Industrial Energy Consumers of America (IECA)
The Voice of the Industrial Energy Consumers

1050 Connecticut Avenue, NW, Suite 500 • Washington, D.C. 20036
Telephone (202) 223-1420 • www.ieca-us.org

December 9, 2024

The Honorable Willie L. Phillips, Chairman
The honorable Mark Christie, Commissioner
The Honorable David Rosner, Commissioner
The Honorable Lindsay See, Commissioner
The Honorable Judy Chang, Commissioner

Re: Large Loads Co-Located at Generating Facilities: AD24-11-000

Energy Scarcity and Higher Energy Prices Directly Impact Manufacturing

When there is insufficient natural gas pipeline capacity or supply of electricity to serve demand, manufacturing companies are always the first to be curtailed at great costs. Therefore, we are more impacted than any other sector of the economy by energy scarcity. U.S. changes to energy demand, supply and the resulting price can have a direct impact on competitiveness, investments, employment, and resulting supply chains that also have implications for supply of industrial products used in national defense. It is for these reasons that we are an important stakeholder in policy discussions concerning large loads co-located at generating facilities. Manufacturing industries employ 13 million people.

Data centers and their growth are critical to the U.S. We believe that the U.S. can and should expand energy infrastructure and production that include an all-of-the-above approach to serve our nation's energy needs.

Industrial Energy Consumers of America (IECA)

IECA is a nonpartisan association of leading manufacturing companies with $1.3 trillion in annual sales, 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 majority of our membership is energy-intensive and price sensitive.

Large Loads Co-Located at Generating Facilities

The rapidly growing data center industry – powered by cloud computing, artificial intelligence, and mining for cryptocurrency – continues to place stress on the nation's power grids and presents difficult issues around reliability, resource adequacy (capacity), the allocation of costs for transmission upgrades, and stranded costs.

New data centers are undertaking two basic approaches: 1) siting their load in front of the meter to take networked transmission service; and 2) "co-locating" their load behind the meter of a wholesale generation facility to avoid network transmission, retail distribution, and other charges.

Implications to Manufacturers

Reliability Concerns and Capacity Cost Increases – data centers are placing increased demand on the grid, requiring more generation and more transmission. When data centers co-locate behind the meter of a wholesale generation facility, that baseload generation will be less available to serve network customers. The retirement of traditional fossil-fuel baseload generation has already threatened future reliability and capacity. Even if retiring fossil fuel generation sources stay online for a few more years past their planned retirement date, such generation resources will be able to command higher rates for capacity and energy due to the increase in data center demand. Data center growth and the demand for intermittent renewable resources (without sufficient battery storage deployment) are expected to continue to drive capacity prices higher.

Transmission Upgrade Costs and Price Impacts – certain transmission upgrade costs triggered by the siting of a new, large single-point load in front of the meter will likely not be borne directly by that new large load. Instead, consistent with traditional ratemaking approaches, certain transmission upgrade costs may be socialized across a utility zone(s) or the region or "rolled up" in the transmission rates of networked customers in the utility zone or region. For co-located load behind a wholesale generator meter, that new large load will avoid paying for Network Integration Transmission Service (NITS) charges. If that new large load were networked (i.e., not placed behind a wholesale generation meter), then prices across the impacted transmission zone may be higher or lower, depending on what transmission upgrades are required to serve that load. How those upgrades are cost-allocated, and the cost of those upgrades relative to the level of the new billing determinants will need to be considered. Assessing these types of impacts can only occur on a case-by-case basis, because each case is very fact-specific.

Stranded Costs – if transmission, distribution, and generation plant upgrades are installed by virtue of a new large load's request for service and then that large load does not show up to take service or departs the network shortly after commencing service, then the existing customer base is at risk of paying for the stranded costs of those upgrades. The siting of a new large load as co-located load could also trigger stranded transmission investment if certain transmission facilities installed to provide generation interconnection service are no longer needed. In de-regulated states, there may only be stranded distribution or transmission costs. However, in regulated states where the three core utility functions (generation, distribution, and transmission) remain vertically integrated, there is an additional risk of stranded generation costs.

Policy Considerations

New large loads should not be unduly restricted from entering into co-locating arrangements behind the meter with generation facilities. Nor should new large loads in front of the meter be required to bear all costs associated with upgrades to serve a new large load if the upgrade costs are substantial and/or the upgrades will serve or benefit other network customers. *However, cost responsibilities and risks of those co-locating arrangements and new large networked loads should not be unduly and unfairly shifted to the existing customer base.* However, if the customer desires regular access to the transmission grid, then the customer must be prepared to pay for the costs of such access to the grid. If the new large load is in front of the meter, then the customer will be responsible for the distribution and transmission costs incurred to serve that customer. If behind the meter loads require backup power from the grid and increased generation margin, the co-located load should pay the cost of those services. Behind the meter generation units serving the co-located load will shut down for maintenance which requires the load to purchase power from the grid, which increases costs for other consumers. Policy should consider the costs to other ratepayers.

Each co-located load arrangement and new large networked load will require a detailed, fact-specific analysis to determine the appropriate amount of transmission cost responsibility. It may be prudent to ensure that grid operators study the co-located load and generation together; however, large customers with plans to deploy new facilities will not necessarily want to advocate for a new customer/load queue. Reasonable credit requirements and longer-term commitments for new large networked loads must be in place so that the existing customer base is not at risk of bearing substantial stranded costs in the event the large load never shows up or its existence is fleeting (i.e., the mobile nature of certain cryptocurrency mining or data centers).

To minimize the potential for stranded costs, a new large load in its application for service with the local utility should be contractually required to pay for all direct upgrade costs and to provide a commitment that the customer will take service from the local utility for a duration that allows the utility to recover a meaningful portion of transmission facility upgrade costs.

Thank you for the opportunity to provide input.

Sincerely,

Paul Cicio
Paul Cicio
President & CEO

The Industrial Energy Consumers of America is a nonpartisan association of leading manufacturing companies with $1.3 trillion in annual sales, over 12,000 facilities nationwide, and with more than 1.9 million employees worldwide. It is an organization created to promote the interests of manufacturing companies through advocacy and collaboration for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. 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.