

United States Domestic Transformer Manufacturers Coalition



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RE: Transformer Manufacturer's Coalition Response to: U.S. DOE's RFI Pertaining to Securing Electric Infrastructure from Attacks from Foreign Adversaries and President Biden's Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis released January 20, 2021; for Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis

SPX Transformer Solutions, Inc., Delta Star, Inc., Pennsylvania Transformer Technology, Inc., and Niagara Transformer Corp. (collectively "United States Domestic Transformer Manufacturers Coalition") are filing these comments in response to the Department of Energy's request for public comments on the Investigation referenced above. This submission is timely filed pursuant to the Department's required date of June 7, 2021.

For the purposes of definition, this coalition represents "US Domestic Manufacturers" who by definition, design and manufacture all elements of Domestic Power Transformers within the United States and do not outsource critical manufacturing of parts or elements of the Power Transformer to non-domestic locations and/or companies. Further, these manufacturers have corporate headquarters in the United States.

The signatories to these comments are each a member of this crucial industry that design, build, and sell power transformers. Collectively, these companies represent thousands of American employees in numerous states. One common theme through ALL members of the transformer manufacturing industry that operate plants in the United States is that they each rely on a vibrant, competitive, and diverse international marketplace for purchasing their critical raw materials at *globally competitive prices*.

The coalition advocates for policies to ensure the United States is the best place in the world to invest, manufacture, and hire. We believe such policies also enhance the resilience and reliability of America's energy infrastructure in ways that are essential to national security. Advancing pro-growth policies in areas from workforce training and infrastructure investment, to accessing capital, to foreign market penetration, are just a few of the Domestic Transformer Manufacturers'

priorities that strengthen the U.S. manufacturing base, including areas relevant to the power grid.

The Domestic Transformer Market

The current domestic transformer demand is about twice what domestic manufacturers currently produce. This is a challenge and a risk for the U.S. Energy Grid, which should be substantially mitigated with the right measures implemented by the U.S. Federal Government.

The United States market for power transformers over ten MVA is approximately \$2.7 billion including all voltage ratings. Of this amount, it is estimated that \$1.4 billion of the market is between 10-60 MVA and \$1.38 billion greater than 60 MVA. However, imports of greater than ten MVA has grown to over \$1.1 billion, with the over 60 MVA alone representing \$832 million in the most recent USITC.

These three markets have different characteristics and different global manufacturing footprints and supply chain demands, with smaller transformers more likely to be manufactured close to the end-customer. For this reason, there is a larger presence of U.S. transformer manufacturers in the distribution transformer market. Unfortunately, most of the large power transformers which must be procured for individual utilities' needs on procurement timelines that often exceed 12 months — are produced in a handful of factories around the world, as most of these manufacturers have fled the United States for more cost competitive environments. In the end, incentives for domestic manufacturing is limited, expansion and re-tooling is capital intensive, and market protection is limited at this time.

It is critical that steps are taken to secure the domestic supply chain for investor-owned utilities, which comprise of most of the domestic electrical grid. The power transformer industry in the United States has been dramatically hampered in recent decades. As a result, a once vibrant industry that supplies the United States grid with power transformers has moved overseas and the remaining manufacturers are in a constant battle to keep this critical technology in America.

The challenges to domestic transformer manufacturers are extensive and include the following: Limited, to non-existence, incentive for domestic sourcing of power transformers and other critical grid components from domestic companies by the Utilities. Unlike other nations, there is simply no national priority in supporting American manufacturers of power transformers. This has led to a disincentive for domestic power transformer manufacturers to expand domestically and/or source domestic components, which ultimately has led to the increases in supply chain costs to manufacture quality transformers, further putting the domestic transformer manufacturing industry at a disadvantage compared to foreign competition. American transformer manufacturers have continued investment despite these challenges. Next, the domestic transformer manufacturers have endured endless dumping from other countries into the United States market. This coalition along with others have brought a number of dumping complaints, while though have largely been successful, are extremely expensive and pursuing the vast number of dumped transformers is simply cost prohibitive and a great distraction towards our collective mission of manufacturing quality transformers. Finally, when the federal government has acted in our market, these actions have made our competitiveness more difficult – not less. For example, the Section 232 case on Grain Oriented Electrical Steel (GOES) is one of the latest examples of federal policy that is attempting to push more transformer manufacturing out of America.

The federal government has expressed concern about the lack of domestic transformer manufacturing capacity for many years, without any significant movement on solutions. Our coalition believes that President Biden's Executive Order is an opportunity to finally stop the outsourcing of our transformer technology to other countries, strengthen our ability to protect the security of our critical national power grid, and invest in a high-paying American workforce.

The Solution / Requests

Utility Incentives: The federal government should provide clear incentives for utilities to source domestic power transformers. The best method of protecting the grid is to encourage sourcing of transformers from domestic manufacturers. This request is unlike the traditional "Buy American" approach. Instead, incentives to buy domestic transformers with a predominantly American supply chain is imperative to build back our dominance in manufacturing power transformers. In reality the list of Eligible Countries for Buy American as published by the Office of the United States Trade Representative protects against components sourced from specific countries but permits sourcing from more than thirty countries other than the United States. While this may inhibit sourcing of components from some countries in a limited manner, it does not accomplish the goal of "Buying American". Foreign competitors from many countries are able to manufacture equipment outside the USA and still qualify as "American". The quantity of eligible countries needs to significantly decrease, and the percentage of components sourced in the USA needs to dramatically increase to truly promote the objectives of "Buying American".

Therefore, to truly impact national security, the United States must end the offshoring of transformers and protect the domestic power grid with domestic power transformers. Similarly, the federal government should consider providing more favorable depreciation schedules for utilities when they source cyber secure domestic power transformers.

Future of American Transformer Manufacturing

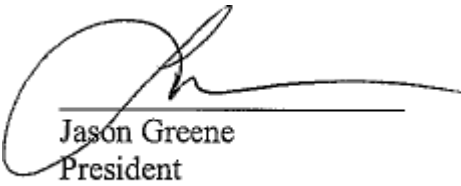
The ultimate challenge is the lack of incentive for utilities to source domestic in order for domestic manufacturers to remain and expand their domestic operations. Minimizing grid security vulnerabilities and reducing dependency on foreign nations will require providing shorter depreciation periods for Utilities who domestically source power transformers, providing tax incentives for Utilities who domestically source transformers and other grid products, and by providing forgivable loans/grants to United States manufactures in Research & Development efforts to upgrade technology and to expand domestic capacity to support grid infrastructure.

Cyber Security: The opportunity for adverse nations with track records of malicious cyber activity have almost unlimited opportunities and access to our critical grid infrastructure via the nearly 2,000 transformers imported from non-domestic sources annually. Immediate steps should be taken to ensure that power transformers are manufactured within the United States, including all critical control and electronic components, that, in the rare case where transformers cannot be produced and/or sourced domestically, the components should be swapped by domestic contractors with chain of custody protection on critical control and electronic components. Lastly, nations with track records of malicious activity should be indefinitely prohibited from providing such sensitive components to the U.S. Grid.

In summary, the coalition of domestic transformer manufacturers thanks the Administration for

their efforts to protect the national security of the power grid. Our economy is dependent on a secure and resilient domestic grid that gives assurance to our people and businesses that hospitals, homes, military bases, water treatment plants, etc... are continuously operating at peak efficiencies. The recommendation herein would have a dramatic impact on the protection of the grid, our way of life, and the long-term security of the American craftsmen, engineers and all those working within the domestic transformer industry.

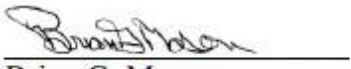
Respectfully submitted,



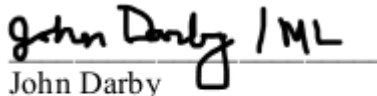
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