



Shaping Tomorrow's
Built Environment Today

180 Technology Parkway, NW • Peachtree Corners, GA 30092-2977 • Tel: 404.636.8400 • www.ashrae.org

Ginger Scoggins
2023-2024 ASHRAE President

Engineered Designs, Inc.
1151 SE Cary Pkwy., Ste. 200
Cary, NC 27518
Phone: (919) 851-8481
Email: gscoggins@engineereddesigns.com

February 29, 2024

The Honorable Robin Carnahan
Administrator
General Services Administration
1800 F Street NW
Washington, DC 20270

Re: Minimum Requirements for New Data Centers

Dear Administrator Carnahan:

As the General Services Administration (GSA) crafts Minimum Requirements for New Data Centers, as required by the National Defense Authorization Act, Title LIII, "Federal Data and Information Security," ASHRAE would like to offer its expertise on requirements pertaining to energy efficiency and resilience of these critical facilities.

ASHRAE, founded in 1894, is a technical society advancing human well-being through sustainable technology for the built environment. The Society and its more than 53,000 individual members – comprising engineers, academics and other professionals in the buildings industry – focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. ASHRAE is actively engaged in the development of voluntary consensus-based standards, and is one of only six standards-developing organizations in the U.S. that can self-certify that its standards have followed procedures established by the American National Standards Institute (ANSI).

ANSI/ASHRAE Standard 90.4-2022, *Energy Standard for Data Centers*, would be important for GSA to reference in its Minimum Requirements for New Data Centers as it offers a framework for the energy efficient design of data centers with special consideration to their unique load requirements compared to other buildings. This includes the maximum mechanical load component and electrical loss component values required for compliance which have been lowered in recognition of the industry's changing technologies and improved efficiencies. In addition, the standard includes language to give credit for recovered heat (heat reclaim) shared with non-data center spaces. The standard was developed under the guiding principle that data centers are mission critical facilities demanding careful attention to the potential impact of its

requirements. This standard reduces energy use and carbon emissions by harnessing the availability of systems and techniques to enhance data center performance without compromising availability or reliability.

Referencing ANSI/ASHRAE Standard 90.4-2022 in the Minimum Requirements for New Data Centers would address the following minimum requirements listed in section (b), “Minimum Requirements for New Data Centers”: related to (ii) the use of new data centers, including . . energy consumption; and (iv) protections against power failures, including on-site energy generation. Standard 90.4 does this by addressing energy efficient designs inclusive of redundant systems and on-site energy generation.

Thank you for your consideration of ASHRAE’s input. As a global technical society that develops consensus-based building standards grounded in the latest building science and technology, we would be happy to provide any additional assistance as you develop these minimum requirements for data centers. If you have any questions or need additional information, please contact GovAffairs@ASHRAE.org.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Ginger Scoggins', with a stylized flourish at the end.

Ginger Scoggins
2023-2024 ASHRAE President