1050 Connecticut Avenue, NW, Suite 500 • Washington, D.C. 20036 Telephone (202) 223-1420 • <a href="https://www.ieca-us.org">www.ieca-us.org</a>

May 28, 2024

Environmental Protection Agency
Docket Center
Docket ID No. EPA-HQ-OAR-2024-0135
Mail Code 28221T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Reducing Greenhouse Gas Emissions from New and Existing Fossil Fuel-Fired Stationary Combustion Turbines

## **Industrial Energy Consumers of America**

IECA is a nonpartisan association of leading manufacturing companies with over 12,000 facilities nationwide, and with more than 1.9 million employees. IECA membership represents a diverse set of industries including chemicals, plastics, steel, iron ore, aluminum, paper, food processing, fertilizer, insulation, glass, industrial gases, pharmaceutical, consumer goods, building products, automotive, independent oil refining, and cement.

### The U.S. Manufacturing Sector

The manufacturing sector consumes 25 percent of U.S. electricity. U.S. manufacturers employ 13 million people and contribute \$2.8 trillion to the GDP, which is 10 percent of U.S. GDP.

Higher electricity costs and reduced reliability directly impact manufacturing competitiveness and reshoring.

The cost and reliability of energy, specifically electricity and natural gas, is the only competitive advantage that U.S. manufacturing companies have over manufacturers in other countries. Therefore, it is imperative that EPA regulations not increase the cost of electricity, nor impair reliability.

The manufacturing sector participates in U.S. and global markets with intense competition, including with countries that subsidize energy to their manufacturing sector like China. For energy-intensive trade-exposed (EITE) industries, relatively small increases in electricity costs can have a significant competitive impact.

## All costs of electricity generation are passed onto us, the consumer.

The manufacturing sector's power generation decision making is different than that of electric utilities. A utility can automatically pass all costs onto us the consumer. As a result, they can do things that are sometimes not economical. We cannot. We compete globally and are energy price sensitive. If technology solutions are economical, we will embrace it to reduce our costs and diversify supply options. Otherwise, it is not likely the manufacturing sector will invest in less economical or less reliable power options.

What is missing from the EPA evaluation of alternative generation sources is the cost of producing electricity with those options and the readiness or availability of technology solutions. In our view, all of the EPA electricity generation options would increase the cost of generation and are not reliable sources of electricity. Most manufacturing facilities operate 24/7, which requires reliable power.

There is also a cost associated with not having a reliable electric grid. When there is an inadequate supply, the manufacturing sector is the first to be curtailed. When that happens, we are forced to reduce production rates or shutdown at significant costs of millions of dollars per day. If power quality falters, it can damage equipment and can also be a safety issue for employees.

Almost 100 percent of forecasted demand increases are coming from data centers and manufacturing facilities that include semi-conductor plants, both of which operate 24/7 and require reliable dispatchable power. Therefore, we need more capacity of generation that is dispatchable.

#### Readiness/availability of technology.

For example, using hydrogen as a replacement for natural gas in electric turbines is in an early stage of readiness. Manufacturing companies with self-generation of power and onsite hydrogen that is economical, are already using 30 percent hydrogen/natural gas mixtures. Above 30 percent is not technically feasible at this time. Hydrogen burns at over 500 degrees Fahrenheit higher than natural gas and has a flame that is three times as fast, which is a severe safety hazard. Industrial boilers face the same challenges.

## EPA technology options are heavily dependent upon renewable energy supply.

IECA companies have aggressively embraced renewable energy when it can be purchased or produced in-house economically. Since 1990, U.S. manufacturing has increased its use of renewable energy by 35 percent. Many of the proposed EPA technology options are dependent upon significant increases in renewable energy supply. Growing supply face resource challenges and requires significant increases in transmission capacity that is very expensive, has long lead times, and is facing public opposition.<sup>1</sup> <sup>2</sup>

# Pipelines issues.

Building pipelines of any kind, whether natural gas, hydrogen or carbon dioxide, all have serious challenges by activists that can slow or stop the progress of building a pipeline. Because of legal challenges to pipelines, the cost of pipelines has substantially increased which decreases the viability of projects. For that reason, permitting reforms are needed.

The U.S. economy is growing, and we need infrastructure to support it, including increases in natural gas pipeline capacity to accommodate growth in manufacturing facilities and for reliable power generation.

# CO2 Storage.

Caverns where CO2 would be stored are valuable assets that are used to store natural gas, hydrocarbon feedstock, and fuels. Salt cavern storage facilities are drilled at great expense. The owners of these assets are not likely to use them for CO2 that does not have any value and would prevent commercial use and economic value to their companies.

Carbon capture facilities, pipelines, and storage facilities are all finding opposition by the public.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> "Copper can't be mined fast enough to electrify the US," Michigan News, University of Michigan, https://news.umich.edu/copper-cant-be-mined-fast-enough-to-electrify-the-us/

<sup>&</sup>lt;sup>2</sup> "Green Transition Set to Face Critical Minerals Shortfall, IEA Says," Wall Street Journal, https://www.wsj.com/articles/green-transition-set-to-face-critical-minerals-shortfall-iea-says-ce89acf0

<sup>&</sup>lt;sup>3</sup> "Biden and oil companies like this climate tech. Many Americans do not." Star Tribune, <a href="https://www.startribune.com/biden-and-oil-companies-like-this-climate-tech-many-americans-do-not/600367023/">https://www.startribune.com/biden-and-oil-companies-like-this-climate-tech-many-americans-do-not/600367023/</a>

The mission of EPA is to protect human health and the environment. FERC and states have the responsibility for regulation of electricity generation.

The electricity market is very complex. We do not encourage EPA to pick winners and losers for electric generation options. We support all-of-the-above because when generation options compete, consumers benefit from lower electricity prices. Affordable and reliable electricity increases reshoring of jobs, investment, improves supply chain and national security.

Sincerely,

Paul N. Cicio

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President & CEO

cc: Senate Committee on Energy and Natural Resources
House Committee on Energy and Commerce