



Information Technology Industry Council

**Written Testimony of
Rona Newmark**

**Vice President, Intelligent Efficiency Strategy
EMC Corporation**

**In behalf of the
Information Technology Industry Council (ITI)**

**Before the
Subcommittee on Energy and Power**

U.S. House Committee on Energy & Commerce

Energy Efficient Government Technology Act

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Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee:

Thank you for inviting the Information Technology Industry Council (ITI) to testify here today on the important issue of energy efficiency legislation, and more specifically, concerning our support for the “Energy Efficient Government Technology Act.”

ITI is the global voice of the technology sector. The 60 companies ITI represents are leaders and innovators in the information and communications technology (ICT) sector, including in hardware, software, and services. These companies, including my own, are committed to innovation, to developing the energy-efficient solutions demanded by our customers, and to helping drive sustainable economic growth and energy independence across our nation’s economy. We believe the U.S. government can be a helpful partner in these efforts.

The “Energy Efficient Government Technology Act” (EEGTA) was first introduced back in February 2013, and last year easily passed the House of Representatives as Title III of H.R. 2126, the “Energy Efficiency Improvement Act of 2014.” Last month EEGTA was re-introduced as H.R. 1268 by Representatives Anna Eshoo, Adam Kinzinger, and three other members of this Subcommittee. It has also been incorporated as Sections 4111 and 4112 of the

Committee's Discussion Draft entitled, "Title IV Energy Efficiency and Accountability" (EEGTA also comprises Sections 301 and 303 of S. 720, the "Energy Savings and Industrial Competitiveness Act of 2015"). With support from ITI and seven other prominent organizations, EEGTA builds on a rich, bipartisan energy efficiency tradition between ITI and this Committee.

As a quick recap, this tradition dates back to 2006 with the introduction and enactment of H.R. 5646, a bill requiring the EPA and DOE to analyze and report to Congress on the growth and energy consumption of federal government and private sector data centers. The bill's lead sponsors were Representatives Mike Rogers and Anna Eshoo, and the key supporting organization was ITI.

The report required by that bill was delivered to Congress in August 2007, and was entitled the "Report to Congress on Server and Data Center Efficiency Public Law 109-431." The report provided important information on data center energy usage and practices, as well as useful analysis of both the benefits and obstacles to greater energy efficiency in data centers. To this day, it remains the government study that is consistently referenced globally as concerns data center energy efficiency.

Based on that 2007 report, and with ITI leading in support, Representatives Eshoo and Rogers then offered an amendment (which was accepted by voice vote in the Committee) to the Energy Independence and Security Act (EISA). Enacted in 2007 as Section 453 of PL 110-140, this amendment established a voluntary national information program on data center energy efficiency and innovation, encouraging a strong partnership between the private sector and the federal government.

EEGTA builds on this foundation, supplying a meaningful update and reinvigoration to the requirements of Section 453 of EISA. The bill does not bring a regulatory approach to energy efficiency. Rather, it stresses voluntary partnership between the private sector and the federal

government, and it encourages greater federal government leadership in leveraging information and communications technology (ICT) for energy efficiency and productivity. ITI scores the bill as providing significant savings for the U.S. taxpayer – through reduced federal government energy use and through greater productivity per watt expended.

As regards these potential savings, the American Council for an Energy Efficient Economy (ACEEE) in 2012 released a relevant study, entitled “*A Defining Framework for Intelligent Efficiency*,” that includes the following estimate,

“If homeowners and businesses were to take advantage of currently available information technologies that enable system efficiencies, the United States could reduce its energy use by about 12 – 22% and realize tens or hundreds of billions of dollars in energy savings and productivity gains. In addition, there are technologies that are just beginning to be implemented that promise even greater savings.”

The Center for Climate and Energy Solutions (C2ES) report issued later that same year, “*Leading by Example: Using Information and Communications Technologies to Achieve Federal Sustainability Goals*,” focuses more specifically on the federal government, and estimates that widespread deployment of ICT within the federal government “*could save an estimated \$5 billion in energy costs through 2020.*”

The C2ES Report includes eight case studies of federal agencies: using smarter building systems to save energy; expanding teleconferencing, teleworking and e-training to cut travel and training costs; reducing fleet miles and emissions with smart routing solutions; and shifting technology infrastructure from local server rooms to the cloud. In each case, C2ES found that ICT could produce costs savings, more sustainable practices, and a more productive federal sector.

These eight case studies are representative of the kind of agency initiatives that would be encouraged by Section 2 of EEGTA. This section recognizes that as the nation’s largest

landlord, fleet operator, and purchaser of goods and services, the federal government has both the opportunity and responsibility to lead by example in leveraging ICT in moving the U.S. in a less costly, more sustainable direction. The importance of doing so will increase further as intelligent efficiency and the Internet of Things become more pervasive. In a paper last year, ACEEE spoke of the three drivers of productivity that will be increasingly activated by the combination of intelligent efficiency and the Internet of Things:

- A higher level of system-wide energy savings (as opposed to energy savings from the enhanced efficiency of individual devices) made possible by the array of interconnected equipment, appliances, systems, and infrastructures;
- The set of net positive economic externalities (non-energy benefits) or spillovers that arise from those greater linkages and interactions; and,
- The increased capacity for individuals, systems, and regional economies to learn and act at higher levels of performance as experience and knowledge build up over time.

Enactment of Section 2 of EEGTA would help ensure that the federal government better utilizes these three drivers.

As regards Section 3 of EEGTA, this section focuses on improving the energy efficiency of federal data centers, including measures that will lay the groundwork for further private sector improvements in data center efficiency. It does so by building on work already being performed by the Department of Energy and key stakeholders.

Most prominent of these stakeholders is The Green Grid, a consortium of approximately 200 companies, government agencies, and educational institutions dedicated to advancing resource efficiency in data centers. The Green Grid's metrics, models, and educational resources have provided organizations globally with the ability to measure, manage, and make drastic improvements in the efficiency of their data centers. Indeed, it is estimated that these tools have helped the industry reduce power and cooling energy overhead by 20 percent over the past five years.

Section 3 not only builds on this work, it also captures ITI's vision for the productive future of the partnership between the federal government and our industry. This future should include: an update to the 2007 Report to Congress; further work on specifications, measurements, and benchmarks, and in particular on a new data center utilization metric; use of the Data Center Energy Practitioner Program; and, increased sharing of best practices and open data.

In sum, ITI thanks Representatives Eshoo, Kinzinger, Welch, McKinley, and Tonko for introducing EEGTA again this year, thanks the Committee for its inclusion within the Discussion Draft as Sections 4111 and 4112, and strongly urges EEGTA's adoption this year. EEGTA would serve as a welcome non-regulatory boost to U.S. energy efficiency and to greater return on the U.S. taxpayer's dollar.