

Coordinating Mission Support Functions: Insights from David Klaus, Deputy Under Secretary for Management and Performance, U.S. Department of Energy

By Michael J. Keegan



The U.S. Department of Energy is responsible for advancing the energy, environmental, and nuclear security of the United States, promoting scientific and technological innovation in support of that mission, sponsoring basic research in the physical sciences, and ensuring the environmental cleanup of the nation's nuclear weapons complex.

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To be successful in these areas involves better aligning mission support functions with mission delivery. Given the critical challenges facing government today, the ability of government executives to properly align mission support with mission delivery can help them respond more effectively to their mission and management challenges and to drive change within their departments. What are the key management and operational challenges facing Energy? How is Energy progressing in its environmental management cleanup efforts? What are the department's IT goals and priorities? And how is Energy changing the way it does mission support? David Klaus, Deputy Under Secretary for Management and Performance, U.S. Department of Energy shares his insights on these topics and more. The following is an edited excerpt of our discussion on *The Business of Government Hour*.

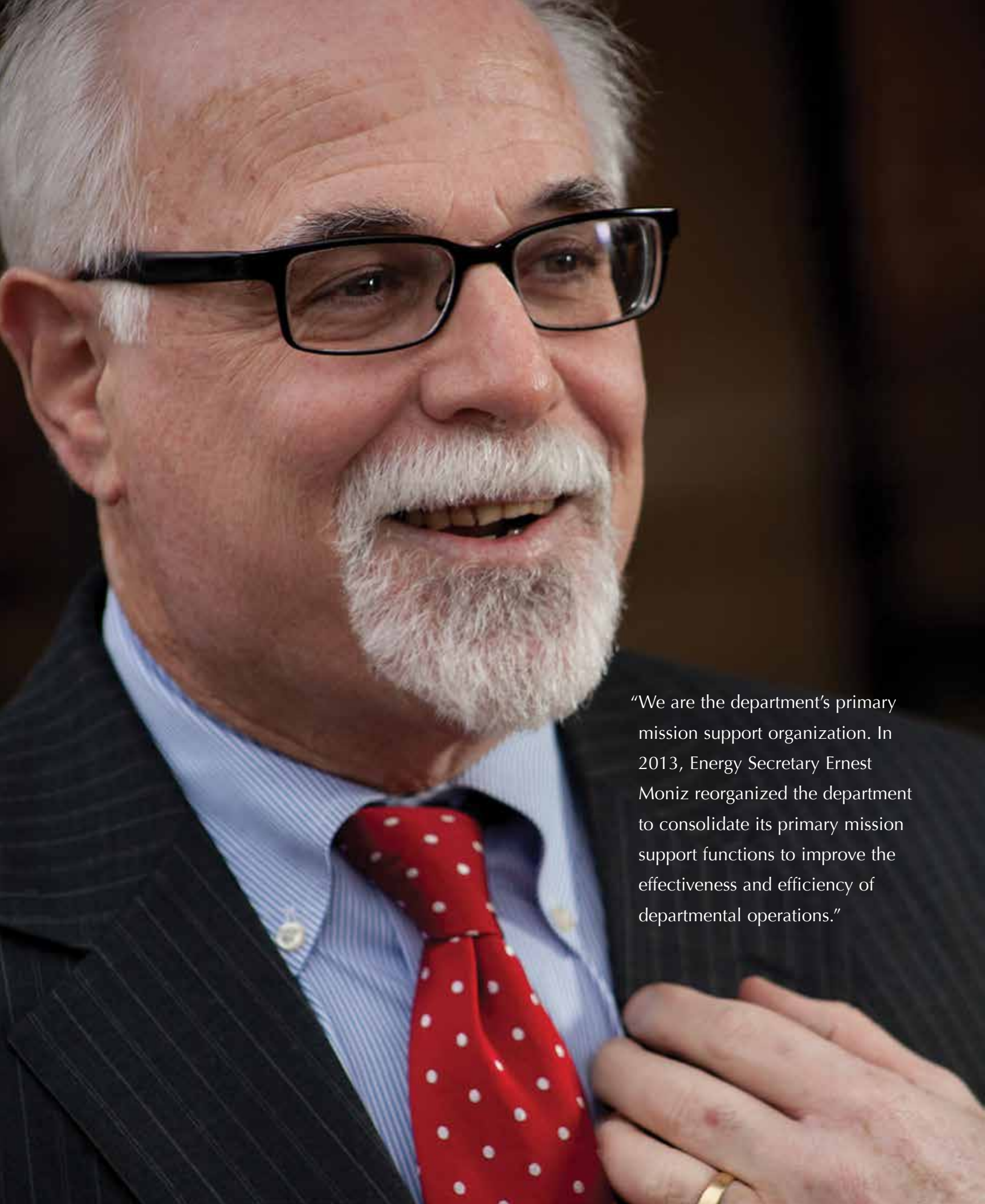
Before we delve into your specific portfolio, perhaps you could give us a sense of the mission and scale of operations of the U.S. Department of Energy?



David Klaus: The department has its roots in the Manhattan Project. Since its formal establishment by law in 1977, the department's mission has evolved. It continues to

have a nuclear security mission; we are the civilian entity responsible for the development and management of nuclear weapons. The Department of Energy (DOE) is also the home of basic science research within the U.S. government. This encompasses everything from exploring the origins of the universe to developing high performance scientific tools that allow you to look inside molecules, atoms, and viruses to advance the creation of new medicine and the development of new materials. The department has 17 national laboratories spread across the country that pursue such important research. The third area is the department's applied energy mission. We have Offices of Fossil Energy, Nuclear Energy, and Energy Efficiency and Renewable Energy (EERE). These are applied energy programs, in which we support basic research in these areas but also seek to move developed technologies forward (i.e., through appliance-efficiency standards in the EERE, helping with the development of wind and solar energy technology, and providing grants for small nuclear reactor development.) The fourth area involves the department's environmental management mission. More than 60 years of full production of nuclear weapons produced an enormous amount of nuclear waste and materials. It is going to take 40 to 50 years to clean that up; and that's the very difficult, but critically important job performed by DOE's Office of Environmental Management.

The department has about 13,500 federal employees and 104,000 contractor employees. We operate using management and operation contracts that support the department's national laboratories. Energy's footprint spans the entire United States. If put together, we have land territory larger than the states of Delaware and Rhode Island combined. Some of our facilities in Idaho cover more than 900 square miles. The department's budget is in the range of \$29 billion



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with about \$7.5 billion in the Office of Management and Performance of which I am deputy under secretary.

Would you tell us more about the areas under your purview as the department deputy under secretary for Management and Performance?



David Klaus: We are the department's primary mission support organization. In 2013, Energy Secretary Ernest Moniz reorganized the department to consolidate its primary mission support functions to improve the effectiveness and efficiency of departmental operations. To that end, Secretary Moniz created the Office of the Under Secretary for Management and Performance to manage the:

- Office of Management and Administration (MA)
- Office of Chief Human Capital Officer (HC)
- Office of Chief Information Officer (CIO)
- Office of Economic Impact and Diversity (ED)
- Office of Hearings and Appeals (OHA)
- Office of Environment, Health, Safety, and Security

In addition to bringing together the department's primary support organizations, the office portfolio also includes the Office of Environmental Management, which is about a \$5.8 billion-per-year clean-up of the nuclear waste that resides across our complex. There is also a small office called Legacy Management that actually oversees the sites that we and the U.S. Army Corps of Engineers clean up. Combining mission support with these other areas is consistent with the department's objective of improving project management and performance in the latter two key areas and across the department.

What management challenges are you facing?



David Klaus: One of our top challenges is continuing to strengthen our project management capability. Managing the clean-up of nuclear waste is a significantly difficult task. We have made commitments to remove very toxic, radiological waste from several key sites and glassify [apply heat to convert a silica-bearing material into a glasslike substance]. Doing this accomplishes two objectives: it puts the waste into a safe form for disposal and renders it completely unusable for future weapons purposes, which is consistent with the department's nonproliferation mission.

One of the great challenges the department faces is managing these one-of-a-kind projects. The technical and construction challenges these projects present are seen nowhere else in the world. For that reason alone, my number one challenge from

a management standpoint is working to improve the project management capability involved in these serious efforts.

The second challenge would involve our workforce, about a fourth of which is eligible to retire within five to seven years. In fact, a previously expected wave of retirements that hadn't appeared in the last couple years is actually happening. As I've sometimes said, when your 401(k) is a 201(k) you don't retire, but the economy has come back. By September 2014, we actually had as many retirements as we did in the each of the previous two years. This wave of retirements is going to continue and build and, looking at the demographics, we're losing the very people who have spent their careers at the department. Many of them are senior leaders, nuclear scientists, and managers; many with unique technical expertise. This challenge focuses on workforce management and, more specifically, getting the right workforce together that will serve the department's mission now and into the future.

Recognizing that your office is relatively new, I'd like to get a sense of your key strategic priorities going forward. Would you elaborate on those priorities and how you are working to improve the effectiveness and efficiency of the department's operations?



David Klaus: As I noted, the department has some 13,500 federal employees and something on the order of 104,000 contractor employees. We also manage 17 national laboratories. Given the size and expanse of such an organization, how can we operate as a single enterprise? Historically, we've operated very much in what people would call silos. For example, we provide human capital services through 19 different service centers for our federal employees at a cost that, frankly, well exceeds that of the government average and the private sector. We've got two or three initiatives underway that are moving us toward an enterprise view. One initiative is in the human capital area; we're trying to reduce the total number of service centers down to five with the express purpose of being more efficient in the provision of human capital services to our staff. Much in the same way, we're also reviewing our IT structure; finding the best alignment for realizing efficiencies.


With the establishment of the National Laboratory Policy Council and the National Laboratory Operations Board, the secretary seeks to reset our relationship with the national laboratories. We are working on the infrastructure issues associated with the system. We're working on alternative financing mechanisms, human capital issues, and a whole range of day-to-day nuts-and-bolts issues. By doing this, we can better operate



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more as one enterprise and that is a core objective of what we’re trying to achieve on the management side.


Energy has been working for nearly 25 years to clean up the radioactive and chemical contamination derived from weapons production and energy research during the Manhattan Project and the Cold War. Would you tell us more about the department’s environmental management clean-up efforts and the progress to date?

 **David Klaus:** Well, let me start by trying to give a perspective on the size of the challenge. I don’t know whether this is the product of an official study but, in some conversations, one estimate is that we have approximately \$250 billion worth of clean-up work to do that is going to take 40 to 50 years to accomplish.


We live in a budget-constrained world. I don’t think that’s going to change in the foreseeable future. We’re trying to tackle a \$250 billion challenge and we’re tackling it in \$5 billion to \$6 billion-a-year increments. We’re also doing this in an environment in which we have different states and different district courts regulating what happens at each of our sites. It’s no easy task, but there has been success. By 2012, the program reduced the number of contaminated sites from 107 to 17; and since the 1960s we have reduced our land holdings by more than 246,000 acres—demonstrating tremendous success in the accelerated cleanup of the Cold War legacy. Major successes include completing cleanup at the Rocky Flats, Mound, and Fernald sites as well as the construction and operation of the Defense Waste Processing Facility at the Savannah River Site.

In fact, we’re trying to develop new technologies that can better manage, and ultimately reduce this waste. The Savannah River National Laboratory has as one of its many purposes the task of developing these new technologies and tools with the express intent of better processing hazardous waste and materials.

I’d like to explore the use of collaboration and partnerships among agencies, branches of the government, and with the private sector to achieve mission results. How are you leveraging partnerships and collaborating to improve operations and program outcomes?

 **David Klaus:** I’ll give you an example of how we leverage partnerships and engage in meaningful collaboration, using our national laboratories. We have an initiative called lab-to-market. We have within it thousands of patents, innovations, and ideas that can help this country basically build the innovation economy. That said, we are not the marketers; it’s not what we do. As a result, we are building partnerships with the U.S. Department of Commerce, the Small Business Administration, and with many local economic development and outreach organizations to create the procedures and avenues for lab-to-market to actually work. In fact, in October 2014, Energy launched a \$2.3 million pilot program called Lab-Corps to accelerate the transfer of innovative, clean energy technologies from the DOE’s national laboratories into the commercial marketplace. Lab-Corps aims to better train and empower national lab researchers to successfully transition their discoveries into high-impact, real world technologies in the private sector. This will further illustrate the importance of partnerships and collaboration in doing what we do.

Today, rapidly evolving technology increases an organization’s IT vulnerability footprint. Would you elaborate on efforts to secure Energy’s IT infrastructure and combat cyber security threats? What is being done to strengthen the department’s cybersecurity posture?

 **David Klaus:** Cybersecurity continues to be one of the department’s most significant focus areas. Keeping the department’s mission-critical information and the personal information of our workforce secure is a top priority. Accordingly, we are deeply engaged in a wide range of internal and interagency policy and operational activities. In the years ahead, we will undertake several initiatives to enhance our cybersecurity posture. We will strengthen situational awareness and incident response to address cybersecurity threats. We will establish federally aligned

departmental cybersecurity standards, and introduce cutting-edge cyber technologies through our Cyber Sciences Laboratory and Cyber Innovation Center. In addition, we will improve cybersecurity training to bolster workforce awareness and accountability. Protecting agency information and assets is paramount to successfully executing the department's mission. We must proactively assess and detect cybersecurity risks and vulnerabilities, resolve threats when they do occur, and continually monitor the effectiveness of our cybersecurity solutions.

What advice would you give someone who is thinking about a career in public service?



David Klaus: There's tremendous opportunity in government. Government service offers significant rewards and I would encourage them to do it. I'd also cite the statistic that, in five to seven years, 20 percent or 25 percent of Energy's senior leaders will no longer be with the department. This presents many opportunities for those with passion and interest in government service. ■

To learn more about DOE's Office of Under Secretary for Management and Performance, go to www.energy.gov/office-under-secretary-management-and-performance



To hear *The Business of Government Hour's* interview with David Klaus, go to the Center's website at www.businessofgovernment.org.



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