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March 23, 2023

U.S. Antitrust Division
U.S. Department of Justice
950 Pennsylvania Ave, NW
Washington, D.C. 20530
Energy.standards@usdoj.gov

Re: **Department of Energy Distribution Transformers Rulemaking Docket EERE-2019-BT-STD-0018 and Competitiveness Concerns for Electric Utility Sector, Transformer Makers and Indirect Impacts to the Construction Industries of America**

Dear Antitrust Counsel:

I am writing to express concerns regarding the intended efficiency improvements and unintended consequences of a proposed DOE rulemaking for electric distribution transformers. This proposed transformer regulation would decrease the carbon dioxide CO₂ footprint from steel manufacturing. The Energy Policy Act of 2005 or EPAct 2005 authorizes DOE to increase the efficiency standards of many products ranging from electric distribution transformers to home HVAC, appliances and other products.

Electric utilities and their allies in other industries, do **not** oppose sensible steps to reduce CO₂ or CO₂ equivalent (CO₂e) in greenhouse gases in order to reduce the negative effects of climate change. Some of these companies are committed to prescribed state and local regulations (or shareholder obligations) to reduce the reliance upon natural gas-fired power plants or to increase their efficiency of electricity usage. The proposed DOE energy efficiency standard is not the only mechanism to reduce CO₂ in the energy sector. Electric utilities will also be regulated under Section 111(b)(d) Clean Air Act to reduce CO₂. It is probable that the steel industry will face its own regulation under Section 111(b)(d) for CO₂ in subsequent years.

DOE's proposed rule has a series of serious and long-lasting economic effects and market consequences that I am certain the DOE staff (a) did not anticipate (b) did not understand the connection between these industrial sectors. As a result, detailed comments will be filed with DOE on March 27, 2023.

DOJ's attention failed to adequately consider the serious current shortage and global lack of availability of electric distribution transformers. DOE's proposed rule will decrease the GOES steel available with more demand placed on **ONE single GOES steel company in Ohio**. Many electric utilities and electric transformer manufacturers have testified at DOE's public hearing (March 16, 2023) and various meetings with DOE and Small Business Administration (SBA) pointing out that if the DOE proposed rule were to take effect (with a 2027 replacement deadline) there would likely be **a 2.5 or perhaps a 3 year wait for electric distribution transformers**. If this proposed rule's 2027 replacement deadline takes effect the consequences would not only be felt by the electric distribution manufacturers reliant upon one single steel company. The single American steel company does not meet the current demand for distribution transformers. To put this in perspective, there are approximately 1 million electric transformers (Single-



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[phase and Phase-3\) sold annually in America](#) and most distribution transformers can function correctly for up to 40 years (although some utilities would prefer to replace some approximately every 25 years).

Wait Time

Two years ago, most utilities were able to get distribution transformers in 4-12 weeks. The 2023 wait time is approximately 45-56 months. Many smaller purchasers (such as the construction industry) are not able to get the distribution transformers at all. There are many reasons for the supply chain shortages- ranging from lack of skilled workers to inadequate supply of electrical engineers designing new transformers (since transformers vary and have unique specifications). Some of these causes have been captured well by [National Electrical Manufacturers Association \(NEMA\) response comments](#) to the DOE RFI in 2022. Oddly, it appears that DOE ignored many of the compelling reasons that NEMA gave in 2022 as to why this proposed rule would affect the existing constrained supply chain in a negative way. DOE ignored NEMA's assertions about limited availability of skilled workers and was oblivious to the impacts to electric reliability at the distribution level.

DOE also ignored the length of time and costs required for the transformer makers to re-design their manufacturing processes to meet the 2027 deadline.

Perhaps most significant is that the single company that makes GOES steel has not indicated in their public statements (during DOE or SBA hearings) that they will increase production adequately to meet greater product demand. While it is a fervent hope by steel users that they would increase production they have not indicated this is likely. Nor is it clear that a new steel plant would easily obtain a Title V Clean Air Act permit given NAAQs limitations.

Additionally, there would be secondary effects on (a) electric reliability at the distribution level of electricity supply and (b) national consequences to the **4,242 construction/homebuilding companies with 120,780 employees**. Home builders obtain fixed rate financing commonly set based upon whether the location is already electrified or merely needs a small extension from existing utilities (electric, city water, cable, WIFI) taking nominal time. In this instance, due to the current shortage of distribution transformers, the thousand or more small "Mom and Pop" construction companies with <100 employees with project financing withdrawn because of the anticipated 2-3 year wait for the distribution transformers. Without electrification infrastructure it is not realistic for many smaller construction companies to compete in the construction market. Any DOE regulation on electric transformers that has an indirect and quick negative impact on financing for the nation's construction companies should not be allowed to proceed as drafted. For most Americans, the purchase of a home (or rental in multifamily dwellings also affected) is the largest family expenditure. **The Justice Department should consider the housing cost ramifications of the DOE proposed rule as well as the potential job losses in the home building sector.**

DOE failed to identify this secondary effect or the impact upon **4,242 companies employing 627,398 employees** with an average salary of **\$40,730 or \$21 per hour** (based upon Bureau of Labor Statistics). BLS statistics identifies 68% of these home construction workers as white, 5.6% African American, 19% Latino; and 1.4% Asian. The top 15 states with residential construction growth are **CA, NY, FL, IL, TX, NJ, OH, MA, NC, MI, GA, IN, MN, TN, and VA**.



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DOE Proposed Rule's Anti-Competitive Impacts on Three Sectors

The proposed DOE electricity transformer proposed rule will lessen the competition in three industries:

- Electric utilities;
- Distribution transformer manufacturers (both original manufacturers and re-manufacturers) and
- Construction sector for individual homes and multifamily apartment buildings

These sectors will be subjected to higher prices with fewer products resulting in a deleterious effect on the broader U. S. economy if the DOE rule is finalized as proposed.

Economic Consequences and Criminal Activities Against Distribution Transformers

We are still at a critical time with negative higher costs effects of prolonged inflation, problems with vendor supply and delays in completing construction projects. Reliance upon one steel company that can make the steel is foolhardy. Nor should we allow a DOE regulation to place burdens on home builders because they cannot obtain distribution transformers. And should there be shortages of distribution transformers we do not want to see a broader electric reliability problem (even if not at the Bulk Electric System of the grid). **Shortages of distribution transformers are dangerous given the number of winter and summer storms, hurricanes, and disturbing number of violent attacks by extremists on distribution systems according to a recent [Brookings study](#).**

While distribution transformers are not directly a basis for placing the broader electric grid at risk, it is foolish for any portion of the electric distribution system at risk due to a DOE regulation that will only accomplish a 1% efficiency improvement. DOE officials and industry experts looking at BES and other related issues are copied in this petition. One can easily presume that if there is only one steel type has been selected for distribution transformers that similar decisions would be made by DOE or EPA for other rules that might affect Bulk Electric Supply.

Recommendations to eliminate or greatly reduce the anti-competitive nature of this proposed energy efficiency rule on distribution transformers

- Withdraw the DOE proposed rule with the 2027 deadline dependent upon one company for amorphous or GOES steel;
- Announce that DOE will revisit this issue and a possible proposed rule 1 year after the global shortages in distribution transformers has been corrected **and** replacement of lifesaving distribution transformers in Ukraine, Syria and Turkey;
- DOE should work with the funding authorized by Congress under IRA and IJJA to fund more amorphous or GOES steel or other similar steel products to expand the production to be used for both distribution transformers and for the much anticipated new steel needed for transformers needed for charging electric vehicles across residential areas. DOE should consider the new or replacement distribution transformers at both NEVI funded and private sector funded EV charging stations;
- DOE should use any discretionary spending options to entice and support more domestic production and use of amorphous and GOES steel for transformers. This might include tax credits or grants toward transformer manufacturers to use the more efficient steel before 2030. This action would support the Biden Administration's decarbonization and electrification goals under both IJJA and IRA laws. However, there should be no expectation that all distribution transformers must be able to meet the steel requirements by 2027 given the current market



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shortages. These DOE enticements might be tax credits, direct grants or the EERE funding in their manufacturing innovation and efficiency programs. All options should be considered;

- Use DOE authorities and incentives for domestic production (and storage) of needed distribution transformers (and steel) for use by electric utilities and consider if this inventory should also be made available to the construction industry as secondary beneficiaries;
- Explore authorities under the Defense Production Act;
- GOES or amorphous steel based distribution transformers will be needed for electric vehicles. DOE should consider the predicted optimal EV growth rate by 2035 and that strain on vendor supply of distribution transformers. Many in the utility sector state that current distribution transformers must have expanded capacity to match with local EV needs for charging in hundreds of thousands of neighborhoods by mid 2030s;
- The Administration should **lift the 25% GOES steel tariffs and quotas** from OECD friendly nations to enable domestic transformer makers to increase production;
- DOE needs to work with U. S. EPA to accelerate the permitting process for Clean Air Act and Clean Water Act new permits (or five-year permit renewals) given NOx limitations (especially given small headroom where a tighter Particulate Matter limit will reduce probability of permitting new steel mills or adding a second or third shift per day;
- Steel and transformer manufacturers should be allowed to engage in NOx emission trading under the EPA's Good Neighbor Plan regulation that now includes industrial facilities; and
- If appropriate, DOE and Department of State should also explore whether there are bilateral agreements that could expand the importation of GOES or amorphous steel from friendly OECD trading partner nations to expand appropriate steel for many purposes (distribution transformers and other purposes). This is a possible option under the new U.S. State Department's Critical Minerals Team, Office of Energy Transformation. This should **not** take precedence over expanding domestic steel manufacturing for many obvious reasons-including domestic competitive and resource availability options.

Reliability and Global Demand

One only has to look at the economic effects resulting from power outages in South Africa, Ukraine, Syria, parts of Turkey due to the earthquakes or the short-term but enormous economic consequences of \$130 billion in Texas (Feb. 2021) and Puerto Rico (multiple hurricanes over the last twenty years) after short term or long-term black outs. While the power outages in South Africa and other locations may be the result of corruption and lack of planning and not the result of inadequacy of finished electrical product supply or the steel to make those products the shortages of distribution transformers globally should be considered since some of these nations and regions lack essential distribution transformers for hospitals, schools, government buildings, manufacturing, transportation and residential communities.

The economic risks and geopolitical risks of power outages and lack of reliability in the U. S. are serious. In this case the rule would be a foolish forced error on the U. S. government's part- placing emphasis on reducing carbon footprint in the steel to make new distribution transformers by less than 1% from the distribution transformer (not the entire electric utility) at the risk of our economy.

Conclusion



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These comments address identified industrial sectors that have expressed their concerns about competitiveness in the public record. This filing with DOJ does not address the unknown anti-competitive effects and costs if there are localized failures in the electric reliability system due to inadequate supply of distribution transformers.

The proposed distribution transformer proposed rule also does not recognize that the current shortage will only become worse as the electric sector must place new distribution transformers to support electric vehicles.

Thank you for considering these comments on the anti-competitiveness and unintended effects of this proposed rule on both the electric sector and the home and commercial construction industry. Please express DOJ's concerns on proposed rule during interagency review. It is my hope that Justice Department will weigh in on this proposed rulemaking considering the direct and indirect impacts on competitiveness and societal economic impacts on three industrial sectors.

Sincerely,

(Signature not provided for identity protection purposes)

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