

ELECTRICITY MARKETS

Actions Needed to Expand GSA and DOD Participation in Demand-Response Activities

Why GAO Did This Study

As electricity demand varies throughout the day and year, operators of the electricity grid respond by continually increasing or decreasing the amount of electricity that they call upon power plants to generate. Some grid operators and other entities offer demand-response programs, which provide customers with financial incentives to reduce their electricity use during periods of peak demand. Consumers, including GSA and DOD—among the federal government's largest electricity users—may enroll in these programs.

GAO was asked to examine GSA and DOD demand-response activities. This report examines: (1) steps these agencies have taken to facilitate their sites' participation; (2) the extent to which these agencies have participated in and benefitted from demand-response activities; and (3) challenges these agencies' sites face participating in these activities. GAO examined agency documents and data on participation and benefits, surveyed GSA regions and 20 selected DOD installations, and conducted interviews with officials.

What GAO Recommends

GAO recommends, among other things, that GSA and DOD consistently track and assess participation in demand-response programs, and DOD establish guidance encouraging participation and ask Congress to provide it with authority similar to GSA, allowing use of payments without further appropriation. GSA and DOD generally agreed with GAO's recommendations.

What GAO Found

The General Services Administration (GSA) and the Department of Defense (DOD) facilitate participation in electricity demand-response activities by their buildings and installations, but unlike GSA, DOD does not have guidance encouraging this participation. Specifically, GSA has provided information to its building managers about periods of peak demand. GSA also issued guidance encouraging its building managers to participate in demand-response programs. In contrast, DOD has some energy management initiatives underway that could facilitate participation in demand-response programs by DOD installations including expanding the use of advanced meters—meters that measure and record data on electricity use and enable consumers to identify opportunities to reduce use during peak times—but DOD does not have current policies or guidance encouraging installations' demand-response participation.

GSA and DOD have participated in demand-response activities to some extent, and participation at both agencies has provided financial benefits. GSA has not consistently tracked information on participation and financial benefits, therefore, this information is not readily available. But, data GAO collected indicate that GSA's participation in demand-response programs has yielded financial benefits of approximately \$888,000 for fiscal year 2012. Similarly, the full extent of military installations' participation in demand-response programs, and any resulting financial benefits, are unknown because DOD does not track this information, but the data GAO collected indicate that at least 56 of 450 domestic DOD installations have participated in demand-response programs since 2009, and participation yielded about \$6.8 million in total financial benefits for fiscal years 2011 and 2012. Without consistently tracking participation and benefits, GSA and DOD cannot fully assess their agencies' participation in demand-response programs and may miss opportunities to expand participation.

GSA and DOD face challenges to facilitating broader participation in demand-response activities, including challenges outside of the agencies' control, such as limited program availability in certain regions where demand-response programs are not offered, and challenges they may be able to address, such as technological hurdles associated with automated systems to control building electricity usage. Also, DOD faces challenges in accepting and using financial benefits for participating in programs. Congress has provided DOD facilities with authority to receive financial benefits for participation in demand-response programs as either a cost reduction to their utility bill or a direct payment. However, unlike GSA's authority, any financial benefit not received as a cost reduction to a DOD installation's utility bill must be deposited into a designated Treasury fund and appropriated prior to use and, if appropriated, the funds may not end up back at the installations that earned them. DOD officials told GAO that financial benefits are needed to offset costs of participating in demand-response programs. If installations cannot retain incentive payments, this may discourage participation. Further, DOD officials told GAO that a cost reduction to the utility bill for an installation in 1 year could reduce their utility budget in subsequent years, and some demand-response programs do not offer financial benefits as credits to the utility bill, thus limiting options available to some installations.