AMENDMENT TO THE RULES COMMITTEE PRINT
FOR H.R. 8
OFFERED BY MR. WELCH OF VERMONT

In chapter 2 of subtitle A of title IV, add at the end the following new section:

SEC. ______. SMART MANUFACTURING ASSISTANCE.

(a) DEFINITIONS.—In this section:

(1) ENERGY MANAGEMENT SYSTEM.—The term “energy management system” means a business management process based on standards of the American National Standards Institute that enables an organization to follow a systematic approach in achieving continual improvement of energy performance, including energy efficiency, security, use, and consumption.

(2) INDUSTRIAL ASSESSMENT CENTER.—The term “industrial assessment center” means a center located at an institution of higher education that—

(A) receives funding from the Department of Energy;

(B) provides an in-depth assessment of small and medium-sized manufacturer plant
sites to evaluate the facilities, services, and manufacturing operations of the plant site; and

(C) identifies opportunities for potential savings for small and medium-sized manufacturer plant sites from energy efficiency improvements, waste minimization, pollution prevention, and productivity improvement.

(3) NATIONAL LABORATORY.—The term “National Laboratory” has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(4) SMALL AND MEDIUM-SIZED MANUFACTURERS.—The term “small and medium-sized manufacturers” means manufacturing firms—

(A) classified in the North American Industry Classification System as any of sectors 31 through 33;

(B) with gross annual sales of less than $100,000,000;

(C) with fewer than 500 employees at their plant sites; and

(D) with annual energy bills totaling more than $100,000 and less than $2,500,000.

(5) SMART MANUFACTURING.—The term “smart manufacturing” means advanced tech-
nologies in information, automation, monitoring, computation, sensing, and networking that—

(A) digitally simulate manufacturing production lines, operate computer numerically controlled and additive manufacturing equipment, monitor and communicate production line status, and manage and optimize energy, productivity, and cost throughout production;

(B) model, simulate, and optimize the energy efficiency of a factory building, and monitor and optimize building energy performance;

(C) model, simulate, and optimize the design of energy efficient and sustainable products, including the use of digital prototyping and additive manufacturing to enhance product design, and connect manufactured products in networks to monitor and optimize their performance, including automated network operations; and

(D) digitally connect the supply chain network.

(b) Expansion of Technical Assistance Programs.—The Secretary of Energy shall expand the scope of technologies covered by the industrial assessment centers of the Department of Energy—
(1) to include smart manufacturing technologies and practices; and

(2) to equip the directors of the industrial assessment centers with the training and tools necessary to provide technical assistance in smart manufacturing technologies and practices, including energy management systems, to manufacturers.

(c) Leveraging Smart Manufacturing Infrastructure at National Laboratories.—

(1) Study.—

(A) In general.—Not later than 180 days after the date of enactment of this Act, the Secretary of Energy shall conduct a study on ways in which the Department of Energy can increase access to existing high-performance computing resources in the National Laboratories, particularly for small and medium-sized manufacturers.

(B) Inclusions.—In identifying ways to increase access to National Laboratories under subparagraph (A), the Secretary shall—

(i) focus on increasing access to the computing facilities of the National Laboratories; and

(ii) ensure that—
(I) the information from the manufacturer is protected; and
(II) the security of the National Laboratory facility is maintained.

(C) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the results of the study.

(2) ACTIONS FOR INCREASED ACCESS.—The Secretary shall facilitate access to the National Laboratories studied under paragraph (1) for small and medium-sized manufacturers so that small and medium-sized manufacturers can fully use the high-performance computing resources of the National Laboratories to enhance the manufacturing competitiveness of the United States.