# TESTIMONY of the U.S. Department of Energy

Max Everett Chief Information Officer

and

Alison Doone Chief Financial Officer (acting)

and

John Bashista Senior Procurement Executive

and

Barbara Helland Associate Director of Advanced Scientific Computing Research

Before the

Subcommittees on Information Technology and Government Operations of the Committee on Oversight and Government Reform U.S. House of Representatives

November 15, 2017

Good afternoon Chairmen Hurd and Meadows, Ranking Members Kelly and Connolly, and distinguished Members of the Committee. On behalf of the Secretary and Deputy Secretary of Energy, I thank you for inviting me to testify about the Department of Energy's (DOE or Department) implementation of what is commonly referred to as the *Issa-Connolly Federal Information Technology Acquisition Reform Act (FITARA)*. *FITARA* and its complement on the cybersecurity front, the *Federal Information Security Modernization Act (FISMA)*, provide me the authority necessary to manage DOE's information technology (IT) resources and cybersecurity program. Today, I will testify on the progress we are making in exercising our *FITARA* authority, discuss the status of key programs, and share insights into some of our challenges.

To begin, I would be remiss to not acknowledge the dedicated career and contractor IT and cybersecurity professionals across the Department whose critical efforts transcend changes in administrations. On my first day, the team provided me a strong baseline from which to build.

#### **ORGANIZATION**

As the DOE Chief Information Officer (CIO), I report directly to the Secretary and Deputy Secretary. The Secretary and Deputy Secretary recognized not only the requirement of *FITARA* on this issue—but the driver behind it: the best practice for public and private sector organizations to have technology leadership represented at the executive-level of all organizations. I have direct access to the Secretary and Deputy Secretary and take direction only from them. This change originated with a Secretarial memorandum and is reflected in DOE's organizational chart.

The Secretary has made cybersecurity a priority for the Department, both in our role as the Sector-Specific Agency for the Energy sector, and by adopting best-in-class cybersecurity risk management practices across the Department. On an operational level, I have regular meetings with the Deputy Secretary, who every month calls to order the Department's senior leadership to evaluate progress on DOE's IT and cybersecurity strategic goals. My reporting and working relationships with them are evidence of the success of this *FITARA* requirement.

### WORKFORCE

My Office is working with the Department's Chief Human Capital Officer (CHCO) to develop and improve guidance to DOE program offices with embedded CIOs (or officials with CIO-like functions), with the expectation that they follow the FITARA reporting model and elevate these officials to a direct reporting relationship with their respective senior leadership. Per FITARA, my Office is engaged with hiring officials for these positions and rating their performance. The Deputy Secretary has instructed the CHCO that my Office should be engaged in the hiring process for anyone slotted in an Office of Personnel Management IT Management Series 2210. While this direction will result in me obtaining a more comprehensive view of—and the ability to set expectations and establish priorities for—the Department's IT workforce, I recognize that IT and cybersecurity work is performed by individuals across a variety of duty stations. Both at DOE and throughout the Federal Government, the traditional, outdated model of an "IT worker" is a challenge, much like our legacy IT systems and unsupported software. We need professionals with multi-disciplinary skill sets, not just coding or network operations. They need to understand, for example, policy development and implementation, acquisitions, contracts, human resources, technical writing, supply chain and risk management, and inter- and intraagency coordination. These professionals need to be customer-focused, tailoring systems and operations to meet customer needs from the start, instead of trying to drive customer behavior from the top-down.

### DATA CENTER CONSOLIDATION

Frankly, the Department is not where it should be in this area. Our current inventory includes 289 data centers; we are working to increase the scope and fidelity of this inventory. We have closed 84 data centers since fiscal year (FY) 2010 resulting in savings of approximately \$21 million and plan to shutter another 11 more by the end of FY 2018. We are examining ways to do more, and to accelerate the process. One catalyst for optimizing DOE data centers is our

expanded use of cloud services. Our diverse Department, with 97 sites in 27 states, will see significant value from the use of cloud computing.

### INCREMENTAL DEVELOPMENT

Through our *FITARA* IT acquisition approval process, we require Departmental elements to certify the use of incremental development or explain why it is not indicated. We also validate the use of incremental development through our IT Dashboard process, and during our Investment Review Board's examinations of major IT investments across DOE's program offices. Please note that most of our projects involve operations and maintenance, and not development, modernization, or enhancement. We are aware that we need to modernize—while it is difficult at first, we know it will pay dividends in the long run.

### PORTFOLIO REVIEW EFFORTS

Of the Department's FY 2018 \$2.1 billion IT budget, 16 major IT investments total \$502 million. Following the Subcommittees' issuance of the *FITARA* Scorecard 4.0, with assistance from our colleagues in the Government Accountability Office, we deconstructed our scores to identify ways to improve our overall performance. We learned that the Subcommittees want CIOs to capture and reflect risk more accurately. Accordingly, we recalibrated our risk ratings for our major IT investments to be more aggressive and forward-looking. This ensures that we adequately consider, *inter alia*, losses of good program managers and changes in vendors. Although we did not identify any major IT investments as falling into the Office of Management and Budget's (OMB) red category, we recently downgraded several to yellow pursuant to our new risk calculus.

From FY 2012 to FY 2017, we reported approximately \$66 million in cost savings, of which \$5 million came in FY 2017. We know that we can do better in this area.

## SOFTWARE LICENSE MANAGEMENT

We have made progress when it comes to improving software license management. In August 2017, we issued an enterprise-wide data call to develop a baseline inventory of software licenses purchased, deployed, and used. We will conduct another data call to collect information on software licensing contracts. With respect to policy documentation, by this December we plan to complete a software management centralization plan (which is in draft form) and to develop a vendor management strategy. We can also leverage the Department of Homeland Security's Continuous Diagnostics and Mitigation program's tools and dashboards to locate, identify, and validate software (and hardware) assets within our managed environments.

The Department's Senior Procurement Executive, working with my Office, will be issuing guidance to program offices that will strengthen existing guidance regarding the CIO's review and approval of IT acquisitions. This maturing *FITARA* acquisition review process gives us valuable information on software licensing, and provides an avenue for inquiring into software use enterprise-wide. While we have realized some cost savings in this area, we recognize that a

more robust, enterprise-wide, coordinated effort using a variety of tools and approaches is indicated.

### APPLICATION OF FITARA TO THE NATIONAL LABORATORIES

At a previous hearing before the Subcommittees, Ranking Member Connolly expressed a strong interest in *FITARA*'s application to the National Laboratories (National Labs).

As CIO, I engage with all National Labs through the Annual Laboratory Planning and Appraisal reviews. Not only do I have the opportunity to comment on National Lab IT activities, I can refocus their efforts to address my concerns through the development of Performance Evaluation and Measurement Plans that define notable outcomes that the National Labs must meet in the upcoming year.

By way of illustration, the Office of Science (SC), which oversees ten National Labs for the Department, uses a planning and appraisal process with a common structure and scoring system. In FY 2016, SC added IT reporting to its Business Systems performance goal for its National Labs, and requested information on their current and planned IT and mission-related computing investments, as well as a description of their respective processes for approving computing procurements. In FY 2017, SC worked with the National Labs' CIOs to further refine their processes and to establish a common format; data from that effort has been shared with me.

# DOE FITARA COORDINATION

Following the Secretary and Deputy Secretary's leadership, my counterparts—the CHCO, the Senior Procurement Executive, and the Acting Chief Financial Officer (CFO)—and I meet regularly and closely coordinate on the effective use of *FITARA* authority at DOE. Building on the coordination between my Office and that of the CFO, which resulted in the issuance of joint IT budget guidance for FY 2018, this year we again issued IT budget guidance and hosted an OMB briefing for DOE's Capital Planning and Investment Control officers on the new Technology Business Management approach. As mentioned earlier, the Department will issue guidance on hiring of CIOs and 2210s to ensure that my Office is directly involved in hiring and performance assessments for those CIOs. As previously stated with respect to procurements, the Senior Procurement Executive, in coordination with my Office, will be issuing guidance that will strengthen existing guidance relating to my approval of IT purchases.

This coordination also extends to the Department's program offices. One program office approached my Office for assistance with reviewing draft procurement documents for a proposed \$1 billion procurement, which included IT and cybersecurity elements, to ensure that the program office was aligned with my Office's strategy from the ground up. In another case, my Office and a program office that manages a world-class data transport network are examining ways to leverage this asset enterprise-wide.

## IT ACQUISTION REFORM AND SECURITY

As I mentioned at the start, *FITARA* and *FISMA* authorities provide me the leverage necessary to push toward stretch goals, which I acknowledge may be uncomfortable to some. The Department needs a Digital Transformation, and we have identified several areas for immediate action, namely:

- Headquarters Network Refresh/National Capital Region Network Upgrade
- Integrated Joint Cybersecurity Coordination Center Unclassified Security Operations Center
- Unified Communications/Voice over Internet Protocol
- Headquarters Data Center Migration (Infrastructure as a Service)
- Secure Mobility and Remote Access Enhancements

We intend to use *FITARA* to continue to be more granular and transparent with our IT costs in order to efficiently and effectively implement our Digital Transformation efforts.

### **CONCLUSION**

In detailing the changes, improvements, and challenges that I have seen during my short time as the DOE CIO, it has been my aim to demonstrate that the Department is moving in the right direction. The Department's robust IT and cybersecurity governance mechanisms are inclusive, transparent, and facilitate timely performance of DOE's diverse mission. I firmly believe we are continuing to advance and improve, which would not be possible without the authorities provided to us by *FITARA*. I am encouraged by the interest in and support of our efforts shown by the leadership and Members of the Subcommittees, and I look forward to achieving our shared goals.

It has been my distinct honor to testify before you today, and I would be pleased to address your questions.