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2020-2021 ASHRAE President

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March 9, 2021

The Honorable Jennifer Granholm
Secretary
U.S. Department of Energy
1000 Independence Avenue SW
Washington, DC 20585

Dear Secretary Granholm:

As the Department of Energy begins to implement the energy provisions from the Consolidated Appropriations Act, 2021, that was signed into law on December 27, 2020, ASHRAE would appreciate the opportunity to serve as a resource for your office. As a non-profit engineering society founded in 1894, ASHRAE has more than 55,000 members worldwide who can provide expertise on building systems, energy efficiency, indoor air quality, refrigeration, and smart grid applications.

In particular, ASHRAE would like to provide technical assistance to DOE as it implements Section 1007 of the bill, "Smart Building Acceleration" and development of the report in subsection (e) concerning the advanced integration of buildings into the electric grid. This section requires by December 27, 2021 the development of a Buildings-To-Grid Integration Report that examines "the research, development, and demonstration opportunities, challenges, and standards needed to enable components of commercial and residential buildings."

ASHRAE offers its technical assistance in development of this report and would like to serve as a resource to your staff. With its over 125-year history in standards development and expertise in building systems, ASHRAE understands the transformational nature of smart grids and buildings and the necessity of standards and protocols to ease this transition, ultimately creating a more resilient, reliable, and sustainable built environment. For example, ASHRAE has developed BACnet, a data communication protocol for building automation and control networks, which is an American national standard, a European standard, a national standard in more than 30 countries, and an ISO global standard. In addition, ASHRAE's BACnet Committee is working to further standardize and unify semantic information used for describing data of digital representation of buildings and their automation and control stems by developing proposed Standard 223P, *Semantic Data Model for Analytics and Automation Applications in Buildings.* This proposed machine-learning standard is intended to provide conformity in energy management, load control and smart buildings and grid management.

ASHRAE, in cooperation with the National Electrical Manufacturers Association, developed Standard 201 *Facility Smart Grid Information Model*, designed to drive the development of smart grid-friendly control systems in commercial, industrial, and residential buildings. This standard has also been adopted as an ISO global standard.

In addition, ASHRAE, the Smart Electric Power Alliance (SEPA) and the OpenADR Alliance published the *Smart Grid Application Guide* which is a vital reference and details the concrete steps needed to prepare a building – whether new construction or renovation – for integration with the smart grid.

As the Secretary of Energy, we appreciate your leadership on these issues and are looking forward to our continued collaboration. Please do not hesitate to contact me, or have your staff contact ASHRAE's government affairs staff at GovAffairs@ashrae.org.

Sincerely,

Charles E. Gulledge III, P.E., FASHRAE, HBDP, LEED AP
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