October 17, 2022

The Honorable Joseph R. Biden, Jr. President of the United States 1600 Pennsylvania Ave, NW Washington, DC 20500

Dear President Biden.

On behalf of the undersigned organizations, we write to share with you our grave concerns regarding the severe shortages our members are experiencing in the supply and availability of transformers and other electrical components. As outlined below, because of the pressing nature of these shortages, we ask for your immediate attention to these issues.

By way of background, U.S. Department of Commerce staff have held several conversations with the National Association of Home Builders on this important issue, and we appreciate their consideration of these concerns. However, we are now joined by our colleagues at Associated Builders and Contractors, Association of General Contractors and Independent Electrical Contractors to reiterate our concerns regarding the lack of supply and availability of transformers and related components.

We appreciate the administration's focus on the semiconductor chip shortage, and while that issue is slowly being resolved, those ripple effects continue to be felt, particularly for transformers and other components that rely on these chips. The severe shortage of transformers and other electrical components is spreading across the country and is having a deleterious effect on efforts to implement your administration's infrastructure plan, finish construction projects, provide affordable housing, and ultimately, will imperil the national and economic security of the United States.

Over the last several months, our respective members have experienced a variety of shortages and delays. We wanted to share several of these with you to illustrate our concerns. First, a number of our members have reported significant shortages of single-phase transformers and other components that are preventing local jurisdictions from issuing building permits because there is no way to provide power to the new homes. Members report the situation is worsening as it spreads nationwide, with delays in some areas ranging from 26 to 48 weeks, or more in areas like Arkansas and Florida. In Florida, for example, Duvall County officials reported prior to Hurricane Ian that the wait was approximately 30 weeks out for transformers; Duvall County is one of the highest-growth areas in Florida. All of these concerns have now been compounded by the damage caused by Hurricane Ian, meaning residents and businesses can expect significant delays for any repairs and continued impediments in connecting people back to the power grid.

Second, members have also reported on a variety of electrical component shortages, including one company that produces electrical switchgear which has reported that the time for delivering electrical switchgear had doubled from 20 to 40 weeks, in part because of the difficulty in acquiring a fire-retardant chemical produced in Europe that goes into a plastic resin used to make the housing for its switchgear.

Third, our members have also experienced delays of critical components, with one of the most common being the inability to acquire switchboards. In this example, our members report that original delivery dates for switchboards are seldom met and then delayed on multiple occasions. A school had to delay the opening of an addition by four months while waiting for the main switchboard. We have also received reports of delayed deliveries of switchboards on a hospital addition and a university boiler project.

Moreover, a decline in imports of finished transformers has added exponentially to the problems being experienced. Prior to the pandemic, the United States relied on imports for 82% of its large transformers. The number of high-capacity transformers has fallen substantially due to both the pandemic as well as restrictive trade policy. Imports of transformers rated for 50kVA-500kVA has fallen from 1.6 million in 2018 to a projected 400,000 in 2022. Mexico has exported twice as many units to the United States in 2022 than the next largest international supplier, Spain, but the number of units exported is still 73% lower than it was in 2018.

Imports of transformers rated 16kVA-50kVA has shown a similar downward trend, declining 160,000 units—or 35%—between 2021 and 2022. The two-year total fell nearly one-third between 2018/2019 and 2021/2022. Vietnam and China have been the leading source countries in 2022. As a consequence, vastly reduced imports into the United States are exacerbating the current transformer crisis across the country.

As you can see from just these few examples, the shortage of key electrical components and particularly transformers, switchgear, switchboards, circuit breakers and other key material inputs serves to illustrate our concerns that supply chain constraints continue to plague the construction industry. These shortages not only undermine the ability of U.S. businesses to build and repair housing, schools and critical infrastructure, they also undermine the national security of the United States.

Accordingly, as your administration did in response to the semiconductor chip shortage, we ask that you convene a summit with affected stakeholders to discuss solutions to these problems. Focused attention to these matters is needed to resolve these shortages and rebuild critical infrastructure in disaster-affected areas and across the United States where projects have been put on hold due to shortages.

We appreciate your consideration of these matters and welcome your administration's continued engagement on these shortages. If we can be of further assistance, please contact Jim Tobin, NAHB chief lobbyist, at (202) 266-8258 or jtobin@nahb.org.

Sincerely,

Associated Builders and Contractors
Associated General Contractors of America
Independent Electrical Contractors
National Association of Home Builders

CC: Gina M. Raimondo, Secretary, Department of Commerce Jennifer M. Granholm, Secretary, Department of Energy Katherine Tai, Ambassador, United States Trade Representative