



**Comments of NRDC on Department of Energy Interim Final Rule:  
Energy Conservation for New Federal Commercial and  
Multi-Family High-Rise Residential Buildings and  
New Federal Low-Rise Residential Buildings**

Docket No. EE-RM/STD-02-112

David B. Goldstein, Ph.D.  
Natural Resources Defense Council

30 January 2007

**I. Introduction**

DOE's proposed rules represent an outrageous misinterpretation of the Energy Policy Act of 2005, taking a legislative requirement to establish standards that save at least 30% and turning it into a do-it-yourself exercise for architects, an exercise structured to guarantee that savings will be no more than 30%. DOE should revise this rule as soon as possible to establish explicit standards that comply with the clear and evident requirements of EAct 2005, Section 109.

**II. The Requirements of EAct**

Section 109 of the Energy Policy Act of 2005 was intended to assure that federal buildings meet substantially higher standards for energy efficiency than typical new buildings. Subsection (1) of Section 109 immediately replaced the obsolete energy code references with references to current model energy codes. But it goes on directly in subsection (2) to require that:

“the Secretary shall establish, by rule, revised building federal energy efficiency performance standards that require that –

(i) if lifecycle cost effective for new federal buildings –

(I) the buildings be designed to achieve energy consumption levels that are *at least* 30% below the levels established in the version of the ASHRAE standard or International Energy Conservation Code as appropriate, that is in effect as of the date of the enactment of this paragraph;...”(emphasis added)

The plain reading of this Section, which is so obvious that it is almost an absurdity to try to paraphrase it here, is that the Secretary is required to establish new federal building energy performance standards that save at least 30% compared to the reference national codes. An exception is provided in the case that DOE determines that the 30% minimum for the energy goal is not cost effective.

In other words, DOE has an affirmative responsibility to write a standard – or adopt one by reference – that achieves the required savings (assuming it is cost-effective, which ample evidence demonstrates that it is) of at least 30%.

The Published Rule does not do this. Instead, it establishes the standard *at the same level* as the model energy codes, which is what Subsection I has already done legislatively.

DOE then tries to pawn off its responsibility on to the building designer by asking the designer to not only determine whether they can build a building that saves 30%, but to have the flexibility to go to a lower level of savings if the architect determines that the standard is not cost effective.

This procedure is in blunt and obvious contradiction to the requirements of the law. Congress did not ask DOE to set a standard based on individual, building-by-building calculations of cost-effectiveness. It did require DOE to establish “revised building energy efficiency performance standards that require that... the buildings be designed to achieve energy consumption levels that are at least 30% below the levels [in the model codes].”

DOE’s Interim Rule is also in error because it attempts to read the words “at least” out of the legislation. There is nothing in DOE’s Interim Rule that attempts to find standards for federal buildings that save even 30.1%. This is in plain violation of the intent of Congress.

DOE’s Interim Rule is all the more surprising because the amount of work that would be needed to establish cost-effective standards that meet the explicit language as well as the intent of the law is minimal. Most of the effort has been made in documents that are already available, and indeed, are cited in the Interim Rule. The New Buildings Institute’s Advanced Buildings™ Benchmark, as noted in the Interim Rule, was intended to achieve a 30% reduction compared to the previous version of ASHRAE 90.1, and with minor technical adjustments could easily be amended to meet the goal of at least 30% savings. The Benchmark itself points out demonstrations of cost-effectiveness in which the provisions for most buildings have a payback period of 3 years or less, which is outstandingly cost-effective using the methodologies DOE recommends in the Interim Rule. So it is evident that minor improvements beyond this could achieve cost effectiveness. Similarly, ASHRAE’s “Advanced Energy Design Guide,” applicable for small office buildings and retail stores, also approaches achievement of the 30% savings goal, and could have been used as an additional resource by DOE staff or contractors attempting to develop a standard.

Section 1331 of EPACt establishes a tax deduction for buildings that meet a target of 50% savings. Federal buildings can make use of this deduction to cut government costs by assigning it to the architect in charge of the design. Why did DOE not require all federal buildings to meet this target? Or if 50% is seen as too difficult, why not set a minimum of 45% or 40%?

For residential buildings, one approach that would have been compliant with the law would have been even easier for DOE. The Department already provides a methodology for calculating compliance with the new homes tax credits, also enacted in EAct. This method requires 50% savings in heating and cooling energy compared to the model code referenced. It provides no prescriptive options for doing so. It would have been easy for DOE to require that federal buildings meet this 50% target using the methodology it has approved for tax credit compliance. If DOE suspected that this 50% level might fail the cost-effectiveness test, which NRDC finds dubious, since many builders are already taking advantage of the tax credit and would be profoundly unlikely to do so if it were not cost-effective for their customers, it could analyze whether the appropriate target would be 5% or 40% or 35% ...

What is so distressing about DOE's Interim Rule is that if Congress had intended each individual architect to check whether 30% savings were cost effective and if not, drop back to 25%, etc., as DOE has proposed, it could have written that itself. Evidently, the fact that Congress delegated the authority and responsibility to DOE to "establish, by Rule, revised building energy efficiency standards," meant that they intended something more sophisticated than what they could have done themselves.

Ironically, DOE's Interim rule validates Congress' decision in Subsection I to write the initial standards legislatively rather than through regulation; at least the result was what the legislation intended.

### **III. Conclusions**

EAct Section 109 requires DOE to promulgate new energy efficiency standards for federal buildings that save *at least* 30%. The Department has failed to do so. Instead, it has promulgated a procedure for each individual architect or building designer to follow in seeking energy savings that may be *as large as* 30%.

DOE has the affirmative obligation under Section 109 to do the serious analytical work that would establish actual federal building energy performance standards and to do so at a level that saves more than 30%. Given DOE's statutory requirement to "maximize energy conservation measures," DOE is obligated to set the percentage savings at the very highest level that is economically justifiable. This means that DOE must start its analysis at the 50% savings levels established for the tax incentives, both for commercial buildings and for residential buildings, and reduce stringency from this 50% savings only if 50% fails to be cost effective.

NRDC notes in conclusion the increasing tendency for Congress to adopt specifications that ought to be established through the regulatory system by DOE explicitly as part of legislation. This displays a profound distrust by Congress of DOE's competence at following the usual sort of legislative direction and relying on agency discretion and expertise to get it right. Unfortunately, this rule reinforces this skepticism. Regulating through legislation is not an example of good government. DOE should work, in this rule and others, to produce regulatory products that accomplish the intent of legislation and are compliant with the explicit requirements, instead of trying to rewrite the law.

Thank you for the opportunity to comment.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "David B. Goldstein". The signature is fluid and cursive, with a long horizontal stroke at the end.

David B. Goldstein, Ph.D.  
Energy Program Director  
[dgoldstein@nrdc.org](mailto:dgoldstein@nrdc.org)