United States Senate
WASHINGTON, DC 20510

June 1, 2023

The Honorable Jennifer Granholm
Secretary
US Department of Energy
1000 Independence Ave SW
Washington, DC 20585

Dear Secretary Granholm:

We write to you regarding the U.S. Department of Energy's (DOE or the Department) *Proposed Rulemaking: Energy Conservation Program: Energy Conservation Standards for Distribution Transformers* (Proposed Rule).[1] The availability of critical grid components remains a significant challenge for the electric power industry that could impact national security, grid reliability and resilience, as well as the ability to continue the important work of electrification and grid modernization.

The Proposed Rule increases efficiency standards on distribution transformers, critical grid products, which currently are no less than 97.7% energy efficient, at a time when the industry is struggling due to a significant increase in demand, supply chain issues, and skilled workforce shortage.[2] These factors have made it hard for manufacturers to meet current demand for distribution transformers, creating challenging lead time conditions and concerns regarding grid reliability and resiliency. Further, the proposed rule has introduced uncertainty that prevents utilities from signing long-term contracts and manufacturers from making investment decisions.

The Proposed Rule would require all distribution transformers to shift from the industry standard grain oriented electrical steel (GOES) cores to amorphous steel cores. GOES currently accounts for more than 95 percent of the domestic distribution transformer market and, therefore, manufacturers' production lines are tooled for designs that use GOES. A final rule that adopts DOE's current proposal could meaningfully worsen the current supply chain shortage by requiring manufacturers to change production lines to less readily available amorphous steel.

Currently, the United States only has one domestic producer of amorphous steel. Moving to amorphous steel cores, as proposed by DOE, would require this sole domestic supplier to rapidly scale operations from its current market share of less than five percent to accommodate the entire distribution transformer market. Such a recalibration of the supply chain will further delay

[1] *Energy Conservation Program: Energy Conservation Standards for Distribution Transformers,* 88 *Fed. Reg.* 1722 (Jan. 11, 2023).
[2] *NEMA, Energy Efficiency Regulations and Requirements for Distribution Transformers Sold in the United States, available at https://www.nema.org/docs/default-source/nema-documents-libraries/doe-transformer-efficiency-regs.pdf?sfvrsn=8253222a_0.*

manufacturing production timelines – currently estimated to be a minimum of 18 months to two years.

Between 2020 and 2022, average lead times to procure distribution transformers went from eight to 12 weeks to up to three years. This multi-fold increase is directly impacting the electric power industry's grid modernization and reliability efforts, as well as its ability to respond and recover from natural disasters, posing challenges for communities that need to rebuild as well as new development.

We appreciate the actions that this and previous administrations have already taken in recognition of the challenges associated with distribution transformer supply chains, including the 2022 designation of GOES on the U.S. government's list of "critical goods and materials"[3] and the invocation in the same year of the Defense Production Act to accelerate the production of "critical power grid infrastructure like transformers."[4]

However, by phasing out the primary market for U.S.-produced GOES, the Proposed Rule could jeopardize this progress, putting everyday American families at risk. Further, we are concerned that requiring the use of amorphous steel for new distribution transformers could put the administration's electrification goals at risk by exacerbating an existing grid vulnerability.

At the same time, we recognize the numerous and often underappreciated benefits of energy efficiency and support the overall goal of reducing wasteful electrical losses in our distribution grid. We believe the most prudent course of action is to let both GOES and amorphous steel cores coexist in the market, as they do today without government mandates, for new installations as we ramp up domestic production and reorient supply chains.

We urge the Department to refrain from promulgating a final rule that will exacerbate transformer shortages at this strategically inopportune time. Such a standard could come at meaningful cost to grid reliability and national security, continuing the clean energy transition, and bolstering domestic supply chains and the workforce. Instead, we urge the Department to finalize a rule that does not exacerbate the shortage in distribution transformers and convene stakeholders across the supply chain to develop consensus based approach to setting new standards.

We request a briefing with your office on the path forward on DOE's proposal, as well as how to best leverage existing DOE authority to bolster domestic supply chains and help alleviate the current and persisting supply chain challenges facing distribution transformers. We are committed to working with you to identify short and long-term solutions to the supply chain shortage of these critical grid components with a goal of building a robust domestic market and a more efficient and reliable grid for decades to come.

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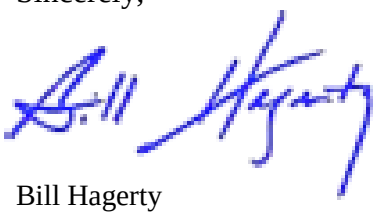
[3] *See Draft List of Critical Supply Chains, U.S. Department of Commerce International Trade Administration, available at https://www.trade.gov/data-visualization/draft-list-critical-supply-chains.*

[4] *FACT SHEET: President Biden Takes Bold Executive Action to Spur Domestic Clean Energy Manufacturing, available at https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/06/fact-sheet-president-biden-takes-bold-executive-action-to-spur-domestic-clean-energy-manufacturing/.*

Thank you for your consideration.

Sincerely,



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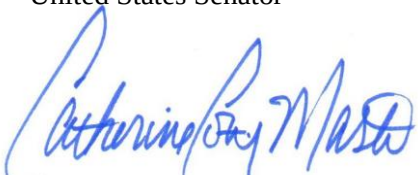

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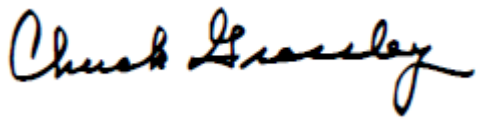

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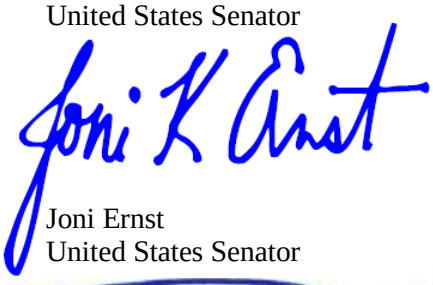

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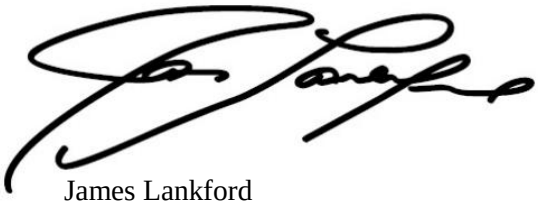

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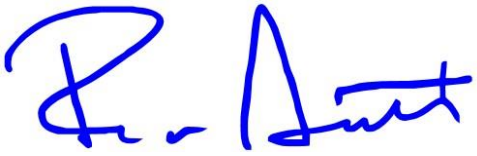

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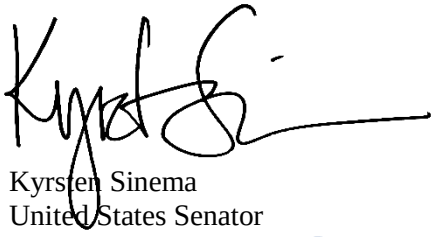

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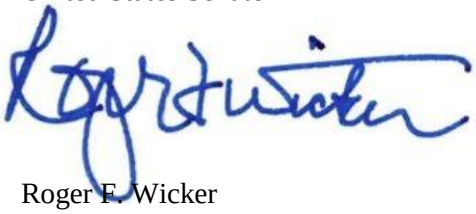

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