Distribution Transformers

Dear Mr. Dommu:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), Consumer Federation of America (CFA), Earthjustice, and the National Consumer Law Center (NCLC) on behalf of its low-income clients on the request for information (RFI) for standards for distribution transformers. 91 Fed. Reg. 35903 (June 15, 2026). We appreciate the opportunity to provide input to the Department.

In 2024, DOE finalized amended efficiency standards for distribution transformers.¹ The amended standards, which are set to take effect in April 2029, will provide significant benefits for ratepayers while improving grid resilience. In the RFI, DOE requests comment on issues related to how the new standards interact with domestic manufacturing capacity and supply chain constraints. As we explain below, the standards have spurred domestic manufacturing investments that have fostered a more diverse and resilient transformer core market, and regulatory certainty remains crucial for continued investments across the distribution transformer supply chain. The amended standards were carefully crafted to address the same supply chain concerns raised in the RFI, and they were publicly supported by the domestic supplier of grain-oriented electrical steel (GOES) and electric utilities. Furthermore, the supply chain concerns, which predate the amended standards, are improving and stem from causes unrelated to efficiency requirements. If DOE remains concerned about domestic transformer-related supply chains, the Department should support continued investment through tools like the Defense Production Act (DPA).

In the RFI, DOE also requests comment on whether the amended standards result in any special hardship, inequity, or an unfair distribution of burdens, language which mirrors section 504 of the Department of Energy Organization Act. We also explain below why DOE cannot use section 504 to amend the standards for distribution transformers.

¹ 89 Fed. Reg. 29834 (April 22, 2024).

The amended standards for distribution transformers will benefit ratepayers at a time when electricity prices are rising sharply. The Energy Information Administration (EIA) estimates that residential electricity rates rose nearly 30% from 2021 to 2025.² DOE estimated that the final rule will provide energy cost savings of more than \$14 billion over 30 years of transformer sales³—savings that should largely accrue to electricity customers and facility owners. As electricity rates continue to rise, transformer efficiency improvements driven by the amended standards will play a meaningful role in protecting ratepayers from higher utility bills.

The amended standards will improve grid resilience by cutting energy use and reducing required electric generation capacity. These benefits are especially significant given that NERC projects summer peak demand across North America will grow by 224 gigawatts (GW) over the next decade, which represents a 24% increase over 2025 levels.⁴ DOE found the April 2024 Final Rule will yield 4.6 quads of full-fuel-cycle energy savings, representing a 10% reduction in energy use relative to products sold today.⁵ DOE also estimated that these standards will reduce electricity consumption by about 1,800 gigawatt-hours (GWh) in 2030 and 11,000 GWh in 2040, while lowering required total installed capacity by nearly 6,000 MW by 2040.⁶ These represent meaningful reductions in energy use and required capacity at a time of considerable electric load growth.

The amended standards have fostered a more diverse and resilient transformer core market. Instead of replacing domestic GOES, the amended standards will preserve existing GOES capacity while driving new amorphous metal (AM) investment that will increase overall supply.⁷ Historically, the market for distribution transformer cores has relied on GOES. However, the GOES market is poorly positioned to keep pace with rising demand for distribution transformers: domestic GOES production is capital-intensive and dependent on a single domestic supplier.⁸ The GOES market has historically relied on imports to meet total demand for both distribution and large power transformers, and global steelmakers are now shifting GOES production capacity to instead serve the growing EV market.⁹ Since AM is not used in electric motors or in large power transformers, and is made via an entirely different process, AM capacity cannot be easily diverted to supply either market. As a result, AM core transformers are insulated from the market pressure currently straining the GOES supply chain.

Domestic manufacturers have already moved aggressively to increase AM production capacity in response to the 2024 Final Rule. For example, Howard Industries announced a \$236 million expansion across three Mississippi facilities in June 2025, which will increase production capacity and create 450

² Table 5.3. www.eia.gov/electricity/monthly/epm_table_grapher.php?t=table_5_03&utm

³ www.energy.gov/articles/doe-finalizes-energy-efficiency-standards-distribution-transformers-protect-domestic

⁴ www.utilitydive.com/news/nerc-10-year-peak-demand-forecast-jumps-24-on-new-data-center-loads/810955/

⁵ www.energy.gov/articles/doe-finalizes-energy-efficiency-standards-distribution-transformers-protect-domestic

⁶ p. 15-8. www.regulations.gov/document/EERE-2019-BT-STD-0018-0165. Reported numbers reflect TSL 3, the finalized level for liquid-immersed and low-voltage dry-type transformers, which account for 97% of energy savings; medium-voltage dry-type transformers were finalized at TSL 2.

⁷ 89 Fed. Reg. 29834, 29905, 29906 (April 22, 2024).

⁸ 89 Fed. Reg. 29834, 29889 (April 22, 2024).

⁹ p. viii. www.energy.gov/sites/default/files/2022-02/Electric%20Grid%20Supply%20Chain%20Report%20-%20Final.pdf

jobs.¹⁰ Additionally, ERMCO designated one of its facilities as a dedicated "amorphous hub" in 2025, stating publicly that the investment positions the company "ahead of the curve in aligning with the U.S. Department of Energy's 2029 efficiency standards."¹¹ By providing regulatory clarity, the standards have spurred the capital investment needed to build a more stable and diversified domestic supply chain.

Regulatory certainty is crucial for continued investment in the distribution transformer supply chain.

The RFI seeks information on the extent to which regulatory certainty affects manufacturer investment planning, capital allocation, and willingness to expand production capacity.¹² Domestic manufacturing capacity and national security, the very objectives the referenced Presidential Determination seeks to strengthen,¹³ depend on regulatory stability. Domestic manufacturers have already deployed considerable capital to meet the amended standards, and regulatory certainty is a key driver of long-term industrial planning and capital allocation. Manufacturers need confidence that the finalized standards will take effect as anticipated to justify continued investment. Any destabilization of the regulatory landscape after hundreds of millions of dollars have already been committed would work against the administration's own objectives.

The amended standards were carefully crafted to address the same supply chain concerns discussed in the RFI. DOE noted upon finalization of the amended standards that the "standards are expected to protect existing domestic supply of core materials used in distribution transformers" while "increasing resiliency in the distribution transformer supply chain."¹⁴ Notably, the standards in the April 2024 Final Rule were significantly less stringent than the standards proposed in 2023,¹⁵ which would have required a much larger market shift toward AM core transformers. While the initial proposal would have required almost the entire market to shift to AM cores, about 75% of the market will be able to continue using domestic GOES under the amended standards.¹⁶ The final rule also extended the compliance timeline from three years to five years, moving the compliance date to April 2029, while also reducing total industry conversion costs relative to the initial proposal.¹⁷ The finalized standards were intentionally designed to prevent further supply shocks and preserve the existing domestic steel manufacturing base while improving long-term grid stability through expanded buildout of domestic AM transformer production.

The amended standards were supported by the domestic supplier of GOES and electric utilities.

Cleveland-Cliffs, the domestic supplier of GOES, stated that the final rule "ensures Cliffs' ability to continue producing highly-efficient GOES in the United States."¹⁸ The Edison Electric Institute (EEI),

¹⁰ www.howardcomputers.com/INFO/news/2025/06/26/howard-industries-invests-over-230-million-to-expand-operations-across-mississippi.cfm

¹¹ www.ermco-eci.com/ermco-strengthens-energy-infrastructure-capabilities-through-wisconsin-facility-acquisition/

¹² 91 Fed. Reg. 35903, 35905.

¹³ www.federalregister.gov/documents/2026/04/23/2026-08013/presidential-determination-pursuant-to-section-303-of-the-defense-production-act-of-1950-as-amended

¹⁴ www.energy.gov/articles/doe-finalizes-energy-efficiency-standards-distribution-transformers-protect-domestic

¹⁵ 88 Fed. Reg. 1722 (January 11, 2023).

¹⁶ www.energy.gov/articles/doe-finalizes-energy-efficiency-standards-distribution-transformers-protect-domestic

¹⁷ 88 Fed. Reg. 1722, 1726 (January 11, 2023), 89 Fed. Reg. 29834, 29838 (April 22, 2024). \$229 million in the final rule, compared to \$343 million in the proposed rule.

¹⁸ www.clevelandcliffs.com/news/news-releases/detail/633/cleveland-cliffs-applauds-does-final-transformer

which represents investor-owned utilities, noted that the final rule “provides regulatory certainty on the timeline needed to protect and expand domestic manufacturing capacity,”¹⁹ while the American Public Power Association (APPA) referred to positive steps taken by the Department in the final rule “to assist electric utilities in their efforts to continue providing reliable, affordable, and sustainable power to their customers.”²⁰

Current supply constraints predate the amended standards, are improving, and stem from causes unrelated to efficiency requirements. Procurement lead times for distribution transformers have generally improved over the last few years.²¹ The most acute procurement backlogs facing the utility sector involve large power transformers, which are not subject to federal efficiency standards; among distribution transformers, supply pressures are concentrated in large three-phase transformers.²² The standard levels for large three-phase transformers were carefully selected to account for persistent supply constraints: the April 2024 Final Rule allows manufacturers to meet the 2029 standards for these products using domestic GOES. Current supply challenges instead reflect historically high demand—driven by AI data centers and electric grid expansion—rather than any regulatory constraint.²³

DOE could support industrial investment through the Defense Production Act (DPA). If DOE is concerned about domestic core steel and transformer production, the DPA offers a direct tool to address that concern. The Presidential Determination discussed in the RFI cites electrical core steel and transformers as a national security concern.²⁴ Section 303 of the DPA allows DOE to address that concern directly, through purchases, commitments, and financial support for domestic production capacity for distribution transformers.

DOE cannot use Section 504 to amend the standards for distribution transformers. DOE’s specific request for information “regarding whether, and for whom, the adopted standards may result in special hardship, inequity, or an unfair distribution of burdens” appears intended to facilitate weakening the adopted standards.²⁵ Although the RFI does not indicate what action DOE may take in response to any comments received on this topic, it appears relevant that section 504 of the Department of Energy Organization Act uses the same three criteria—special hardship, inequity, or unfair distribution of burdens—to delineate DOE’s authority to provide for certain types of adjustments to rules, regulations, or orders issued under the Energy Policy and Conservation Act (EPCA).²⁶ However, the RFI does not quote or even cite section 504, leaving it unclear whether DOE’s recitation of that provision’s three criteria in the RFI is a mere coincidence. To the extent DOE may be planning to assert a novel claim of authority to act under section 504, we urge the Department to abandon that as-yet unspecified plan.

Section 504 does not authorize DOE to conduct a rulemaking to amend an energy conservation standard. The provision, titled “Requests for adjustments,” enables DOE to “provide for the making of . .

¹⁹ www.utilitydive.com/news/doe-finalizes-distribution-transformer-rule/712229/

²⁰ www.publicpower.org/publication/appa-statement-doe-transformer-efficiency-standards-final-rule

²¹ distroforge.com/blog/transformer-procurement-2026/

²² *Ibid.*

²³ 89 Fed. Reg. 29834, 29902 (April 22, 2024).

²⁴ www.federalregister.gov/documents/2026/04/23/2026-08013/presidential-determination-pursuant-to-section-303-of-the-defense-production-act-of-1950-as-amended

²⁵ 91 Fed. Reg. at 35905.

²⁶ 42 U.S.C. § 7194(a).

. adjustments to any rule, regulation or order . . . issued under . . . [EPCA], consistent with the other purposes of [EPCA], as may be necessary to prevent special hardship, inequity, or unfair distribution of burdens.”²⁷ Section 504(a) further requires DOE to “establish procedures which are available to any person for the purpose of seeking an interpretation, modification, or re[s]cission of, exception to, or exemption from, such rule, regulation or order.”²⁸ The same subsection also requires that DOE “shall additionally insure that each decision on any application or petition requesting an adjustment shall specify the standards of hardship, inequity, or unfair distribution of burden by which any disposition was made, and the specific application of such standards to the facts contained in any such application or petition.”²⁹ The remainder of section 504 likewise exclusively addresses the possible results of the case-specific determination the provision authorizes.³⁰

The most natural reading of section 504 is that it provides only for an adjudicatory process, not rulemaking. For example, in lieu of empowering DOE to “make adjustments” to standards—direct language which might plausibly authorize rulemaking—section 504(a) uses the much more indirect “provide for the making of . . . adjustments.”³¹ This choice of words establishes the case-specific way in which DOE must resolve the “Requests for adjustments” highlighted in the section’s heading.³² Similarly, the types of adjustments that DOE is authorized to make—“an interpretation, modification, or re[s]cission of, exception to, or exemption from, [a] rule, regulation or order”—are available only to a “person” who seeks them, not to the Department, on its own initiative.³³

This understanding of section 504 is also consistent with the legislative history of the provision. Congress intended section 504 to carry forward the adjustments program established under the Federal Energy Administration Act of 1974, which DOE’s predecessor, the Federal Energy Administration (FEA), had used, on a case-by-case basis, to temper the effects of oil price control measures on smaller oil producers.³⁴

Finally, DOE’s longstanding practice confirms that section 504 does not empower DOE to prescribe rules amending existing standards. DOE has long understood section 504 to provide for relief from standards only on a case-by-case basis. The Secretary of Energy has delegated authority under the provision to the DOE Office of Hearings and Appeals (OHA), which administers exception relief pursuant to procedural regulations codified at 10 C.F.R. Part 1003, Subpart B. “Under these provisions, persons subject to the

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *See id.* § 7194(b) (providing for review of “a denial of a request for adjustment under subsection (a)”).

³¹ *Id.* § 7194(a).

³² *Id.* § 7194.

³³ *Id.* § 7194(a).

³⁴ *See* House Report 95-539, to Accompany S. 826, July 26, 1977 at 84 (“The criteria for adjustments included in both the House and Senate Bills are identical to those included within the original Federal Energy Administration Act of 1974.”); *see also Powerline Oil Co. v. Fed. Energy Admin.*, 536 F.2d 378, 380-82 (Temp. Emer. Ct. App. 1976) (discussing FEA’s use of its authority to make adjustments to oil price control measures).

various product efficiency standards . . . promulgated under DOE’s rulemaking authority may apply to OHA for exception relief.”³⁵

Even if section 504 could be read to authorize DOE to issue or amend rules, any such rules would be constrained in important respects. First, section 504 requires that any adjustments be “consistent with the other purposes of [EPCA].” EPCA’s purposes, as relevant here, include “conserv[ing] energy supplies through energy conservation programs, and, where necessary, the regulation of certain energy uses” and “provid[ing] for improved energy efficiency of motor vehicles, major appliances, and certain other consumer products.”³⁶ Similarly, the purpose of the part of EPCA governing the energy efficiency of commercial equipment like distribution transformers is “to improve the efficiency of electric motors and pumps and certain other industrial equipment in order to conserve the energy resources of the Nation.”³⁷ DOE would need to explain how any adjustments it proposes are consistent with these purposes.

Second, any attempt to adjust the standards for distribution transformers via a rulemaking under section 504 would be constrained by EPCA’s anti-backsliding provision.³⁸ The anti-backsliding provision was added to EPCA in 1987, and that later enactment modifies any rulemaking authority that DOE might assert is conferred by the older section 504. Moreover, nothing in the text of the anti-backsliding provision suggests that it applies only to rulemakings that DOE completes under EPCA’s authority. The text of the provision prohibits “*any* amended standard which increases the maximum allowable energy use . . . or decreases the minimum required energy efficiency, of a covered product.”³⁹

Third, any adjustment that DOE could make under section 504 would have to be the minimum adjustment “necessary to prevent special hardship, inequity, or unfair distribution of burdens.”⁴⁰ Therefore, even if DOE claims that section 504 confers the authority for rulemaking, exercising that purported authority would require DOE to analyze alternative adjustments and demonstrate that the Department’s preferred approach is the least intrusive method of addressing whatever special hardship, inequity, or unfair distribution of burdens DOE can prove exists.

Thank you for considering these comments.

Sincerely,

³⁵ *Vaughn Thermal Corp.*, OHA Case No.: EXC-14-0003 (2015); *See also, e.g., Diversified Refrigeration, Inc.*, OHA Case No. VEE-0073 (2001); *Midtown Development, LLC*, OHA Case No. VEE-0073 (2000); *Amana Appliances*, OHA Case No. VEE-0054 (1999).

³⁶ 42 U.S.C. § 6201(4) & (5).

³⁷ *Id.* § 6312(a).

³⁸ *Id.* § 6295(o)(1).

³⁹ *Id.* (emphasis added).

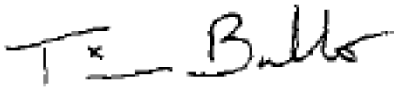
⁴⁰ *Id.* § 7194(a).



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