DOE Is Addressing Invention Disclosure and Other Challenges but Needs a Plan to Guide Data Management Improvements

What GAO Found

The U.S. Department of Energy (DOE) provided at least a total of $11 billion ($12 billion in fiscal year 2014 dollars) in research and development funding to contractors for fiscal years 2009 through 2013. Contractors reported about 5,800 inventions and 700 patents developed with DOE funding during this time period. To ensure disclosure of these agency funded inventions, DOE relies primarily on contractor self-reporting and financial assistance award closeout procedures. Contractors are generally required to adhere to specific time frames for invention disclosure. Following contractor invention disclosure, DOE patent counsel monitor the invention through the end of a financial assistance award to ensure contractor compliance with time frame requirements for electing to retain ownership and applying for patent protection of the invention.

DOE faces challenges in (1) ensuring that contractors disclose agency funded inventions and (2) managing information related to these disclosures and is taking steps to address them.

- **Limited ability to ensure invention disclosure after funding ends**: DOE does not have a documented process to ensure contractors disclose inventions after financial assistance awards end. To address this, DOE recently began two pilot efforts to determine the extent of undisclosed inventions. One is an audit of a sample of previously completed financial assistance awards and the other involves cross-referencing U.S. Patent and Trademark Office data against DOE information on inventions it funded. DOE is still implementing these efforts but reported identifying more than 100 potential undisclosed inventions. DOE will assess the results of the pilots to determine whether to continue them, according to DOE patent counsel.

- **Data management limitations**: DOE faces a challenge in managing information related to agency funded inventions because it relies on two different data systems that are outdated, unable to communicate with each other, and do not allow for electronic reporting. Under federal internal control standards, information should be recorded and communicated to management and others within the entity who need it and in a form and within a time frame that enables them to carry out their responsibilities. DOE is in the process of updating its data systems and is planning the development of an electronic reporting function but has not established an implementation plan with milestones against which it can track its progress toward completing these efforts. By developing such a plan, DOE would have greater assurance that it is making timely progress toward these efforts.

In addition, DOE faces challenges in its ability to monitor and influence the utilization and domestic manufacture of inventions it funded to protect its interests in them. DOE has proposed regulatory changes to address these challenges that would (1) require contractors to report on the utilization and domestic manufacture of agency funded inventions, (2) allow DOE to assess manufacturing plans as criteria for funding decisions, and (3) require contractors to obtain DOE authorization for changes in their control—including ownership—under certain circumstances. According to patent counsel, DOE expects to finalize these regulatory changes in fiscal year 2015.

What GAO Recommends

GAO recommends that DOE develop an implementation plan with milestones for improving its data management systems. DOE agreed with this recommendation.

View GAO-15-212. For more information, contact John Neumann at (202) 512-3841 or neumannj@gao.gov.