EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

August 12, 2010

Mr. Cyrus Nasseri
U.S. Department of Energy
Federal Energy Management Program
Mailstop EE-2L
1000 Independence Avenue, SW
Washington, DC 20585–0121
Cyrus.Nasseri@ee.doe.gov

Via E-mail and eRulemaking Portal

Re: Notice of proposed rulemaking, Energy Efficiency and Sustainable Design Standards for New Federal Buildings, 75 Fed. Reg. 29,933 (May 28, 2010)

Docket No. EE-RM/STD-02-112
RIN 1904-AC13

Earthjustice respectfully submits the following comments on behalf of Natural Resources Defense Council, the Sierra Club, the D.C. Environmental Network, and Public Citizen. For the benefit of their members and the public, each of these organizations shares a common interest in ensuring that each agency in the Federal government takes prompt action to advance energy efficiency and reduce both its local environmental footprint and its contribution to global warming. Department of Energy ("DOE") leadership, guidance, and regulatory action, including the proposed rules addressed in these comments, are essential to this effort. In these comments, part I discusses the importance of improving the energy efficiency and sustainability of Federal buildings through completion of the above-described proposed rule and all related building standards and requirements without further delay. Then, in part II, we provide specific comments regarding certain elements of the proposed rule for consideration by DOE. We appreciate your consideration of these comments and would welcome further information from DOE regarding the regulatory actions discussed herein.

I. DOE Must Finalize the Rule and All Other Unmet Statutory Duties Related to the Energy Efficiency and Climate Impact of Federal Buildings Without Further Delay.

A. Our nation needs energy-efficient and sustainable Federal buildings.

It is urgent for Federal agencies to reduce the amount of energy that their buildings use and to lessen their buildings' impact on global warming. Doing so will help restore our nation's

1625 MASSACHUSETTS AVENUE NW SUITE 702 WASHINGTON, DC 20036
T: 202.667.4500 F: 202.667.2356 E: dcoffice@earthjustice.org W: www.earthjustice.org

economy and protect our environment. *See, e.g.*, 42 U.S.C. § 6831 (Congressional findings and purposes); *id.* § 8251 (purpose of Federal Energy Management Program); *id.* § 7112(2), (4), (13) (DOE purposes). Improving energy efficiency in Federal buildings will 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. Most importantly, leadership by the Federal government to improve the energy efficiency and sustainability of Federal buildings will serve these goals and help drive the market for and expand the construction of energy-efficient buildings in the private sector. To achieve these goals, Federal law requires all agencies to ensure the energy efficiency and sustainability of all Federal buildings, and also directs the Department of Energy ("DOE") to provide regulatory requirements and guidance for agency action. These mandates are codified in the Energy Conservation and Production Act ("ECPA"), as amended by the Energy Policy Act of 2005 ("EPACT") and the Energy Independence and Security Act of 2007 ("EISA"). 42 U.S.C. § 6834. Additional requirements are set forth in the National Energy Conservation Policy Act ("NECPA"), as amended. *Id.* § 8253.

Federal buildings offer a unique opportunity for the Federal government to reduce energy use and serve as an example for states, local governments, and citizens. Often located in the town square, the 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. Americans go to Federal buildings to 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. Wherever Federal employees and contractors work in Federal buildings around the nation to serve the needs of Americans, taxpayers pay for the energy used.

The Federal government is the nation's largest energy user. The use of energy by Federal buildings represents 5% of commercial-building energy consumption in the United States.[1] Of all energy consumed by the Federal government, nearly 40% is used by Federal buildings.[2] The following five agencies consume 90 percent of all Federal building energy use: the Department of Defense (60.4 %), Department of Energy (7.2 %), Department of Veterans Affairs (6.7 %), U.S. Postal Service (6.4 %), and the General Services Administration (4.3 %) (which manages buildings used by most other agencies).[3] The top energy customers of GSA building services include the Department of Justice, Department of Homeland Security, Federal Judiciary, and Department of Treasury.

---

[1] NAT'L RENEWABLE ENERGY LAB., PROJECTED BENEFITS OF FEDERAL ENERGY EFFICIENCY AND RENEWABLE ENERGY PROGRAMS, FY 2007 BUDGET REQUEST, NREL/TP-620-39684, at 2-7 (Mar. 2006), http://www.nrel.gov/docs/fy06osti/39684.pdf.

[2] FEMP, DOE, ANNUAL REPORT TO CONGRESS ON FEDERAL GOVERNMENT ENERGY MANAGEMENT AND CONSERVATION PROGRAMS FISCAL YEAR 2006, at 2 (Nov. 26, 2008), http://www1.eere.energy.gov/femp/pdfs/annrep06.pdf.

[3] OFC. OF THE FED. ENVTL. EXECUTIVE, THE FEDERAL COMMITMENT TO GREEN BUILDING: EXPERIENCES AND EXPECTATIONS 13 & tbl. 1 (2010), http://www.epa.gov/greenbuilding/pdf/2010_fed_gb_report.pdf.

Reducing the use of fossil-fuel-based energy cuts the amount of greenhouse gas pollution going into the atmosphere and lessens the Federal government's contribution to global warming. It also decreases the amount of local air pollution that harms the health of communities near Federal buildings and the sources that supply them with energy. The less energy the Federal government buys, the more the local energy market has available to meet peak demand for other energy consumers.

The Federal government's actions also can help transform the market for energy and energy-efficient products. Energy efficiency upgrades to these buildings are likely to rely on local businesses and help develop the local market for energy efficiency products, systems, and services. When public buildings install new lighting, or heating and cooling equipment, whether a geothermal heating unit or solar water heaters, many people learn about and benefit from this locally – adding value beyond the savings for U.S. taxpayers. Federal agencies' large purchases can help manufacturers develop the scale of operations needed to reduce prices for the average commercial or individual consumer. 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.

B. DOE should complete this rulemaking promptly.

For these reasons, with this rulemaking DOE is taking a positive first step by recognizing the need to perform a series of important actions that the prior administration failed to take. Existing statutory requirements direct DOE to complete the instant rulemaking expeditiously. The regulatory duties to promulgate sustainable design standards that meet certain criteria were initially enacted in EPACT, 42 U.S.C. § 6834(a)(3)(A)(i)(II) (establishing a deadline of Aug. 8, 2006), and then renewed, and strengthened, in EISA, which also added the requirement for DOE to identify a certification system and level for green buildings, *id.* § 6834(a)(3)(D)(i)(III) (establishing a deadline of Dec. 19, 2008). The law also requires DOE to issue building standards that ensure the use of water conservation technologies, *id.* § 6834(a)(3)(A)(ii); *id.* § 6834(a)(3)(D)(vii), and the use of solar water heaters, *id.* § 6834(a)(3)(A)(iii), in Federal buildings. As the deadlines for all of these actions have now passed, DOE must finalize these requirements to come into compliance with the law.

Further, DOE must complete the instant rulemaking expeditiously, because it would incorporate into Federal regulatory requirements important principles that are long overdue for Federal buildings. For example, it is vital that agencies include energy efficiency as a core priority in deciding how to select the sites for Federal buildings. This applies both to orienting the building in such a way as to use the least amount of energy for lighting, heating, and cooling and to prioritizing the siting of buildings in central areas well-served by public transit. The latter aspects of these requirements are essential to reduce the indirect agency greenhouse gas emissions related to the building's use and to make the building more accessible for Federal employees and visitors. The inclusion of day lighting and automatic dimming requirements in the proposed rule is also an important step to improve the efficiency of Federal buildings. Each

of these requirements will save energy, improve the health and welfare of Federal employees and government visitors, and save taxpayer money.

C. It is also urgent for DOE to fulfill all related energy efficiency and climate duties for Federal buildings.

DOE must take all other related and legally required actions to improve the energy efficiency and sustainability of Federal buildings. DOE needs to fulfill all of these overdue requirements to ensure that the Federal government will make measurable, verifiable reductions both in energy use and in the government's global warming impact. Further delay would be neither lawful nor appropriate, and we therefore urge DOE to act quickly to complete the following requirements.

1. DOE must promulgate the fossil-fuel reduction rule promptly.

EISA directs DOE to promulgate Federal building energy efficiency performance standards that require Federal agencies to ensure that all new Federal buildings and Federal buildings undergoing major renovations meet specific reduction levels for the amount of fossil fuel-generated energy that they consume. In particular, all new buildings and building renovations must be designed to ensure that their fossil fuel-generated energy consumption is reduced by the following amounts (as compared to a similar building in FY 2003):

- 55% reduction by 2010.
- 65% by 2015.
- 80% by 2020.
- 90% by 2025.
- 100% by 2030.

42 U.S.C. § 6834(a)(3)(D)(i)(I). But, in the proposed rule, DOE states that "DOE will address the fossil fuel requirements of section 433 of EISA in a separate rulemaking." 75 Fed. Reg. at 29,934. DOE should not defer this rulemaking but should promulgate the fossil-fuel reduction rule in an expeditious manner. The rule was due by December 19, 2008, and further delay is both unlawful and inappropriate.[4]

Further, in Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (Oct. 5, 2009), the President has committed to reduce the *total* greenhouse gas emissions of the Federal government by 28% (from 2008 levels) by the year 2020.[5] Implementation of the fossil-fuel reduction rule for new Federal buildings and building

[4] Commenters note that the website of the Office of Management and Budget ("OMB") shows that OMB has been reviewing a rule on this subject since June 23, 2010. We appreciate DOE sending this rule to OMB and urge OMB to release it for prompt publication by DOE.

[5] *See* Council on Environmental Quality website, http://www.whitehouse.gov/administration/eop/ceq/initiatives/sustainability.

renovations is not only required by law but also will provide a useful method for the Federal government to begin to meet the E.O. 13514 requirements.

2. DOE must promptly complete a rulemaking to determine whether to update Federal building standards based on the most recent ASHRAE and IECC Standards.

The law directs DOE, not later than 1 year after the date of approval of each revision of the ASHRAE Standard or International Energy Conservation Code, to update Federal building energy efficiency standards to reflect the amendment, as appropriate. 42 U.S.C. § 6834(a)(3)(B). The most recent ASHRAE standard is 90.1-2007 and the most recent ICC energy code is 2009 IECC. DOE has missed the 1-year deadline to update the Federal building standards to reflect recent amendments to these standards. DOE must promulgate determinations under 42 U.S.C. § 6834(a)(3)(B) to decide whether the standards for new Federal buildings should be updated to reflect the amendments and to require the level of energy efficiency that these new codes achieve. In the proposed rule, DOE states that it intends to address these determinations in a separate rulemaking, 75 Fed. Reg. at 29,334, but further delay is neither lawful nor appropriate. Moreover, DOE's failure to update the building standards to reflect the new industry codes causes significant harm because, as discussed later, the proposed rule at hand applies outdated standards in determining the life-cycle cost-effectiveness of sustainable design elements. *See id.* at 29,942 (proposed 10 C.F.R. § 433.2).

3. DOE must finalize the regulatory guidelines required to assist all agencies in meeting energy efficiency and sustainability requirements under 42 U.S.C. §§ 6834 and 8253.

NECPA also requires DOE to issue guidelines for Federal agencies to achieve energy management and performance measures under 42 U.S.C. § 8253(f)(4)-(5). *See id.* § 8253(f)(6)(A)(ii). The proposed rule notes that DOE has issued certain guidelines under 42 U.S.C. § 8253(f)(2)-(3), 75 Fed. Reg. at 29,936, but does not recognize that the guidelines were incomplete, in that they left out guidelines for the implementation of identified energy and water efficiency measures and for follow-up on implemented measures, as required by 42 U.S.C. § 8253(f)(4)-(5). The cited guidelines themselves acknowledge that DOE has not yet fulfilled the requirements.[6] As with all other related overdue requirements, DOE must take prompt action. Further delay is both unlawful and inappropriate.

4. DOE must establish a web-based tracking system for agency energy data.

NECPA directs DOE to develop and deploy a web-based tracking system that will track, at a minimum: all covered existing Federal facilities; the status of meeting requirements to perform energy and water evaluations, implement energy and water efficiency measures, and follow-up to ensure that energy and water savings are measured and verified. 42 U.S.C. § 8253(f)(7)(B)(i). This system will allow DOE, Congress, other Federal agencies, and the public to

[6] *See* DOE/FEMP, Facility Energy Management Guidelines and Criteria for Energy and Water Evaluations in Covered Facilities 1-2 (2008), http://www1.eere.energy.gov/femp/pdfs/eisa_s432_guidelines.pdf.

track whether each agency is satisfying the energy conservation and design standards for its buildings required by 42 U.S.C. § 8253(a)(1). *Id.* § 8253(f)(7)(C) (mandating that DOE "shall make the web-based tracking system . . . available to Congress, other Federal agencies, and the public through the Internet"). DOE has not yet created this web-based tracking system or made it publicly available on the Internet. This system is needed to create accountability and promote agency compliance with 42 U.S.C. §§ 8253 and 6834.

Related to this requirement, DOE also must select or develop a building energy use benchmarking system to assess agency compliance and issue guidance regarding the system. 42 U.S.C. § 8253(f)(8). This legal requirement also remains overdue and it would be efficient for DOE to fulfill it at the same time as promulgating the other needed regulatory actions and creating the web-based tracking system.

DOE must finalize the web-based tracking system and benchmarking system promptly as any further delay is both unlawful and inappropriate.

In addition, DOE has a related responsibility under Executive Order 13514 to develop and provide GHG accounting and reporting capability and procedures that are compatible with other Federal agency reporting systems, by October 5, 2010. E.O. 13514 § 9. It would be efficient for reporting agencies and the public for DOE to finalize the statutorily required web-based energy use tracking system and incorporate the GHG accounting requirements of E.O. 13514 into this system. Like NECPA, section 1 of E.O. 13514 also establishes public transparency as a priority. The public needs to have basic information about whether or not agencies are fulfilling energy efficiency requirements for buildings, and whether they are appropriately saving taxpayer dollars, in a timely way and an easily accessible and understandable format.

II. <u>In Finalizing This Rule, DOE Should Incorporate the Following Comments.</u>

A. DOE must not limit the applicability of EISA requirements.

Tracing the evolution of ECPA's requirements for the application of sustainable design principles to new Federal buildings enables a clearer understanding of DOE's mandate. EPACT commanded DOE to establish standards requiring the application of sustainable design principles to the siting, design, and construction of all new and replacement Federal buildings, if such standards were life-cycle cost effective:

> (A) Not later than 1 year after August 8, 2005, [DOE] shall establish, by rule, revised Federal building energy efficiency performance standards that require that—
>
> (i) if life-cycle cost-effective for new Federal buildings—
>
> . . .

> (II) sustainable design principles are applied to the siting, design, and construction of all new and replacement buildings.

42 U.S.C. § 6834(a)(3)(A). When DOE failed to meet this statutory deadline, Congress added an additional requirement in the Energy Independence and Security Act ("EISA") in 2007. EISA left in place the EPACT provision regarding sustainable design principles, but added a further requirement for DOE to promulgate standards mandating the application of such principles to a defined group of Federal buildings without consideration of life-cycle cost effectiveness:

> (D) Not later than [December 19, 2008], [DOE] shall establish, by rule, revised Federal building energy efficiency performance standards that require that:
>
> (i) For new Federal buildings and Federal buildings undergoing major renovations, with respect to which the Administrator of General Services is required to transmit a prospectus to Congress under [40 U.S.C. § 3307], in the case of public buildings (as defined in [40 U.S.C. § 3301]), or of at least $2,500,000 in costs adjusted annually for inflation for other buildings.
>
> . . .
>
> (III) Sustainable design principles shall be applied to the siting, design, and construction of such buildings. . . .

42 U.S.C. § 6834(a)(3)(D). In promulgating sustainable design principles for application to Federal buildings, DOE must obey the statutory language with regard to both the *scope* of Federal buildings subject to the two statutory commands and the *inapplicability* of cost considerations as a brake on the sustainable design requirements for buildings covered by the EISA language. The proposed rule has failed to do this in several important respects.

1. EISA requires that DOE apply sustainable design principles to *all* new Federal buildings.

DOE's proposed rule unlawfully limits the scope of EISA. DOE has proposed to apply to *both* renovations *and* new Federal buildings the limiting criteria in 42 U.S.C. § 6834(a)(3)(D)(i) that actually follow and describe *just* the term "major renovations." *See* 75 Fed. Reg. at 29,934. However, the plain language of ECPA supports a reading of this clause that would apply the sustainable design principles to *all* new Federal buildings, without limitation, as well as to such major renovations as (1) occur in public buildings for which a prospectus is required, or (2) cost at least $2.5 million. The logic of this interpretation is apparent if one focuses on how the second of these criteria applies if the first is not met. In that case, sustainable design principles must be applied to "new Federal buildings and Federal buildings undergoing major renovations . . . of at least $2,500,000 in costs." 42 U.S.C. § 6834(a)(3)(D)(i). While the phrase

"major renovations of at least $2,500,000 in costs" flows naturally, the application of the cost threshold to new buildings reveals the implausibility of DOE's proposed interpretation: "new Federal buildings of at least $2,500,000 in costs." While the "construction" of a new building might commonly be said to "cost" a particular amount, it is unusual to speak of a building itself as costing some amount. Thus, a logical reading of the statute would apply the limiting criteria to renovations only.

It is appropriate to treat the EISA provision as superseding and strengthening the EPACT provision. The fact that Congress did not delete the EPACT provision mandating the application of sustainable design principles to all new Federal buildings if life-cycle cost-effective does not argue in favor of the limited interpretation that DOE has advanced in this proposed rule. Retention of the EPACT language simply maintained DOE's obligation to implement sustainable design principles prior to December 2008, while allowing Congress to establish additional requirements with a new deadline. EISA specifically called for "revised" standards implementing sustainable design principles in new and renovated Federal buildings, and omitted the life-cycle cost-effective requirement. This makes clear that the EISA-required standards should *update* and *replace* the EPACT standards. 42 U.S.C. § 6834(a)(3)(D).

Even assuming arguendo that DOE's interpretation of ECPA, which divides new Federal buildings into two groups – those for which sustainable design principles apply only if life-cycle cost effective and those meeting the criteria under 42 U.S.C. § 6834(a)(3)(D)(i), to which the cost effectiveness limitation does not apply – were lawful, it would not follow that the cost effectiveness determination for new Federal buildings must be made on a building-by-building basis. Had Congress intended this result, it could have required that sustainable design principles be applied "to the extent life-cycle cost effective." Instead, the plain language of 42 U.S.C. § 6834(a)(3)(A) mandates that DOE establish "revised Federal building energy efficiency performance standards" that require that "sustainable design principles are applied to the siting, design, and construction of *all* new and replacement buildings." *Id.* § 6834(a)(3)(A)(i)(II) (emphasis added). The statute provides an exception only in the event that DOE determines such principles are not "life-cycle cost-effective for new Federal buildings." *Id.* § 6834(a)(3)(A)(i). In other words, DOE would have an affirmative responsibility to determine, as a general matter, the cost effectiveness of applying sustainable design principles to the siting, design, and construction of new Federal buildings. It cannot and should not defer this determination to an agency at the building-specific stage.

If DOE applies the life-cycle cost-effectiveness limitation in any way to new Federal buildings, then DOE should follow Congress's intention made plain in the statute and, at minimum, establish a presumption that sustainable design principles are life-cycle cost-effective. If an agency encounters unusual life-cycle cost impacts affecting a particular new building or renovation, DOE should require the agency to request a modification or phased-in process for the rule's requirements, if the agency meets specific criteria to justify the modification. An appropriate method for this process might be the example provided at 42

U.S.C. § 6834(a)(3)(D)(i)(II) for a petition for modification of the fossil-fuel reduction rule, in limited circumstances.

2. EISA requires that DOE ensure the applicability of sustainable design principles to *all* leased buildings built for Federal use.

As amended by EISA, ECPA defines the term "Federal building" as including "buildings built for the purpose of being leased by a Federal agency." 42 U.S.C. § 6832(6). In the proposed rule, DOE has sought comment on the possibility of further limiting the scope of leased buildings subject to the sustainable design principles to those buildings "in which a Federal agency has significant control over the design of the building (e.g., 'lease-constructs')." 75 Fed. Reg. at 29,934. This suggested limitation to the scope of buildings subject to sustainable design principles would violate ECPA, as it would exclude from coverage buildings which meet the statutory criteria of being built for the purpose of being leased by a Federal agency. Such an exclusion would also complicate compliance determinations by necessitating an inquiry into the extent of control exercised by the Federal agency over building design. It could also permit agencies to avoid sustainable design requirements by taking an "arms-length" approach to specifying building parameters, a scenario leading to buildings that not only fail to apply the sustainability principles, but also fail to meet the operational needs of the agency because they were designed without adequate agency input.

3. EISA does not allow DOE to establish a practicability exemption from the requirements to apply sustainable design principles or water conservation technologies.

a. DOE may not create unlawful practicability exemptions to EISA.

In the proposed rule, DOE has asserted that Federal agencies need to apply sustainable design principles only "to the extent practicable." ECPA contains no such limitation, and DOE has provided no legal justification for this interpretation, which is contrary to the statute's plain language. Even if DOE were authorized to provide such exemptions, the breadth of those it has proposed will effectively nullify ECPA's command for the application of sustainable design principles. Instead of adding a loophole for agencies to escape the plain statutory requirements, DOE should respect Congress's decision to waive both life-cycle cost effectiveness as well as any other "practicability" concerns as a prerequisite to the applicability of sustainable design principles.

DOE may not lawfully inject a requirement that sustainable design principles must be applied only "to the extent practicable." When Congress has intended to include a practicability limitation, it has explicitly stated such limitation in the statute. For example, Congress has authorized DOE to establish a narrow practicability limitation for the fossil-fuel reduction rule. As ECPA states:

> Upon petition by an agency subject to this subparagraph, the Secretary may adjust the applicable numeric requirement under subclause (I) downward with respect to a specific building, *if* the head of the agency designing the building certifies in writing that meeting such requirement would be *technically impracticable* in light of the agency's *specified functional needs for that building and the Secretary concurs* with the agency's conclusion. This subclause shall not apply to the General Services Administration.

42 U.S.C. § 6834(a)(3)(D)(i)(II) (emphasis added). Similarly, in NECPA, Congress explicitly provided a practicability limitation for other requirements applicable to Federal buildings, but it chose not to do so with regard to the sustainable design principles at issue here. *See id.* § 8253(c)(1)(A)(i). As the U.S. Court of Appeals for the D.C. Circuit has reasoned in a similar context, when a statute requires a cost-benefit analysis for one determination, but not another, the implication is that the omission of such an economic analysis is purposeful. *See City of Portland v. EPA*, 507 F.3d 706, 712 (D.C. Cir. 2007) ("when Congress wanted EPA to undertake cost-benefit analysis, it said so expressly"). Therefore, DOE is not authorized to limit the application of sustainable design principles based on practicability.

DOE also has proposed to add an unlawful practicability loophole into the proposed rules on water conservation technologies, in proposed 10 C.F.R. §§ 433.7 and 435.7. The limitation "to the extent practicable" does not appear in the statutory language. DOE has no authority to add this blanket loophole, either, and provides no rational justification for doing so.

b. If DOE considers practicability at all, it must do so in a limited way that is consistent with EISA and the APA.

Even if DOE had stated a reasoned explanation for its concern about the practicability of applying sustainable design principles or water conservation technologies in specific instances, an appropriate way to address such a concern would be to provide a process through which a Federal agency could apply for a rare, narrowly constrained modification to the rules. The fossil-fuel reduction rule allows DOE to use such a petition process in limited circumstances, as discussed above, 42 U.S.C. § 6834(a)(3)(D)(i)(II). DOE should not allow agencies to exempt buildings from the rule requirements without, at minimum, following a similar process. The appropriate process for a modification of the rule requirements, if any, would be a determination by *DOE*, not the agency itself, that the rule may be modified as applied to a particular building.

Even if DOE were to review proposed exemptions of buildings due to practicability concerns through a process like the one outlined in 42 U.S.C. § 6834(a)(3)(D)(i)(II), the Department's proposed criteria are arbitrary and capricious under ECPA and the Administrative Procedure Act, 5 U.S.C. § 706. DOE's proposed regulations state that the buildings referenced in 42 U.S.C. § 6834(a)(3)(D)(i) need only apply sustainable design

principles "to the extent practicable," which the Department has proposed to define as meaning "wherever feasible, taking into consideration health and life safety, key project design and function objectives, agency mission, product or material availability, net increases in life cycle cost (if significant), and total funding available." 75 Fed. Reg. at 29,942 (proposed 10 C.F.R. § 433.2); *id.* at 29,945 (proposed 10 C.F.R. § 435.2). The effect of these proposed exemptions is to stand Congress' incrementally stronger requirements for Federal buildings on their head. ECPA required a cost effectiveness justification for the initial implementation of sustainable design principles as required by EPACT, but Congress chose to proceed without such limitations in enacting EISA.

Even accepting DOE's artificially constrained interpretation of the scope of buildings that fall within 42 U.S.C. § 6834(a)(3)(D)(i), the rationale that animated Congress is readily apparent: the largest, most costly, and most visible building projects are too important to allow the implementation of sustainable design principles (and the projects themselves) to become bogged down in the exercise of projecting life-cycle cost effectiveness. Congress lifted that requirement for such buildings, but DOE's proposed regulations have made it even easier for such buildings to avoid the application of sustainable design principles.

In the preamble to the proposed rule, DOE elaborated on its proposed regulations by suggesting that the following situations may exceed the limits of practicability:

- full implementation would prevent the building or facility from fulfilling a key design or function objective;
- the necessary products or materials cannot be commercially procured in a timely fashion;
- the net increases in total project life cycle costs are very large; or
- initial funding required to integrate features to comply with this rule exceeds 3 percent of total first costs.

See 75 Fed. Reg. at 29,935. As demonstrated below, each of these criteria has significant flaws and would create major loopholes in the underlying requirements if finalized in their proposed form.

DOE has not suggested what may constitute a "key design or function objective," and more specificity is required. Any such key objectives must be identified at the outset of the project, prior to the consideration of individual sustainable design elements. Otherwise, agencies could avoid implementing sustainable design principles by identifying "key design or function objectives" on the fly.

More specificity is also necessary to flesh out the proposed exemption that would apply when products or materials cannot be quickly procured. For example, while it may in some instances take additional time to obtain materials meeting the Department's sustainable design principles, such materials may not be immediately needed to continue making progress

towards the completion of construction or renovation. Therefore, the Department must limit this exemption's applicability to instances when the failure to timely procure such products or materials would significantly delay the completion of the project.

The third criteria would reinject life-cycle cost considerations in direct opposition to ECPA's clear instruction to omit such considerations for the EISA-covered buildings. This would be plainly contrary to the statute for the reasons discussed in section II.A.1 above.

Finally, the three percent of initial costs criteria would be extremely limiting to the proposed rule's requirements. For example, it could nullify the proposed requirement to locate Federal buildings at sites well-served by transit. As a Federal Transit Administration study of real estate values in the Washington, D.C. area, found, with a mere 1000 foot (approximately three city block) reduction in the distance to a mass transit stop, the value of commercial property increased by approximately two percent.[7] DOE's three percent initial cost increase criterion would justify the continued location of Federal buildings in exurban locations where property values are low and access to transit is nonexistent. Aside from that, three percent is also an arbitrary number for which DOE has presented no rational justification.

B. For those buildings where DOE asserts that a life-cycle cost-effectiveness limitation is allowed, the life-cycle cost-effectiveness analysis required must be consistent with ECPA.

1. DOE must require consideration of the value of environmental benefits in life-cycle cost effectiveness analyses.

Because DOE has asserted that the application of sustainable design principles to certain Federal buildings hinges on the life-cycle cost effectiveness of those measures, DOE must monetize the value of environmental benefits and incorporate them into the economic analyses of sustainable design measures. A failure to do so would be arbitrary and capricious. In the proposed rule, DOE admitted that it "has not attempted to quantify externalities related to sustainable design, such as the value of wetlands preservation," or of reduced greenhouse gas emissions, but stated that the Department "welcomes public comments on whether DOE should attempt to quantify externalities for these types of environmental benefits." 75 Fed. Reg. at 29,937. However, agencies are likely to have difficulty in weighing the full economic impact, or value, of applying sustainable design principles to Federal buildings unless they actually calculate the economic dimension of environmental benefits.

Failure to assign an economic value to environmental benefits when undertaking a required economic analysis of potential agency action is tantamount to valuing those environmental benefits at zero, an approach that the United States Court of Appeals for the Ninth Circuit has determined is arbitrary and capricious. *Center for Biological Diversity v.*

[7] OFFICE OF POLICY DEVELOPMENT, FEDERAL TRANSIT ADMINISTRATION, TRANSIT BENEFITS 2000 WORKING PAPERS: A PUBLIC CHOICE POLICY ANALYSIS 112 (2000).

NHTSA, 538 F.3d 1172, 1203 (9th Cir. 2008). As in the rulemaking at issue in *Center for Biological Diversity*, any life-cycle cost analysis of the application of sustainable design principles already involves the monetization of several uncertain economic outcomes, such as projections of future maintenance costs and the future cost of energy sources. Exclusion of environmental benefits from the life-cycle cost effectiveness analysis on the basis of alleged uncertainty as to their precise measure would therefore be arbitrary and capricious. *See id.* at 1202 (NHTSA's failure to monetize CO_2 benefits is arbitrary and capricious in light of the agency's monetization of other uncertain benefits). Moreover, we note that OMB guidance provides that agencies are to monetize costs and benefits whenever possible (OMB Circular A-4 at 27 (2003).

2. DOE should provide appropriate guidance on the minimum acceptable "life-cycle" for Federal buildings.

Where DOE has determined to use a life-cycle cost effectiveness, DOE has not defined or proposed a specific, acceptable "life cycle" for Federal buildings, or types of buildings. Without this, agencies are likely to have difficulty applying DOE's proposed rules. At minimum, DOE should consider and address a reasonable range of acceptable life cycles for basic categories of Federal buildings. Moreover, DOE should make clear that agencies may not avoid applying sustainable design principles by projecting unrealistically short life cycles. Further elaboration of how agencies should interpret this factor would make it more likely that agencies will apply the proposed rules in a consistent manner, and will assist them in meeting their statutory requirements to reduce energy use.

3. DOE should update the baseline for "life-cycle cost-effectiveness."

Under the new proposed rules for Federal commercial and multi-family residential buildings, 10 C.F.R. Part 433, DOE proposes to define "life-cycle cost-effective" by comparison with a "baseline building" defined in 10 C.F.R. § 433.2, which refers to an outdated, less efficient standard. 75 Fed. Reg. at 29,942. The existing definition of "baseline building" contained in 10 C.F.R. § 433.2 is "a building that is otherwise identical to the proposed building but is designed to meet but not exceed the energy efficiency specifications of ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings, January 2004 (incorporated by reference, see § 433.3)." Rather than incorporating that outdated baseline, DOE should update the baseline building standard, as already discussed, and in the proposed rule DOE should define the baseline building as "a building that is otherwise identical to the proposed building but is designed to meet but not exceed the energy efficiency specifications of the most recently published ANSI/ASHRAE/IESNA Standard."

The same problem exists for low-rise residential buildings in Part 435, for which DOE proposes to define "life-cycle cost-effective" using an outdated baseline. 75 Fed. Reg. at 29,945 (proposing 10 C.F.R. § 435.2). For these buildings, "baseline building" is defined as "a new Federal low-rise residential building that is otherwise identical to the proposed building but is designed to meet but not exceed the energy efficiency specifications in the ICC International

Energy Conservation Code, 2004 Supplement Edition, January 2005 (incorporated by reference, see § 435.3)." 10 C.F.R. § 435.2. Rather than incorporating that inefficient baseline, DOE should update the baseline building standard, as already discussed, and should define the baseline building as "a building that is otherwise identical to the proposed building but is designed to meet but not exceed the energy efficiency specifications in the most recently published ICC International Energy Conservation Code."

C. DOE Should Require Reporting and Review of Energy Use Data under Section 6834.

We support DOE's proposal to require evaluation/assessment and verification measures for green-certified buildings. *See* 75 Fed. Reg. at 29,939. This is an essential component and DOE should include it. The public needs to know that certification has meaning. Evaluation and verification will also drive valuable market changes to further advance sustainable buildings in the private sector. If a building does not satisfy the energy use requirements within a year after its completion, DOE should require appropriate additional steps to meet the energy use requirements to be designed and reported to DOE within a reasonable time period, such as within 1 year after a determination of non-compliance, and then to be implemented within an appropriate time period thereafter, such as no later than 2 years after the additional steps are submitted to DOE for approval. There can be no justification for allowing a building to retain its certification if it does not meet the requirements. DOE must ensure that certification is removed for any building that does not meet the criteria within a reasonable time, or the certification of other buildings that *do* meet the standard will become meaningless.

DOE must include in this rule a requirement for Federal agencies to collect actual energy use data from all Federal buildings, not just green-certified buildings. In the proposed rule, DOE stated that it is "considering a requirement for Federal agencies to demonstrate that the energy use of a certified green building is consistent with the energy use targets identified under the green building certification program." 75 Fed. Reg. at 29,938. As discussed at the July 28, 2010 public meeting, DOE is also taking comment on whether "actual energy use of buildings designed to this code [should] be collected and reviewed" and "[i]f so, how should this data be used."

DOE must take a broader approach to satisfy its legal obligations. NECPA requires Federal agencies to report certain data to DOE for inclusion in FEMP's annual report and authorizes DOE to require reporting of "complete information on [each agency's] activities under this part." 42 U.S.C. § 8258(a). Collecting energy use data for all Federal buildings, including data demonstrating compliance with both 42 U.S.C. §§ 6834 and 8253, would ensure that DOE and all other agencies fulfill their duties to improve energy efficiency and reduce energy use and GHG emissions. Although 42 U.S.C. § 8258 does not refer specifically to ECPA requirements, 42 U.S.C. § 6834 explicitly authorizes DOE to collect building energy information under that section as well. *Id.* § 6834(a)(3)(C) (requiring agency to submit information on each building and a statement "in each report submitted by the Federal agency under section 8258(a)

of this title" to show compliance with 42 U.S.C. § 6834). This authorization enables DOE to collect all relevant information needed to verify agency compliance with 42 U.S.C. § 6834. It should do so as part of its annual FEMP reporting under 42 U.S.C. § 8258. These data should also be made publicly available as part of the web-based tracking system that DOE is required to create under 42 U.S.C. § 8253, as discussed earlier in these comments, and the GHG accounting portal that DOE is required to create under E.O. 13514.

D. DOE must design this and other Federal building rules to maximize reductions of energy and GHG emissions.

In this rulemaking and in all other actions to be taken under 42 U.S.C. §§ 6834 and 8253, DOE should ensure that its actions will direct agencies to maximize the reduction of energy use and the reduction in their consumption of fossil-fuel-based energy. For example, DOE should begin, in the instant rulemaking, by including the following requirements:

1. DOE should refer explicitly to and incorporate all of the requirements of 42 U.S.C. § 8253 into the regulations applicable to new Federal buildings.

The energy management and performance requirements of 42 U.S.C. § 8253 apply to all Federal buildings (with limited exclusions). First, by the year 2012, all Federal buildings must be metered and must use advanced meters or metering devices that provide data at least daily and that measure electricity consumption at least hourly. 42 U.S.C. § 8253(e)(1). DOE has issued guidelines to assist agencies in carrying out this requirement. However, in order for agencies to meet the 2012 deadline, all new Federal buildings should satisfy the metering requirement. If a new or renovated building does not fulfill the NECPA metering requirements, it should not be considered to be in compliance with the energy efficiency performance standards under 42 U.S.C. § 6834. A critical time to ensure that buildings meet the requirements of 42 U.S.C. § 8253 is at the design, construction, and commissioning stage. Incorporating 42 U.S.C. § 8253(e)(1) into the 42 U.S.C. § 6834 sustainable design requirements is thus both necessary and appropriate.

Second, each Federal agency must apply energy conservation and design measures so that the energy consumption per gross square foot of the Federal buildings of the agency in each fiscal year through 2015 is reduced, as compared to fiscal year 2003, by the following percentages:

- 15% by FY 2010.
- 18% by FY 2011.
- 21% by FY 2012.
- 24% by FY 2013.
- 27% by FY 2014.

42 U.S.C. § 8253(a)(1). DOE should adopt specific requirements to ensure that the rule at issue helps agencies achieve these targets for new and renovated Federal buildings. For example, DOE has proposed to require that Federal agencies establish performance specifications for "energy" as part of the comprehensive building design goals and commissioning requirements. *See* 75 Fed. Reg. at 29,942-43 (proposed 10 C.F.R. § 433.6(e)); *id.* at 29,946 (proposed 10 C.F.R. § 435.6(e)). It would be appropriate to direct agencies to set specifications for each new Federal building to ensure that its energy intensity level meets the energy intensity reduction requirements of 42 U.S.C. § 8253(a)(1), and to ensure that renovations help buildings to meet them. Similarly, DOE should incorporate the above requirements as minimum criteria for any green building certification system used under new 10 C.F.R. §§ 433.9 or 435.9. For example, DOE should require that the green building certification system include the above criteria for each of the relevant years in order to be eligible for use by the Federal government. Otherwise, a new Federal building might be built without consideration for the requirements it will need to meet under 42 U.S.C. § 8253. DOE should ensure that the 42 U.S.C. § 8253 energy intensity reduction requirements for all Federal buildings are incorporated into the regulations implementing 42 U.S.C. § 6834 to avoid this absurd result and assist agencies in meeting all related requirements for new Federal buildings and renovations.

2. DOE should also incorporate other related statutory requirements into the sustainability standards.

For example, EPACT requires that, of all electric energy consumed by the Federal Government, the following amounts come from renewable energy:

- Not less than 3% in fiscal years 2007-2009.
- Not less than 5% in fiscal years 2010-2012.
- Not least than 7.5% in fiscal year 2013 and each year thereafter.

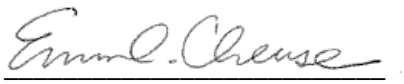
42 U.S.C. § 15852. E.O. 13514 and 13423 also include additional requirements for the use of renewable energy by Federal facilities to advance the creation of new renewable sources. In the proposed rule, DOE directs that "Federal agencies must implement renewable energy generation projects on agency property for agency use, when lifecycle cost effective." 75 Fed. Reg. at 29,943 (proposed 10 C.F.R. § 433.6(f)(1)); *id.* at 29,946 (proposed 10 C.F.R. § 435.6(f)(1)). But the final rule should go farther to implement the specific percentages required by EPACT. DOE should incorporate the renewable energy percentages into the sustainable design standards. If the agency cannot generate renewable energy on-site, DOE could include an alternative or phased-in method for agencies to meet this requirement, such as through the purchase of renewable energy certificates (RECs).

We urge DOE to exercise its authority to fully incorporate these and all other applicable related standards and requirements, both to fulfill its legal duties and to give agencies meaningful assistance and guidance in meeting all such requirements in a comprehensive manner.

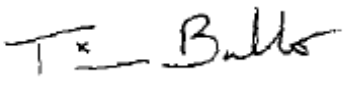
* * *

Thank you for your time and for the opportunity to comment on this proposed rule.

Sincerely,



Emma C. Cheuse
Earthjustice
1625 Massachusetts Ave., NW
Suite 702
Washington, DC 20036
(202) 667-4500 ext. 220
echeuse@earthjustice.org



Timothy D. Ballo
Earthjustice
1625 Massachusetts Ave., NW
Suite 702
Washington, DC 20036
(202) 667-4500 ext. 209
tballo@earthjustice.org