VIA MAIL AND E-MAIL

April 24, 2009

Dr. Steven Chu, Secretary
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Acting Administrator Paul F. Prouty
U.S. General Services Administration
1800 F Street, N.W.
Washington, DC 20405

Dear Secretary Chu and Acting Administrator Prouty:

Recognizing President Obama’s commitment to renewable energy and energy efficiency, we are writing on behalf of Friends of the Earth, Public Citizen, and the Sierra Club to provide information about important efficiency mandates for federal buildings that the prior administration left unfulfilled. The prior administration’s failure to meet these requirements represented a missed opportunity for energy savings that are sorely needed to restore our economy and protect our environment. Satisfying these requirements now will be an important step in advancing energy efficiency, America’s untapped energy resource, and creating green jobs and a clean energy economy.

Federal buildings offer a unique opportunity to implement the President’s energy goals across all of America’s cities and towns – by reducing energy use and serving as an example for states, local governments, and citizens. Often located in the town square, the federal post office, courthouse, army base, and other federal buildings provide a special meeting place and nerve center for the federal government’s activities in communities across America. They are places where citizens can find important information and services, from stamps and voter registration forms to veterans’ benefits and passports. Whereas many Americans may never travel to Washington, D.C., most will visit a local federal building at some point in their lives.

When public buildings install new lighting or other equipment, whether a geothermal heating unit or solar panels, many people see this and benefit from this locally – adding value beyond the savings for U.S. taxpayers. The energy that federal buildings use affects the local energy market, particularly at times of peak demand. Energy efficiency upgrades to these buildings will rely on local businesses and help develop the local market for energy efficiency products and services.

This letter offers our concerns regarding the prior administration’s unmet legal duties on federal buildings because of these buildings’ substantial use of energy. We urge you to make the prompt correction of these failures a high priority for the new administration. We welcome the opportunity to discuss the overdue requirements and other concerns provided in this letter.

Congress has established comprehensive energy efficiency and environmental objectives for all federal agencies to achieve. First, all new and renovated federal buildings “shall be designed so that the fossil fuel-generated energy consumption of the buildings is reduced, as compared with . . . fiscal year 2003” according to the following schedule:1

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<th>Fiscal Year</th>
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Second, all federal agencies must “apply energy conservation measures to, and . . . improve the design for the construction of, the Federal buildings of the agency . . . so that the energy consumption per gross square foot . . . is reduced, as compared with . . . fiscal year 2003” according to the following schedule:2

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<th>Fiscal Year</th>
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Federal law establishes a series of additional requirements for new and existing federal buildings in order to reach and complement these reductions. The law requires the federal government to purchase energy-efficient products, to use electric metering to monitor buildings’ electricity use and equivalent metering of natural gas and steam, and to create a General Services Administration (“GSA”) program to accelerate the use of energy-efficient technology, lighting, and geothermal heat pumps in federal buildings.3 All public buildings under GSA authority must be equipped with energy-efficient or Energy Star lighting fixtures and light bulbs.4 In addition, the Department of Energy (“DOE”) is required to ensure that of the total amount of electricity that the federal government purchases at least 3% is from renewable energy sources by fiscal years 2007-09, at least 5% is renewable by fiscal years 2010-12, and at least 7.5% is renewable

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2 Id. § 8253(a)(1).
3 Id. §§ 8253(e), 8259b, 8262g. 17095.
as of fiscal year 2013 and thereafter. The law also includes related provisions to assist with and ensure compliance, such as a Federal Energy Efficiency Fund and other incentives, the creation of the Interagency Energy Management Task Force, authority to enter energy savings performance contracts, and multiple disclosure requirements that provide information about progress to Congress, to the Office of Management and Budget, and to the public.

The Department of Energy and General Services Administration have responsibility for issuing regulations and guidelines and facilitating the compliance of all federal agencies with these requirements. DOE was established in part “to promote maximum possible energy conservation measures” through effective management of energy functions of the federal government, “[t]o create and implement a comprehensive energy conservation strategy that will receive the highest priority in the national energy program,” “[t]o assure incorporation of national environmental protection goals in the formulation and implementation of energy programs, and to advance the goals of restoring, protecting, and enhancing environmental quality, and assuring public health and safety.” DOE’s Federal Energy Management Program (“FEMP”) has as its mission “to facilitate the Federal Government’s implementation of sound, cost-effective energy management and investment practices to enhance the nation’s energy security and environmental stewardship.”

GSA has authority over the design, construction, repair and alteration, lease acquisition, operation and maintenance, and real property disposal for federally owned or leased facilities. GSA’s top five agency customers are the Department of Defense, Department of Justice, Department of Homeland Security, Federal Judiciary, and Department of Treasury, with about 48% of GSA’s total resources applied to building services. Although federal agencies have achieved some reductions in energy use in recent years, to meet the robust requirements of existing law they need timely guidance, information, and direction from DOE and GSA.

II. Energy Efficiency and Green Building Requirements with Deadlines

Energy efficiency standards and management requirements for federal buildings apply to “any building to be constructed by, or for the use of, any Federal agency,” including privatized military housing and buildings built for the purpose of being leased by a federal agency. GSA owns and leases over 352 million square feet of space in 8,600 buildings in more than 2,200 communities nationwide, including about 1,500 buildings owned by the federal government. There is a total of 3.0 billion square feet included in all standard Federal buildings (e.g., military

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5 42 U.S.C. § 15852.
6 Id. §§ 8256(e), 8257, 8287; see id. §§ 6834(a)(3)(C), 8253(f)(7)(C), 8253(f)(2)-(3) (second subsection (f) enacted by Pub. L. No. 110-140), 8258(b), 8262a, 8287b, 17092(f), 17093, 17143-44 (reporting requirements).
7 Id. § 7112(2), (4), (13).
10 See GSA, REPORT TO OUR CITIZENS 5 (2008).
bases, post offices, hospitals, courthouses). As of 2008, there were about 300 capital projects under the authority of GSA in the pre-planning, site acquisition, design, and construction phases.

A. New and Renovated Federal Buildings – Department of Energy

There are a number of overdue elements of the energy efficiency performance standards for new and renovated buildings that are required by the Energy Independence and Security Act of 2007 (“EISA”), the Energy Policy Act of 2005 (“EPACT”), and the Energy Conservation and Production Act of 1992 (“ECPA”), including each of the following:

(1) Section 433 of EISA set the deadline of December 19, 2008 for DOE to establish, by rule, revised federal building energy efficiency performance standards to ensure that all new and renovated federal buildings meet the required reductions in the use of fossil fuel-based energy. The prior administration failed to promulgate these fossil-fuel reduction standards.

(2) Section 109 of EPACT set the deadline of August 8, 2006 for DOE to establish, by rule, standards requiring that sustainable design principles be applied to the siting, design, and construction of all new and replacement federal buildings. Section 433 of EISA added a requirement that DOE promulgate revised standards by December 19, 2008 ensuring that sustainable design principles are applied to the siting, design, and construction of all new and renovated federal buildings. The prior administration failed to promulgate these sustainable design standards.

(3) Section 109 of EPACT set the deadline of August 8, 2006 for DOE to establish, by rule, standards requiring that “if water is used to achieve energy efficiency, water conservation technologies shall be applied to the extent that the technologies are life-cycle cost-effective.” Section 433 of EISA added a mandate that DOE promulgate standards by December 19, 2008 requiring that “[i]n addition to any use of water conservation technologies otherwise required by this section, water conservation technologies shall be applied to the extent that the technologies are life-cycle cost-effective.” The prior administration failed to promulgate these water conservation standards.

(4) Section 523 of EISA directed DOE to establish, by rule, standards requiring that “if lifecycle cost-effective . . . not less than 30 percent of the hot water demand for each new Federal building or Federal building undergoing a major renovation be met through the

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13 See GSA, FY 2008 ANNUAL PERFORMANCE AND ACCOUNTABILITY REPORT 54 (Jan. 15, 2009).
16 Id. § 6834(a)(3)(D)(i)(II)-(III).
17 Id. § 6834(a)(3)(A)(ii).
18 Id. § 6834(a)(3)(D)(vii).
installation and use of solar hot water heaters.” ¹⁹ The prior administration failed to issue solar hot water heater standards or a related cost-effectiveness determination.

(5) Section 305 of ECPA requires DOE to conduct a review of the federal building energy standards “not less than once every 5 years,” and “if significant energy savings would result, upgrade such standards to include all new energy efficiency and renewable energy measures that are technologically feasible and economically justified.” ²⁰ Although this requirement was imposed by ECPA in 1992, we are unable to find a published record of a prior administration ever conducting such a review or making the requisite determination, which should appear in the Federal Register.

(6) Not later than 1 year after the approval of each revision of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (“ASHRAE”) Standard for commercial buildings or the International Energy Conservation Code (“IECC”) for low-rise residential buildings, the law directs DOE to determine whether the energy efficiency standards for federal buildings should be updated to reflect the amendment. ²¹ This determination should appear in the Federal Register. The prior administration did not meet this deadline for the 2007 version of ASHRAE Standard 90.1, or the 2006 IECC.

When DOE undertakes the reviews required by sections 6834(c) and 6834(a)(3)(B), we encourage DOE to upgrade and ensure that the federal building standards are designed to achieve the maximum level of energy efficiency that is cost-effective, and at least require energy consumption to reach a level of 30% below that established in the most recent commercially developed standards. As shown by the EISA directive to ensure consumption was at least 30% below the then-most recent 2004 ASHRAE standard, ²² commercially developed standards do not yet go far enough to satisfy the energy and environmental goals of federal law. Promulgating clear prescriptive measures for all federal buildings would give federal agencies useful guidance, increase their ability to coordinate and share information and best practices, and improve compliance and verification.

B. All Federal Buildings

There are a number of additional requirements for all federal buildings which the prior administration did not fulfill.

1. Department of Energy

(1) Section 432 of EISA set the deadline of December 19, 2008 for DOE to issue guidelines and necessary criteria for implementation of identified energy and water efficiency

¹⁹ Id. § 6834(a)(3)(A)(iii). Note that although the statute applies the deadline of August 8, 2006 to this requirement, the solar hot water heater requirement was added by EISA on December 19, 2007.
²⁰ Id. § 6834(c).
²¹ Id. § 6834(a)(3)(B).
²² Id. § 6834(a)(3)(A)(i)(I).
measures and follow-up on implemented measures.\textsuperscript{23} The prior administration failed to issue these guidelines or criteria.

(2) Section 432 of EISA set the deadline of December 19, 2008 for DOE to develop and deploy a web-based tracking system to monitor agency compliance with energy and water efficiency measures, including tracking the covered facilities, their progress in achieving energy and water use reduction goals, and the resulting savings from implementation. The law requires that DOE make this system publicly available through the Internet to allow the public to monitor and help enforce compliance.\textsuperscript{24} The prior administration failed to create a publicly available Internet tracking system.

(3) Section 432 of EISA set the deadline of December 19, 2008 for DOE to “select or develop the building energy use benchmarking system” to assess agency compliance with energy and water efficiency measures and to “issue guidance for use of the system.”\textsuperscript{25} The prior administration failed to fulfill these duties.

DOE’s recently issued guidelines observed that the prior administration failed to meet the above three EISA requirements.\textsuperscript{26}

2. General Services Administration

(1) Section 439 of EISA set the deadline of June 16, 2008 for GSA to establish a lighting and geothermal heat pump technology acceleration program to achieve maximum feasible replacement of outdated lighting, heating, and cooling technologies with new, energy-efficient cost-effective technologies.\textsuperscript{27} Although a fall 2008 letter from the Government Accountability Office (“GAO”) stated that “GSA has begun to establish” this type of program, it is unclear whether the prior administration took any of the actions required by section 17095.\textsuperscript{28} GSA also was required to report to Congress by June 16, 2008, and annually thereafter, regarding an implementation plan to comply with EISA.\textsuperscript{29} We are unable to find published evidence that the prior administration fulfilled these requirements.

(2) Section 439 of EISA set the deadline of December 19, 2008 for GSA to establish a timetable of actions to comply with specific energy efficiency requirements of EISA.\textsuperscript{30} The prior administration failed to make information publicly available regarding the status of compliance with this requirement.

\textsuperscript{23} See id. § 8253(f)(6)(A)(ii) (citing § 8253(f)(4)-(5)).
\textsuperscript{24} Id. § 8253(7)(B)-C).
\textsuperscript{25} Id. § 8253(f)(8).
\textsuperscript{27} 42 U.S.C. § 17095(c)(2)(A).
\textsuperscript{29} 42 U.S.C. § 17095(d)(1)-(3).
\textsuperscript{30} Id. § 17095(c)(2)(B)(i) (referring to EISA §§ 431-35, 439).
Section 204 of EPACT set the deadline of October 8, 2005 for GSA to “establish a photovoltaic solar energy systems evaluation program to evaluate such photovoltaic solar energy systems as are required in public buildings.” GSA has authority to establish a photovoltaic energy commercialization program to procure and install solar energy systems, to reach the target of 20,000 installations in federal buildings by 2010. The prior administration failed to make information publicly available regarding these programs, and it remains unclear whether the prior administration took any appropriate action.

The lack of publicly available information regarding the above requirements makes it difficult for the public to monitor, evaluate, and provide meaningful input on GSA’s implementation efforts. For example, the prior administration posted no significant guidance documentation on the page of GSA’s website created for this purpose. The prior administration’s most recent reports lack information regarding GSA’s stewardship of federal property in regard to the energy efficiency requirements discussed. We look forward to a new direction at GSA that advances President Obama’s directive on government transparency by making information related to energy efficiency progress accessible to the public.

III. Valuable Energy Savings When Federal Buildings Lead on Efficiency

Improving energy efficiency in federal buildings would help lead to reduced dependence on fossil fuels, help transition the federal government and the nation to new forms of clean, renewable, and domestically produced energy, and create green jobs, all in keeping with the President’s goals. Congress enacted the energy efficiency deadlines in order to achieve vital goals of public health, welfare, and environmental protection. For example, Congress found that the promotion of energy-efficient products and buildings, such as through the Energy Star program, serves important objectives, including “reduc[ing] energy consumption,” “improv[ing] energy security,” and “reduc[ing] pollution.” Similarly, a central purpose of EISA’s mandate to revise energy efficiency standards for new and renovated federal buildings is to reduce the use of environmentally harmful fossil fuels, as the law directs a reduction specifically of “fossil fuel-generated energy consumption” until it is phased out by the year 2030. The Federal Energy Management Program of DOE has the additional related purposes of “reducing the cost of government, reducing national dependence on foreign energy resources, and demonstrating the benefits of greater energy efficiency to the Nation.”

Complying with these overdue requirements will indeed create substantial benefits. The federal government is the nation’s top energy consumer. Federal agencies annually consume

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32 Id. § 3177(a).
33 See OFC. OF INSPECTOR GEN., GSA, SEMIANNUAL REPORT TO THE CONGRESS (Apr. 1 – Sept. 1, 2008); see also GSA, ANNUAL PERFORMANCE AND ACCOUNTABILITY REPORT (2008).
35 42 U.S.C. § 6294a(a).
36 Id. § 6834(a)(3)(B)(D); see also, e.g., 40 U.S.C. § 3177(a)(2) (solar requirement aims “[t]o reduce the fossil fuel consumption and costs of the Federal Government”).
37 42 U.S.C. § 8251.
38 Id.
about 1.1 quadrillion British thermal units (Btu) or “quads” of site-delivered energy, and an additional 0.4 quads to generate or transport this energy. Of all energy consumed by the federal government, nearly 40% is used by federal buildings. The use of energy by federal buildings represents 5% of commercial-building energy consumption in the United States. The potential energy savings from relighting federal buildings, alone, is significant. Relighting has been projected to have the potential to save as much as 52% of federal buildings’ electricity consumption as of 1993. In recent years, some federal agencies have begun to install geothermal heat pumps, including the Department of Defense which has already installed 7,500. The installation of geothermal heat pumps in virtually any federal building, including older or historic buildings, could lead to energy savings of 40% as well as reductions in energy and costs spent on maintenance.

In turn, the energy savings achieved by fulfilling the statutory energy efficiency and green building requirements described in this letter would help reduce local and national air pollution and the emission of harmful greenhouse gases. Most of the energy and electricity used by federal buildings come from fossil fuels, specifically natural gas, fuel oil, and coal. Coal-fired power plants are major sources of electricity for federal buildings, and air pollution from those plants presents significant public health and environmental risks. Over recent decades residents of urban areas have gained approximately 5 to 10 months in life expectancy as a result of a reduction in local air pollution from the burning of fossil fuels.

Reduced energy use by the federal government, leading to the decreased burning of fossil fuels, would also help cut emissions of greenhouse gases, including carbon dioxide, which cause adverse changes in the climate, including rising sea levels, and harm to public health. In Fiscal Year 2006, federal buildings’ energy use was responsible for greenhouse gas emissions totaling 42.8 million metric tons of CO₂ equivalent (including CO₂, methane, and nitrous oxide). Therefore, improving energy efficiency would reduce global warming and its resulting harm, especially to people who live on or near bodies of water, own coastal land, or enjoy seasonal activities. Although some energy efficiency requirements have been in place for years, the agencies still using the most energy tend also to be those that have shown the least reduction

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39 FEMP, DOE, ANNUAL REPORT TO CONGRESS ON FEDERAL GOVERNMENT ENERGY MANAGEMENT AND CONSERVATION PROGRAMS FISCAL YEAR 2006, at 1 (Nov. 26, 2008) (“FEMP FY 06 ANNUAL REPORT”).
40 Id. at 2.
41 NREL 06 REPORT, NREL/TP-620-39684, at 2-7.
44 FEMP FY 06 ANNUAL REPORT at 3 fig. 1.
48 FEMP FY 06 ANNUAL REPORT at 14 tbl. 2.
in both energy use and greenhouse gas emissions per million gross square foot of their facility space in recent years.49

Increasing federal building energy efficiency would have the added benefit of helping to reduce demand for coal from devastating mountaintop removal mining in the Appalachian Region. This type of mining provides coal for many power plants in the Eastern United States, including those serving federal buildings. Mountaintop removal mining wreaks havoc on the environment of the local region due to damage caused to the waters, land, wildlife, forests, and communities – including the permanent loss of the surface of the mountains and the destruction of streams by filling valleys with waste. Ironically, the mining and processing of this coal also use an exorbitant amount of electricity, making this an inefficient energy source even before the coal reaches the power plant.

Beyond the environmental and health benefits, energy efficiency has significant potential to save the federal government funds. Annually, energy costs the federal government $17.7 billion, representing 0.7% of total annual federal expenditures.50 Of this total, $6.4 billion was spent to purchase energy for federal buildings.51 By failing to perform their statutory duties, DOE and GSA waste taxpayer money which is needed to address other pressing concerns. For example, the revision of the energy efficiency standards promulgated by DOE in 2007 was projected to save taxpayers $776 million dollars over the course of ten years, to avoid consumption of more than 40 trillion British thermal units of energy, and to reduce carbon dioxide emissions by an estimated 2 million metric tons.52

Due to its level of energy consumption, the federal government also has a significant impact on the markets for energy and energy-efficient products and services. The less energy the federal government buys, the more the local energy market has available to meet peak demand for other energy consumers. Thus, compliance with the requirements discussed in this letter will help to limit energy prices, particularly in communities where federal buildings are significant energy users. Moreover, by purchasing energy-efficient products and services, the federal government helps to expand the market for these items. Its large purchases can help manufacturers develop the scale of operations needed to reduce prices for the average commercial or individual consumer. For instance, the federal solar energy requirement was enacted in order “[t]o accelerate the growth of a commercially viable photovoltaic industry to make this energy system available to the general public as an option which can reduce the national consumption of fossil fuel.”53 The federal government’s role as a consumer of efficient products and services also helps to increase the public availability of information regarding these products and services.

49 Id. at 12, 14-16 (tbls. 1-3) (comparing energy use and reductions by DOD, USPS, DOE, VA, GSA, DOJ).
50 FEMP FY 06 ANNUAL REPORT at 1.
51 Id. at 4 fig. 2.
Therefore, by fulfilling the mandates discussed in this letter, DOE and GSA not only will increase the federal government’s use of renewable energy and energy-efficient products and services, but also will help to advance energy efficiency in the private sector and the state and local public sectors as well. Many consumers wish to learn more about or to purchase energy-efficient products and services, such as lighting, geothermal heat pumps, solar hot water heaters, and renewable energy systems, and to reduce their own energy costs and carbon footprint. They have a personal interest in ensuring that the federal government fulfills its mandates, expands market opportunities, and helps bring prices down for these commodities. Some states are leading on energy efficiency, but many look to the federal government on energy policy. For these reasons, the federal government’s fulfillment of the energy efficiency requirements will have a valuable impact even beyond the immediate benefits of reduced energy consumption and air pollution.

IV. Next Steps to Achieve National Progress through Efficiency of Federal Buildings

We appreciate your recognition that energy efficiency must be an immediate priority for the administration as well as your intention to implement transformative solutions to address climate change. We applaud the attention that the President has given to this issue, including his statement in his Inaugural Address that “the ways we use energy . . . threaten our planet.” Prompt attention to energy efficiency in federal government buildings will advance vital goals for our nation, including the urgent reduction of greenhouse gas emissions to prevent and mitigate climate change and its harmful effects. Because the federal government is the nation’s top energy consumer, and because federal buildings are the most visible users of this energy, they present a vital opportunity for the federal government to lead by example on energy efficiency while simultaneously achieving immediate savings on our national energy costs.

We would like to discuss with you the opportunities for action on federal buildings which are overdue as outlined in this letter. We welcome your staff to contact Emma Cheuse at (202) 667-4500 ext. 224. Thank you for your time and consideration.

Respectfully yours,

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