

March 26, 2023

Appliance and Equipment Standards Program
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Mailstop EE-5B
1000 Independence Avenue SW, Washington, DC 20585-0121

RE: Energy Conservation Program: Energy Conservation Standards for Distribution Transformers - Notice of Proposed Rulemaking Docket No. EERE-2019-BT-STD-0018

The National Multifamily Housing Council (NMHC) and National Apartment Association (NAA) have a significant interest in the availability and affordability of critical electric grid components that power America's housing sector. Therefore, we submit the following comments in response to the Department of Energy's (DOE) Notice of Proposed Rulemaking (NOPR) on Energy Conservation Standards for Distribution Transformers. In addition to supporting the goals of the Energy Policy and Conservation Act (EPCA), we are committed to addressing the nation's pressing housing needs. However, we face serious obstacles in addressing rising housing costs and delivering much-needed supply. We therefore urge you to consider the impacts of this rulemaking on housing production and affordability and ensure that new distribution transformer efficiency requirements do not undermine efforts to address America's acute housing challenges.

For more than 26 years, NMHC and NAA have partnered to provide a single voice for America's apartment industry. Our combined memberships are engaged in all aspects of the apartment industry, including ownership, construction, development, management and finance. NMHC represents the principal officers of the apartment industry's largest and most prominent firms. As a federation of 141 state and local affiliates, NAA encompasses over 95,000 members representing more than 11.6 million apartment homes globally.

One-third of all Americans rent their housing, and our industry plays a critical role in meeting the nation's housing needs by providing apartment homes for nearly 39 million residents and contributing \$3.4 trillion annually to the economy. It is well-recognized that distribution transformers are subject to pronounced supply chain challenges and critical production shortages. These products are essential to housing development, repair and rehabilitation in existing residential communities and the fulfillment of electrification and carbon reduction goals.

We are therefore concerned that this rulemaking will divert resources away from efforts to stabilize and improve transformer production and procurement conditions. Moreover, this effort may serve to further disrupt the transformer pipeline and hinder our ability to produce necessary new housing and support existing communities. New performance standards will create additional equipment delays, further stress the supply chain and exacerbate production uncertainty that ultimately dampens critically needed housing construction and development.

Critical Housing Shortages and Affordability Needs

In promulgating this rule on efficiency standards for distribution transformers, the DOE has stated an intention to improve the resiliency of power grids, reduce carbon dioxide emissions and lower utility bills. However, DOE's analysis on the necessity and justification of new standards must balance other considerations, including impacts on the nation's housing conditions.

Our organizations have long been engaged in the rulemaking process for DOE efficiency standards, ensuring that the unique needs of the apartment industry are recognized. Importantly, it is essential that we build housing at all price points to address the nation’s critical housing challenges and ensure economic stability for American households.

According to recent research commissioned by NMHC and NAA, **the U.S. needs to build 4.3 million new apartment homes by 2035 to meet the demand for rental housing.**¹ This includes an existing shortage of 600,000 apartments stemming from underbuilding due in large part to the 2008 financial crisis. Further, underproduction of housing has translated to higher housing costs – resulting in a consequential loss of affordable housing units (those with rents less than \$1,000 per month), with a decline of 4.7 million affordable apartments from 2015 to 2020.

In fact, the total share of cost-burdened apartment households (those paying more than 30% of their income on housing) has increased steadily over several decades and reached 57.6% in 2021.² During this same period, the total share of *severely* cost-burdened apartment households (those paying more than half their income on housing) increased from 20.9 to 31.0%.³

Further, the Biden Administration has recognized this immense need to bolster the nation’s housing production and outlined a strategy to improve housing supply conditions through the Housing Supply Action Plan. The plan underscores that this national supply shortfall “burdens family budgets, drives up inflation, limits economic growth, maintains residential segregation, and exacerbates climate change.”⁴ And that “[r]ising housing costs have burdened families of all incomes, with a particular impact on low- and moderate-income families, and people and communities of color.”⁵ Of particular importance to this rulemaking, the plan specifically identifies the need to control materials costs and address supply chain challenges.

It is becoming increasingly difficult to build housing that is affordable to a wide range of income levels. Ongoing materials and equipment shortages and strained supply chain conditions pressures housing development and results in costs and delays that impact overall affordability and availability. In addition, ill-timed, unnecessary or unduly burdensome laws, policies and regulations at all levels of government prevent us from delivering the housing our country so desperately needs. Elevated regulatory costs, in particular, create a barrier to affordable housing supply. Recent research published by NMHC and the National Association of Home Builders found that regulation imposed by all levels of government accounts for 40.6 percent of multifamily development costs.⁶

¹ Hoyt Advisory Services, “Estimating the Total U.S. Demand for Rental Housing by 2035.” (2022), <https://www.weareapartments.org/>.

² American Housing Survey, U.S. Census Bureau, “NMHC tabulations of 1985 American Housing Survey microdata.” (2021).

³ *Id.*

⁴ “President Biden Announces New Actions to Ease the Burden of Housing Costs.” (May 16, 2022) <https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/16/president-biden-announces-new-actions-to-ease-the-burden-of-housing-costs/>.

⁵ *Id.*

⁶ National Multifamily Housing Council and National Association of Home Builders, “Regulation: 40.6 Percent of the

Transformer Scarcity and Supply Chain Challenges

The nation faces a serious shortage of distribution transformers that raises safety and grid reliability concerns and threatens to undermine critical housing production. In June 2022, the Administration acknowledged the inadequacy of transformer production levels and President Biden invoked the Defense Production Act (DPA)⁷ to "lower energy costs, support the clean energy economy, and strengthen national security."⁸ The effort recognized that communities faced wait times of "up to two years for crucial grid components" and "that we need to expand electricity transmission systems by 60% by 2030 and may need to triple it by 2050 to meet the country's increase in renewable generation and expanding electrification needs."⁹

At the same time, industry stakeholders voiced significant concerns about lagging transformer production and strained availability. An array of electric utility and private sector interests found that transformer production is not meeting demand and that "[b]etween 2020 and 2022, average lead times to procure distribution transformers across all segments of the electric industry and voltage classes rose 443 percent." Further, "[t]he same orders that previously took two to four months to fill are now taking on average over a year."¹⁰

Taken together, there is wide-spread agreement on the risks and vulnerabilities of the current undersupply of distribution transformers. While we appreciate that the Administration has taken much-needed steps to alleviate these supply challenges, the intended outcomes have not yet been realized. Instead of adding new burdens to the transformer market, we urge DOE to collaborate on a whole-of-government approach to easing transformer shortages and focus on maximizing the impact of available mitigation tools and funding.

Even with a robust commitment to address current transformer production problems, meaningful relief will take time. Therefore, DOE should reconsider this rulemaking effort, which could prolong and further complicate manufacturers' ability to scale-up and right-size transformer production and delivery. Housing providers need reliable availability of critical electrical equipment to ensure timely and cost-effective housing production and rehabilitation.

Cost of Multifamily Development." (2022) <https://www.nmhc.org/globalassets/research--insight/research-reports/cost-of-regulations/2022-nahb-nmhc-cost-of-regulations-report.pdf>.

⁷ "Memorandum on Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended, on Transformers and Electric Power Grid Components." (June 6, 2002)

<https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/06/memorandum-on-presidential-determination-pursuant-to-section-303-of-the-defense-production-act-of-1950-as-amended-on-transformers-and-electric-power-grid-components/>.

⁸ "President Biden Invokes Defense Production Act to Accelerate Domestic Manufacturing of Clean Energy." (June 6, 2022) <https://www.energy.gov/articles/president-biden-invokes-defense-production-act-accelerate-domestic-manufacturing-clean>.

⁹ *Id.*

¹⁰ "Letter from National Rural Electric Cooperative Assoc. (NRECA), American Public Power Assoc. (APPA) et al." (November 18, 2022) <https://s3.documentcloud.org/documents/23466298/transformershortage.pdf>.

Moreover, distribution transformers are already highly energy efficient, and the multifamily buildings they service have made significant energy performance gains in recent years, with many properties achieving EPA EnergyStar or other recognition of their distinguished efficiency. Efforts, like those proposed here, that result in only marginal efficiency gains should be balanced against the costs and burdens of equipment changes and production disruption. Such challenges can result in undue delays or cancellation of construction and renovation efforts that would result in broader building performance improvements.

Conclusion

The apartment industry supports the goal of improving energy efficiency and lowering carbon emissions. At the same time, improving housing affordability and availability are key national priorities. We urge DOE to align this rulemaking with greater Administration efforts to support and strengthen the distribution transformer marketplace and avoid measures that would further chill transformer availability. We are committed to working with policymakers to further energy efficiency goals, while supporting the creation of more housing, preserving affordability and ensuring that every American has a safe, quality place to call home.

Respectfully Submitted by:

National Apartment Association

National Multifamily Housing Council