TESTIMONY OF CHARLES HARAK, ESQ.
REGARDING DOE’S APPLIANCE EFFICIENCY STANDARD PROGRAM
Before the House Committee on Energy and Commerce
May 1, 2007

My name is Charles Harak. I am the Senior Attorney for the energy project at the National Consumer Law Center ("NCLC"). For most of my 30 years as a lawyer, I have worked on behalf of low-income consumers and consumer groups to help make their energy bills more affordable and to assist in the development and implementation of low-income energy efficiency programs. Prior to joining NCLC in 2001, I worked for the Massachusetts Attorney General’s office on various matters involving regulated electric and gas utilities as well as on automobile, health and life insurance matters. I also worked for many years at the Massachusetts Law Reform Institute on low-income energy and housing matters.

The primary purposes of my testimony are to underscore the importance to low-income consumers of adopting strong appliance efficiency standards, particularly for boilers and furnaces, and to highlight areas where I think the Department of Energy ("DOE") could do better in carrying out the Congressional mandates regarding those standards.

I. IMPORTANCE OF STANDARDS TO LOW-INCOME CONSUMERS

A. Energy Burdens on Low-Income Households

Low-income households in America struggle to pay their energy bills, as they do with all of their bills for necessities.\(^1\) Households eligible for the federal Low-Income Home Energy

\(^1\) The Census Bureau calculates that as of 2005, 12.7% of all American households were living below the federal poverty level. U.S. Census Bureau, Current Population Reports, P60-231, “Income, Poverty and Health Insurance Coverage in the United States: 2005” (U.S. G.P.O. 2006). Many experts in poverty analysis consider the defined poverty level too low. Many more households than the Census Bureau defines as living in poverty struggle to afford the basic necessities of life.
Assistance Program are projected to spend an average of $1750 on their home energy bills in 2007. Households that heat with propane or heating oil are projected to spend much higher amounts, between $2300 and $2700:²

<table>
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<tr>
<th>Primary heat fuel is &gt;&gt;&gt;</th>
<th>Natural gas</th>
<th>Propane</th>
<th>Heating Oil</th>
<th>Electricity</th>
<th>All (average)</th>
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<tr>
<td>Projected 07 cost is &gt;&gt;&gt;</td>
<td>$1,832</td>
<td>$2,311</td>
<td>$2,714</td>
<td>$1,344</td>
<td>$1,751</td>
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When energy bills are compared to household income, households living in poverty spend 25% of their total income on their energy bills.³

Heating costs can place particularly onerous burdens on low-income families. To choose my state, Massachusetts, as an example, the state heating oil association estimates that oil-heat customers need 800 to 900 gallons to get through the winter. Massachusetts heating oil prices averaged $2.40 per gallon this past winter, and oil-heat households spent an average of $2,000 on heating bills alone. Those who use natural gas for heat, the predominant heating fuel in most other regions of the country, paid somewhat less to keep their homes warm, depending on where they live, but those gas bills were still large and represented a very significant percentage of total household income.

**B. Large Potential for Energy Savings in Low-Income Households**

Investments in improving the energy efficiency of low-income housing clearly pay off. A recent study shows that low-income households whose homes have been weatherized spent $325 (gas-heated homes) to $350 (oil- or propane-heated homes) less for their annual heating

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bills than those which were not weatherized. Increasing the efficiency standards for residential furnaces and boilers can also yield significant savings, especially in low-income households where the typical system is, on average, older and far less likely to be performing even at its rated efficiency.

C. **Split Incentives (Owner - Tenant)**

It is important to keep in mind that low-income households are disproportionately renters, when thinking about standards for boilers, furnaces, and other household appliances and how they impact low-income households. Renters in most circumstances are prohibited from replacing large household appliances, such as furnaces, boilers and water heaters. Property owners almost always make the decisions as to when to replace a furnace or boiler, and what type of system to install. In the absence of rigorous appliance standards, the property owners will often install less expensive and less efficient appliances because the tenants, not the owners, bear the higher energy costs of operating less efficient appliances.

Among low-income households, 60% to 70% are renters, while among households at or above the poverty level the numbers are almost reversed: approximately 70% of non-poor households own their own homes. There is no question that low-income households are disproportionately represented in rental housing. According to the 2000 U.S. Census, median income in owner occupied housing was $51,323, almost double the median income in rental housing of $27,362. According to DOE’s 2001 Residential Energy Consumption Survey

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5 In DOE’s rulemaking docket to revise the efficiency standards for central air conditioners, several parties submitted comments regarding the homeownership rates of poor versus non-poor households. On October 10, 2001, the Environmental Protection Agency submitted comments noting that 60% of households living in poverty were renters, versus only 27% of non-poor households. The Massachusetts Union of Public Housing Tenants submitted comments on October 2, 2001 noting that 59% of all Massachusetts households (poor and non-poor combined) owned their homes, while only 28% of households at or below 30% of state median income owned their homes (72% were renters).
("RECS"), only 4.6% of owner-occupants were below the Federal Poverty Level ("FPL"), while fully one-quarter (25.8%) of renters had incomes at or below the FPL.

Owner-occupants have the incentive to weigh the lower initial purchase cost of a lower-efficiency furnace against the higher long-term operating costs. Owners of rental property, however, see only the incentive of lower purchase costs because the operating costs are generally borne by the tenants.

This so-called "split incentive" between property owners and tenants must inform Congressional and DOE policy regarding energy efficiency standards. In most situations, it would be illegal for a tenant to replace the heating system as tenants simply do not have the right to make major alterations to the owner's property. In most states, it is clearly the owner's legal responsibility to provide an operating heating system, and to maintain or replace it when necessary.6

The barriers that low-income families face in obtaining energy-efficient living space and heating systems are alluded to in the authorizing legislation that created DOE's Weatherization Assistance Program ("WAP"), both in Congress's initial findings and the mandate to ensure that the benefits from any weatherization work flow through to renters:

Congress finds that -

(1) a fast, cost-effective, and environmentally sound way to prevent future energy shortages in the United States while reducing the Nation's dependence on imported energy supplies, is to encourage and facilitate, through major programs, the implementation of energy conservation . . . with respect to dwelling units;

(2) existing efforts to encourage and facilitate such measures are inadequate because -
(A) many dwellings owned or occupied by low-income persons are energy inefficient;

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6 In some states, it is also the owner's responsibility to provide and maintain such major appliances as water heaters and cooking stoves.
(B) low-income persons can least afford to make the modifications necessary to provide for energy efficient equipment in such dwellings . . .

42 U.S.C. § 6861(a) (emphasis added).

. . .

(5) In any case in which a dwelling consists of a rental unit or rental units, the State . . . shall ensure that -

(A) the benefits of weatherization assistance in connection with such rental units, including where the tenants pay for their energy through their rent, will accrue primarily to the low-income tenants residing in such units . . .


Congress and DOE should be taking an aggressive approach when it comes to setting efficiency standards for boilers, furnaces, and other major appliances that are generally maintained and replaced by property owners, because the rental market is flawed and does not send appropriate price signals to all players in that market.

While it is important to be aware of this problem of split incentives, federally-mandated efficiency standards are also important for homeowners and for attaining the statutory goal of reduced energy savings. There are many other barriers to achieving energy savings that standards help to overcome. Many purchasers buy new appliances not after a careful review of available options, but on very short notice, when the existing appliance fails. This may be particularly true of boilers and furnaces. Comparative information about product efficiency may be difficult or time consuming to obtain. Consumers may not fully consider or understand the impact that rising energy prices will have on their total costs (initial purchase plus operating costs) over the life of the unit. For these and other reasons, setting appliance efficiency standards are important for all consumers, not just tenants.
D. Potential National Energy Savings Are Significant and Will Moderate Prices for Low-Income Households

The American Council for an Energy-Efficient Economy ("ACEEE") projects that the adoption of a 90% AFUE standard for residential gas furnaces would save about 2.8 billion therms of natural gas through 2030, compared to DOE’s proposed standard of 80% AFUE.\(^7\) This amount of saved energy is one-third greater than all of the natural gas consumed by residential households in the state of Pennsylvania during 2006.\(^8\)

In addition, savings resulting from adoption of stronger boiler and furnace standards would have a measurable impact on the overall national demand for natural gas, thus moderating expected future increases in the price of natural gas. While various studies differ on the exact magnitude of those price effects, there is a consensus that increases in boiler and furnace efficiency standards will beneficially impact the price of natural gas.\(^9\) Low-income households in particular benefit from any moderation in the price of natural gas because they already pay a disproportionate percentage of their income for home energy bills and often face termination of their service due to non-payment. To the extent that stronger standards for furnaces and boilers are adopted, this will make natural gas a little more affordable for these households and help them stay connected to the gas supply system.

II. SUGGESTIONS FOR IMPROVEMENT IN THE CURRENT SYSTEM

The Committee is no doubt well aware of DOE’s checkered history in implementing the Energy Policy and Conservation Act. In the two reported cases involving DOE’s implementation of energy efficiency standards, courts have held that DOE illegally attempted to

\(^7\) http://www.standardsasap.org/statesavings.pdf.

\(^8\) Total residential consumption in Pennsylvania was 206,985 million cubic feet. http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dc PLCSPA_a.htm. There are approximately 10.2 therms per thousand cubic feet (mcf), with the result that the Pennsylvania residential consumption was 2,111 million therms in 2006.

roll back a standard for central air conditioners (NRDC v. Abraham, 355 F.3d 179 (2nd Cir. 2004)) and that DOE refused to adopt any standards at all, when it was in fact required to adopt standards (NRDC v. Herrington, 768 F.2d 1355 (D.C. Cir. 1985)). More recently, Congress has required DOE to report on its failures to timely adopt or revise various energy efficiency standards (P. L. 109-58, § 141, 119 Stat. 594, 648), and DOE has settled litigation alleging that it illegally failed to adopt and revise energy efficiency standards in accordance with Congressionally-mandated deadlines (State of New York v. Bodman/NRDC v. Bodman, Nos. 05 Civ. 7807/05 Civ. 7808 (SD.N.Y.)(consent decree filed Nov. 6, 2006)).

From the perspective of low-income consumers, the most important improvement that Congress could make in the current regulatory system is to provide DOE with clear authority, if not an out-and-out mandate, to adopt standards for products that vary by climate region, if the cost-effectiveness of higher efficiency standards in fact varies by zone or region. This is true for products such as furnaces, boilers and central air conditioners. Numerous parties (state energy agencies and regulators, environmental groups, low-income consumer groups, etc.) in the pending DOE docket on standards for residential furnaces and boilers (EE-RM/STD 01-350) have been urging DOE to adopt a two-tiered standard for residential gas-fired furnaces. There is a virtually complete consensus among all interested parties and stakeholders that a 90% AFUE standard is technologically feasible as well as economically justified in 30 or more northern, colder states. DOE, however, flatly refuses to consider a two-tiered standard. DOE cites the definition of “energy conservation standard” in 42 U.S.C. § 6291 (6) as tying its hands from doing so, without offering any legal analysis of this conclusion, even though that conclusion

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10 There is not a consensus as to whether the 90% AFUE standard makes economic sense in more southern and warmer states, although there is certainly evidence to support that conclusion.
seriously impedes the Congressional goal of attaining all energy savings that are economically justified.

NCLC, joined by numerous other groups\textsuperscript{11}, presented DOE with a lengthy and detailed legal analysis of why it in fact has the authority under existing law to adopt a two-tiered standard for furnaces.\textsuperscript{12} NCLC, this time joined by four state energy agencies, Dow Chemical Company, and six national/regional associations, also sent a letter to DOE Sec. Bodman urging him to pay personal attention to the furnace rulemaking docket, and particularly to the agency’s position in that docket that it cannot adopt a two-tiered standard for gas furnaces.\textsuperscript{13} At the moment, it appears that DOE does not intend to change its position that it is prohibited from adopting a two-tiered standard, based on its interpretation of the definition of “energy conservation standard” in the Energy Policy and Conservation Act (“EPCA”).

In this context, Congress should carefully consider whether further legislation is needed to overcome this unnecessary obstacle to the attainment of cost-effective energy savings. DOE itself estimates that there would be substantial energy savings of 1.83 quads over the next many years from adopting “regional performance standards for non-weatherized gas furnaces,” as noted in revised data published by DOE in the February 9, 2007 Federal Register (72 Fed. Reg. 6184 – 6186). These savings represent almost 2% of all of the energy consumed in the United States in one year. To the extent that the only barrier that keeps DOE from adopting a two-tiered standard for gas furnaces is its interpretation of the definition of “energy conservation standards,” Congress could easily remove that barrier. To the extent that Congress wishes to

\textsuperscript{11} The other parties include the Consumer Federation of America, Massachusetts Energy Consumers Alliance, Massachusetts Union of Public Housing Tenants, National Association of State Community Service Programs, Ohio Partners for Affordable Energy, People’s Power & Light of Rhode Island, Public Utility Law Project (NY), Salt Lake City Community Action Program, Texas Legal Services Center, Texas Ratepayers’ Organization to Save Energy, The Energy Project (WA), The Utility Reform Network (CA), and the Virginia Citizens Consumer Council.

\textsuperscript{12} A copy of the relevant portion of the January 12, 2007 Comments of NCLC et al. in DOE docket EE-RM/STD 01-350 are attached to this testimony. The legal discussion appeared on pp. 10 – 17 of those comments.

\textsuperscript{13} The letter to Sec. Bodman is also attached to this testimony.
clarify more broadly that DOE can adopt regional standards for any product where this would best carry out Congressional intent to increase appliance efficiency, NCLC attaches to this testimony proposed legislative changes.

Congress should also consider mandating that DOE address the issue of regional standards for furnaces promptly, perhaps within 18 months of any EPCA amendments that may be enacted. It appears that DOE simply will not consider a two-tiered standard for furnaces in the pending boiler-furnace rulemaking docket. Unless Congress were to mandate that DOE immediately revisit furnace standards, DOE may not re-address this issue for another 10 or more years. Given that the existing DOE record has all of the technical and economic information it would need to decide whether and how to implement a two-tiered furnace standard, Congress should set an expeditious deadline for DOE doing so.

III. CONCLUSION

NCLC appreciates the opportunity the Committee has provided by inviting us to testify on the appliance efficiency standards program. We hope that the Committee will seriously consider clarifying existing law so that DOE will have no doubt that it in fact can adopt regional standards for covered products.
SUMMARY OF TESTIMONY OF CHARLES HARKA

Strong appliance efficiency standards, especially for boilers and furnaces, are extremely important for low-income households. Households living at or below the federal poverty level now spend approximately 25% of total household income on energy bills. Yet there is the potential to significantly reduce those bills through adoption of stronger furnace standards.

Low-income households are disproportionately renters not owners: 60% to 70% of low-income families are renters. Rental housing raises the “split incentive” problem – the owner has the incentive to purchase less-expensive, less-efficient appliances because owners do not have the incentive to minimize energy costs over the life of the appliance. Tenants generally pay for those energy bills. This split incentive problem must shape Congressional and DOE policy regarding appliance standards. But strong standards are also very important for homeowner purchases as well, if we are to attain the statutory goal of achieving all economically-feasible energy savings.

In order to improve the current system, Congress should provide DOE with statutory authority, if not an out-and-out mandate, to adopt standards for appliances that vary by region or zone, when the cost-effectiveness of higher standards varies by region (e.g., for furnace, boilers, central air conditioners). DOE has taken the position that it cannot adopt regional standards, even though it is not clearly precluded by statute from doing so. Congress must remove any ambiguity, and adopt language that unquestionably gives DOE the authority to adopt regional standards. In addition, Congress should consider setting a prompt deadline (e.g., 18 months) for DOE determining whether it will adopt a two-tiered standard for residential furnaces.
ATTACHMENTS TO TESTIMONY OF CHARLES HARAŃ

1. Letter from National Consumer Law Center and 11 other parties to DOE Sec. Samuel Bodman re: efficiency standards for residential furnaces and boilers (Mar. 19, 2007)

2. Comments of National Consumer Law Center and 13 other parties in DOE Docket EE-RM/STD 01-350, Standards for Residential Furnaces and Boilers (Jan. 12, 2007)

March 19, 2007

Secretary Samuel W. Bodman
Department of Energy
1000 Independence Avenue S.W.
Washington, D.C. 20585

RE: Efficiency standards for residential furnaces and boilers, EE-RM/STD-01-350

Dear Secretary Bodman:

Many of the undersigned recently filed formal comments in the Department’s rulemaking to establish new energy conservation standards for residential furnaces and boilers. We take the unusual step of separately writing to you to identify two crucial issues in that docket which we believe merit your personal attention before a final rule is published.

First, we are concerned that your staff has erected an unexplained and unjustifiable legal barrier to the Department adopting a “two-tiered” standard for natural gas-fired furnaces, with a higher standard for colder states and a lower standard for warmer states. By eliminating the two-tiered option on unjustified legal grounds, DOE has forgone significant energy savings that DOE’s own analysis shows to be technologically feasible and economically justified. DOE recently reopened the comment period for this rulemaking because it seriously underestimated the savings from a 90% AFUE furnace standard applied only in those states with an average of 6,000 or more heating degree days (HDDs). Initially, DOE erroneously estimated the impact at just 0.2 quads over 23 years (71 Fed. Reg. 59253). The recent notice corrects the estimate to 1.32 quads, a nearly seven-fold increase. DOE estimates that applying such a standard to states with 5,000 or more average HDDs would save 1.83 quads (72 Fed. Reg. 6185, Feb. 9, 2007), or roughly the amount of gas needed to heat nearly every home in the Midwest and Northeast for one year.¹

We feel strongly that DOE has committed serious legal error in deciding that the Department’s hands have been tied by Congress and that the Department has no discretion to set separate furnace efficiency standards in warmer versus colder states. We urge the Department to

¹ According to EIA’s most recent Residential Energy Consumption Survey (RECS), the combined annual natural gas heating use for these regions equals 2.1 quads.
reconsider its legal analysis and encourage you to read the legal analysis submitted in the comments of the National Consumer Law Center and Natural Resources Defense Council before issuing a final rule, as DOE’s current position is legally erroneous. We believe that a proper legal interpretation allows for a regional northern standard. If this is so, it appears likely that DOE would set an AFUE furnace standard for northern states of 90% or higher in order to meet the statutory criteria that new standards be “designed to achieve the maximum improvement in energy efficiency . . . which the Secretary determines is technologically feasible and economically justified,” 42 U.S.C. 6295(o)(2)(a).

Because DOE has ruled out even considering a two-tiered standard, the proposed rule does not adequately address the concerns and needs of consumers in colder states. This will simply drive those states to seek waivers. Forcing states to take this route would ensure that the Department will have to deal with the furnace standards for years to come in additional proceedings, while delaying savings for consumers in cold-weather states and prolonging regulatory uncertainty for manufacturers. We predict that several states will in fact file waiver requests (Massachusetts, Rhode Island and Vermont have all adopted 90% AFUE as their standard for gas furnaces, subject to obtaining waivers), each of which will require those states, manufacturers and DOE to invest significant time and resources in adjudicating those requests. A decision now to adopt a two-tiered standard would achieve large economic and energy savings for consumers; eliminate regulatory uncertainty for manufacturers; and allow DOE to move on to the many other backlogged appliance standards proceedings.

Second, we are concerned that DOE has made a crucial, unfounded policy decision which seriously biases the outcome towards adopting lower boiler and furnace standards. DOE has arbitrarily assumed that the reduced natural gas consumption resulting from the new standards will have a zero impact on natural gas prices. However, all evidence on the record, including a study cited by the Department itself, related to the price impacts of natural gas savings suggests a non-zero impact on prices. Several commenters, especially Natural Resources Defense Council and The Dow Chemical Company, presented detailed estimates, based on different methodologies, demonstrating that the economic value of those price reductions would be quite significant. While future gas price reductions cannot be predicted with certainty, such uncertainty makes them no different than so many estimates which DOE must make in order to determine appropriate appliance efficiency standards.

By arbitrarily assuming that gas price reductions will be zero, the Department has seriously biased its analysis towards lower efficiency standards than are economically justified. In particular, the “zero price effect” assumption directly hindered the analysis of whether a 90% or higher AFUE standard for gas furnaces is economically justified in all 50 states.

While there are several other areas where we disagree with DOE’s approach in this rulemaking, the two issues noted above are of such serious magnitude, with potentially adverse impacts on the goals of the appliance standards program, that we felt the need to bring them to your personal attention.

We are of course available to provide any additional information that you may require.
Respectfully,

Charles Harak, Esq.
National Consumer Law Center

Andrew deLaski, Executive Director
Appliance Standards Awareness Project

Timothy Ballo, Esq.
Earthjustice

Bill Prindle
American Council for an Energy Efficient Economy

Joe Almaguer
Global Energy Efficiency Leader
The Dow Chemical Company

Commissioner David O'Connor
Massachusetts Division of Energy Resources

Sue Coakley
Northeast Energy Efficiency Partnerships

David Goldstein
Natural Resources Defense Council

John M. Becker
Vermont Department of Public Service

John Jones
New York State Energy & Research Development Authority

Amy Ignatius, Director
New Hampshire Office of Energy & Planning

Charles Cottrell, V.P. for Technical Services
North American Insulation Manufacturers Ass’n

cc: Andrew Karsner, Ass’t Sec. for Energy Efficiency and Renewable Energy, DOE
David Rodgers, Deputy Ass’t Sec. for EE & RE, DOE
Ron Lewis, DOE
Mohammed Khan, Project Manager/Standards for Boilers & Furnaces, DOE
Sen. Jeff Bingaman, Chair, Senate Energy & Natural Resources Comm.
Rep. John Dingell, Chair, House Energy & Commerce Committee
Rep. Edward Markey

RE: ENERGY CONSERVATION STANDARDS FOR RESIDENTIAL FURNACES AND BOILERS

Docket No. EE-RM/STD-01-350/RIN 1904-AA78

Submitted January 12, 2007

I. INTRODUCTION

A. Overview of Interest in this Rulemaking

The National Consumer Law Center ("NCLC"), Consumer Federation of America ("CFA"), Massachusetts Energy Consumers Alliance ("Mass Energy"), Massachusetts Union of Public Housing Tenants ("MUPHT"), National Association for State Community Service Programs ("NASCSP"), Ohio Partners for Affordable Energy ("OPAE"), People’s Power & Light of Rhode Island, Public Utility Law Project ("PULP"), Salt Lake City Community Action Program ("SLCAP"), Texas Legal Services Center ("TLSC"), Texas Ratepayers’ Organization to Save Energy ("Texas ROSE"), The Energy Project ("TEP"), The Utility Reform Network ("TURN"), and Virginia Citizens Consumer Council ("VCCC") [collectively referred to as "Consumer Groups" in these comments] appreciate the opportunity that the Department of Energy ("DOE") has provided for interested parties to submit comments on the Notice of Proposed Rulemaking ("NOPR") for residential furnaces and boilers published in the October 6, 2006 Federal Register (71 Fed. Reg. 59204). These groups, whose missions and interests will be described below, all urge the Department to reconsider its decision to set an AFUE standard of 80% for non-weatherized gas furnaces. Notably, the many groups who jointly support these comments include a wide range of national and state organizations with significant geographic diversity, including organizations from both colder states (MassEnergy, MUPHT, PULP, OPAE) and warm states (TLSC, Texas ROSE, TURN and VCCC). They include groups with a narrower focus on the interests of low-income energy consumers (e.g., NCLC, MUPHT, PULP) and groups that focus on the interests of all consumers across the country (e.g., CFA) or of a variety of incomes (e.g., Mass Energy, OPAE, VCCC). There is strong agreement among the many signers of these comments that setting a standard of 90% AFUE for colder, more northern states is both good for the environment and good for consumers’ pocketbooks, not only in the colder states where heating consumption is higher but also throughout the country.

The Consumer Groups note that the current standard for furnaces of 78% AFUE was set
Consumer Group Comments, Furnace/Boiler Docket EE-RM/STD-01-350, p. 10 of 20

The Consumer Groups are well aware that DOE does not think a nationwide standard of 90% AFUE is supported by its regional impact analysis. They do not take a strong position that the 90% standard should be mandated for every state, although they question whether DOE’s own analysis appropriately considers (i) likely future energy price increases that would make the 90% standard even more economically attractive; (ii) the environmental benefits of reduced carbon emissions; (iii) the economic benefit to all U.S. consumers, not just those who would install higher efficiency units as a direct result of a 90% standard, from the dampening effect on prices of a higher standard;23 and (iv) the importance of addressing the market imperfection of “split incentives” discussed above. Therefore, the Consumer Groups are certainly not endorsing the 80% standard for southern states.

However, the Consumer Groups very strongly encourage DOE to adopt the 90% AFUE standard at least for the northern states, and, if DOE does so, to provide a reasonably simple process for any southern state that believes the higher standard makes economic sense in its state to obtain a waiver of the 80% standard. DOE’s own regional impact analysis shows that only 20% of northern households would face net costs from the 90% standard, using the 2006 AEO. TSD, Ch. 11.3.4, Table 11.3.5. The Consumer Groups believe that DOE’s analysis tends to be fairly conservative, so that the findings displayed in Table 11.3.5 are reasonably robust. To the extent that DOE does not adopt 90% AFUE nationally, it should do so in the northern states.

VI. DOE COMMITTED LEGAL ERROR IN DECIDING THAT IT IS BARRED FROM ADOPTING A “TWO-TIERED” AFUE STANDARD FOR FURNACES

In the October 6, 2006 NOPR, DOE addressed “numerous comments” from parties that urged the Department to set “separate furnace and boiler standards for different regions of the country.” 71 Fed. Reg. 59209. In particular, many commenters urged DOE, if it were unwilling to adopt a nationwide standard of 90% AFUE for non-weatherized gas furnaces, to at least set that higher standard for gas furnaces in northern states, by reference to average annual heating degree days (HDD) or other climate-related benchmark.24 Without reaching the merits of these comments, DOE determined that it does not have the legal authority to adopt this “two-tiered” approach for non-weatherized gas furnaces.

households in the northern states would be above 5,000 heating degree days (HDD).” TSD, Ch. 11.3.1, p. 11-6. For purposes of this portion of their comments, the Consumer Groups accept this definition, but do not necessarily agree that the 19 Southern states would not derive a net life-cycle benefit from adoption of a higher AFUE standard than 80%.


24 See, for example, the Nov. 10, 2004 comments of NCLC/CFA/MUPHT, pp. 7-9.
Consumer Group Comments, Furnace/Boiler Docket EE-RM/STD-01-350, p. 11 of 20

There is no question but that very significant energy savings and emissions reductions hinge on deciding this legal issue. The savings that will be lost by not adopting the proposed two-tiered standard will directly and substantially affect those consumers who will have less efficient furnaces installed, with a particularly unjust and onerous burden falling on tenants who have no choice about the furnaces their property owners install. But this will also affect all residential and commercial users of natural gas because national demand for gas will be significantly higher. Despite the importance of this issue, DOE provided nothing more than this non-existent legal analysis to buttress its conclusion:

As discussed in the 2004 ANOPR, the Department has determined that EPCA\(^{25}\) does not authorize DOE to set regional energy conservation standards; instead, the Department can only establish national standards.

Id.

But the “2004 ANOPR” itself is largely devoid of legal reasoning.\(^{26}\)

The Department recognizes that regional climatic effects may be important in the assessment of proposed energy efficiency standards for heating equipment because the energy demand and financial impacts to consumers can vary significantly with variations in climate. The life-cycle cost analysis considers regional impacts. However, DOE believes that the Act does not authorize the adoption of regional standards. See 42 U.S.C. 6291(6)(A).


It is difficult to rebut this legal argument that is little more than *ipse dixit*\(^{27}\) as DOE has

\(^{25}\) “EPCA” refers to the Energy Policy and Conservation Act, Pub. L. No. 94-163, which has since been amended on numerous occasions.

\(^{26}\) DOE has had a notably dismal history of interpreting and implementing EPCA. See, e.g., *NRDC v. Abraham*, 355 F. 179 (2d Cir. 2004) (court finds that DOE violated the “antibacksliding” provision contained in 42 U.S.C. §6295(o)(1) and that agency’s interpretation of statute not entitled to *Chevron* deference); *NRDC v. Herrington*, 768 F.2d 1355, 1364 (D.C.Cir.1985) (finding, *inter alia*, “that in important respects DOE’s determinations are unsupported by substantial evidence and are contrary to law”). Most recently, DOE entered into a consent decree which commits DOE to publish a final appliance efficiency standard for 22 products by deadlines listed in that decree, arising from its delays in updating and adopting standards. *State of New York et al. v. Bodman/NRDC et al. v. Bodman*, Nos. 05 Civ. 7807/7808 (JES) (S.D.N.Y. Nov. 6, 2006).

\(^{27}\) Latin for “he himself said it.”
not disclosed to the public the thinking that may lie behind the mere citation of section 6291(6)(A). However, DOE’s conclusion is contradicted by a federal statute (1 U.S.C. § 1); undermined by U.S. Supreme Court precedent; contrary to prior DOE statements regarding its authority under EPCA; and contrary to the very purposes of EPCA, as explained below.

DOE’s legal analysis rests entirely on a reference to 42 U.S.C. § 6291(6)(A), the definition of “energy conservation standard”:

a performance standard which prescribes a minimum level of energy efficiency or a maximum quantity of energy use, or, in the case of showerheads, faucets, water closets, and urinals, water use, for a covered product, determined in accordance with test procedures prescribed in section 6293 of this title . . .

DOE perhaps reached the conclusion that it cannot set two standards for non-weatherized furnaces, one of 90% in colder states and a lower standard in warmer states, because this definition uses the word “standard”, not “standards”. At the outset of this analysis, it is important to note that in the substantive section of EPCA addressing “standards for furnaces,” 42 U.S.C. § 6295, and in contrast to the definition section that DOE solely relies on, Congress used the word “standards” in a context that referred only to a single, specific sub-category of furnaces, those “which are designed solely for installation in mobile homes” (42 U.S.C. § 6295(f)(2)). Congress there mandated:

The Secretary shall publish a final rule no later than January 1, 1992, to determine whether the standards established by paragraph (2) [42 U.S.C. § 6295(f)(2)] for mobile home furnaces should be amended.

42 U.S.C. § 6295(f)(3)(A) [emphasis added].

The varying use by Congress of the singular “standard” in § 6291(6)(A), and the plural “standards” in § 6295(f)(3)(A), which section refers only to the distinct sub-class of mobile home furnaces, makes it clear that Congress did not intend to exclude the plural when it used the singular, nor to exclude the singular when it used the plural. Put another way, it is clear that when Congress enacted EPCA, it was not directly contemplating whether DOE would be prohibited from adopting geographically-distinct standards for furnaces, and that it used singular and plural terms somewhat interchangeably. Since Congress did not express any clear intent on this issue, DOE has the discretion to adopt the two-tiered standard urged by so many commenters.

The Consumer Groups’ interpretation of DOE’s authority under EPCA is reinforced by DOE’s own prior statements regarding its authority under EPCA, published in the Federal

28 Under DOE’s implicit legal reasoning, the agency would arguably be required to adopt multiple “standards” for mobile home furnaces because Congress used the plural term.
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Register in the context of the recent central air conditioning rulemaking. In that docket, DOE had considered “including a requirement for a new standard based on a system’s energy efficiency ratio (EER) in addition to its seasonal energy efficiency ratio,” but some commenters had argued that DOE was “not permitted to adopt a[n additional] standard other than SEER.” 66 Fed. Reg. 7170, 7182 (Jan. 22, 2001) (italics and bracketed material added). In this instance, DOE expressed no difficulty in reaching the conclusion “that EPCA permits adoption of an EER standard” in addition to the SEER standard. 66 Fed. Reg. 7183. It is difficult to reconcile the case with which DOE concluded that it could have imposed two standards, SEER and EER, on a particular air conditioning unit installed at a particular location, with the legal obstacles DOE now finds to imposing geographically-differentiated standards for furnaces, especially where DOE itself “recognizes that regional climatic effects may be important in the assessment of proposed energy efficiency standards for heating equipment.” 69 Fed. Reg. 45425 (July 29, 2004).

The Consumer Groups’ interpretation of EPCA’s varying use of the words “standard” and “standards” is largely mandated by federal law. The very first section of the entire United States Code provides that:

[i]n determining the meaning of any Act of Congress, unless the context indicates otherwise —

words importing the singular include and apply to several persons, parties or things . . . (emphasis added).

1 U.S.C. § 1. Case law interpreting this statute only reinforces the conclusion that the definition of “energy conservation standard” does not preclude DOE from adopting two standards for residential furnaces.

In Toy Manufacturers of America, Inc. v. Consumer Product Safety Commission, 630 F.2d 70 (2d Cir. 1980) (“TMA v. CPSC”), TMA challenged industry-wide regulations promulgated by CPSC regarding toys intended for use by children under age 3 that presented choking or ingestion hazards. TMA challenged the regulations on the grounds, inter alia, that the “regulation sets forth a generic standard that purports to be applicable to a wide range of products” [underline added], whereas the authorizing statute allegedly granted the agency the authority to promulgate regulations only on a case-by-case basis for an individual “toy” or “article”. TMA v. CPSC, 630 F.2d at 73. The Appeal Court disagreed, noting:

As CPSC correctly indicates, however, TMA’s statutory language argument could be nullified by reference to 1 U.S.C. § 1, which provides in relevant part that “(i)n determining the meaning of any Act of Congress, unless the context indicates otherwise words importing the singular include and apply to several persons, parties, or things . . . .”

Id. at 74. The Court went on to note that nothing in the relevant authorizing act:

limits the use of its banning procedures to situations involving only individual products, nor does the entire general thrust of the FHSA [the authorizing act] suggest that, in the Act’s enforcement, application of the typical rule of statutory construction set forth in 1 U.S.C. s 1 would be inappropriate.

Id.29 Thus, in TMA v. CPSC, the Court, relying in part on 1 U.S.C. § 1, found that a statute which spoke of a “toy” or “article” in the singular could be applied by the implementing agency to all “toys” or “articles” in a rulemaking proceeding that affected an entire industry. Here, DOE should find that the singular use of the word “standard” in section 6291(6)(A) allows the agency to adopt “standards” for a covered product. Where DOE reads the word “standard” as imposing a cap that limits DOE to adopting no more than one standard per product, EPCA in its entirely should be read as setting a floor that requires DOE, at a minimum, to set a standard for each “covered product” discretely listed in 42 U.S.C. § 6292(a)(1) - (18), without inhibiting DOE’s ability to set standards for other products30 or to set up geographically-differentiated standards for a product where to do so best carries out Congressional intent.

Just as the court in TMA v. CPSC “proceeded to examine the legislative history” of the relevant authorizing statute in that case so as not to mechanically or inappropriately apply 1 U.S.C. § 1 in a manner contrary to Congressional intent (630 F. 2d at 74), so is it important here to consider the Congressional intent behind EPCA to determine whether Congress meant to tie DOE’s hands and prohibit it from adopting two geographically-distinct standards for a product such as gas furnaces where the utility and cost-effectiveness of the product varies so significantly by region.

There is nothing in the legislative history of EPCA and subsequent amendments that suggests anything other than that Congress, in authorizing DOE31 to adopt appliance efficiency standards, wished DOE to be aggressive in attaining the maximum energy efficiency savings that were economically feasible. The very first paragraph of House Report 94-340 states that “(t)his legislation is directed to the attainment of the collective goals of increasing domestic supply [and] conserving and managing energy demand.” H.R. Rep. No. 94-340, at 1, reprinted in 1975 U.S.C.C.A.N. 1763. In the same introductory section, the Report notes that the “bill would also establish regulatory programs to bring about measured savings in consumption of energy by improving the efficiency of the products we use . . . .” Id. To the extent that the Report discusses the appliance efficiency standards provisions in more detail, it emphasizes the goal of “prescribing energy efficiency improvements designed to achieve 25% aggregate improvement

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29 See also Application of Foster, 52 C.C.P.A. 1808, 343 F.2d 980, 988, n. 9(1965)

30 As clearly provided in § 6262(a)(19).

31 At the time EPCA was adopted, energy efficiency standards were entrusted not to DOE but to a predecessor agency, the Federal Energy Administration (“FEA”). Pub. L. No. 94-163, § 3 (def. of “Administrator”), §§ 321 ff.
in the efficiency of all major energy consuming appliances by 1980,” 1975 U.S.C.C.A.N. 1779.\footnote{In the final legislation, DOE (then, FEA) was directed to “prescribe . . . energy efficiency targets” that would improve the efficiency of the covered products by “not less than 20 percent.” Pub. L. No. 94-163, § 325(a)(1).} Even at this early date, and well before Congress itself directly established specific numerical standards,\footnote{See Pub. L. No. 100-12, § 5 (setting standards for a range of products).} Congress noted that provisions of the law regarding “energy efficiency improvement targets” were “not intended to be a limitation of the Secretary’s authority to prescribe energy efficiency standards,” \textit{id.} at 1861. It is thus very troubling, and contrary to Congressional intent, that DOE reads the definition of “energy conservation standard” to limit its authority to adopt a two-tiered furnace standard that would achieve economically-justified energy savings.

DOE’s cramped interpretation of the definition “energy conservation standard” also draws no support from the amendments made to EPCA by the National Energy Conservation Policy Act (“NECPA”),\footnote{To the extent there is relevant discussion of the appliance efficiency standards provisions of NECPA in the legislative history, it is noteworthy that the Conference Report highlighted the “priority [that] must be given to nine types of appliances,” including “furnaces.” H. Conf. Rep. No. 95-1751, at 114, \textit{reprinted in} 1978 U.S.C.C.A.N. 8158-8159.} Pub. L. No. 95-619, and little support from the amendments made by the National Appliance Energy Conservation Act of 1987 (“NAECA”), Pub. L. No. 100-12. The legislative history of NAECA makes it abundantly clear that the definition of “energy conservation standard” is nothing more than a definition, and certainly not intended to limit the authority that DOE may have to achieve greater energy efficiency savings by adopting geographically-differentiated standards. S. Rep. No. 100-6, p. 6, \textit{reprinted in} 1987 U.S.C.C.A.N. 57. And while NAECA was in part a Congressional response to the overturning by the Court of Appeals of the “no-standard” standards\footnote{\textit{See NRDC v. Herrington}, 768 F. 2d 1355 (D.C. Cir. 1985).} and the potential Balkanization of efficiency standards as states sought waivers of federal preemption,\footnote{S. Rep. No. 100-6, pp. 3-4, \textit{reprinted in} 1987 U.S.C.C.A.N. 54-55.} DOE would gravely misread this law if it finds any support in NAECA for rejecting its inherent authority to adopt a two-tiered standard. If anything, DOE’s dual approach of rejecting this authority yet encouraging states to file waivers that would allow the adopting of 90% AFUE in colder states\footnote{71 Fed. Reg. 59209 (“However, the Department notes that EPCA allows states to seek . . . a waiver of federal preemption of state or local energy conservation standards. . . In the context of residential furnaces and boilers, where regional climatic effects can have a significant impact on whether a specified energy conservation standard would be technologically feasible and economically justified in that region, such regional climatic effects will be important in}
Balkanization that concerned both manufacturers and Congress at the time NAECA was adopted.

In addition to federal law (1 U.S.C. § 1); the legislative history of EPCA, NECPA, and NAECA; and DOE’s own statements in the air conditioning rulemaking that it could have imposed two distinct standards on the same appliance — there is one other source which undermines DOE’s legal conclusion that it does not have the authority to adopt a two-tiered standard, and that is the Supreme Court. In *Chevron, U.S.A., Inc. v. NRDC*, 467 U.S. 837 (1984) ("*Chevron*"), the Court had to address the authority of the Environmental Protection Agency (“EPA”) to regulate pollution from “new or modified major stationary sources” through a permit process and, more specifically, to decide whether EPA had the authority to determine the geographic level at which the regulations would apply. *Id.*, 467 U.S., at 840. EPA had issued a regulation including a plant-wide definition of “stationary source” which would allow “an existing plant that contains several pollution-emitting devices” or sources to “install or modify one piece of equipment without meeting the permit conditions if the alteration will not increase the total emissions from the plant,” a so-called “bubble concept.” *Id.* The case clearly stands for the proposition that use by Congress of a term in the singular (i.e., “building, structure, facility or installation” in *Chevron*; “standard” here) does not on its own preclude the implementing agency from determining the geographic level at which the law applies, especially where, as here, it is fair to say the statutory language “is not dispositive” nor “precisely directed to the question” at hand and the “legislative history . . . is unilluminating.” 467 U.S., at 860-862.

Within the context of EPCA/NEP/CA/NAECA, where the statute and legislative history simply do not speak clearly to the precise question, DOE somehow finds its hands tied. But the Supreme Court has made it clear that the lack of clarity in an authorizing statute in fact provides the agency with authority to fill in any gaps left by Congress:

The power of an administrative agency to administer a congressionally created . . . program necessarily requires the formulation of policy and the making of rules to fill any gap left, implicitly or explicitly, by Congress. If Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation.

467 U.S., at 843-844 (internal quotations and citations omitted). Under *Chevron*, DOE clearly has the authority to fill in the details that Congress simply did not directly contemplate — whether the agency could adopt a two-tiered standard for a product, where the benefits of owning and operating that product vary so significantly by climate region. This is particularly true where, as here, “the regulatory scheme is technical and complex” and where the “decision

DOE’s assessment of whether there are ‘unusual and compelling state interests’ for state energy conservation standards”

38 The relevant authorizing statute, 42 U.S.C. § 7502(b)(6) has since been amended. The then-extant version may be found in Pub. L. No. 95-95, § 129(b), 91 Stat. 747.
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involve[s] reconciling conflicting policies.” *Id.*, at 865.

DOE’s conclusion that it cannot adopt a two-tiered standard thus runs afoul of Supreme Court precedent; runs counter to the provisions of federal law as embodied in 1 U.S.C. § 1; is contrary to DOE’s own conclusion in the air conditioning rulemaking that it can impose two standards on one product; and undermines one of the central purposes of EPCA — to implement efficiency standards “which the Secretary determines are technologically feasible and economically justified,” 42 U.S.C. § 6295(o)(2)(A). DOE should reverse its position as announced in the NOPR and find that it has the authority to adopt a two-tiered standard for non-weatherized gas furnaces. It should set that standard at 90% AFUE for northern states, defined by reference to average number of heating degree days or other reasonable means.

VII. IF DOE DOES NOT ADOPT 90% AFUE, IT SHOULD MAKE GOOD ON ITS REPRESENTATIONS TO CONSIDER CLIMATIC CONDITIONS AND OTHER IDENTIFIED FACTORS FAVORABLY IN REVIEWING WAIVER REQUESTS

DOE rejects the authority it clearly has under EPCA, as amended, to adopt a two-tiered standard, 71 Fed. Reg. 59209. But it then generally describes the process by which waivers may be sought and emphasizes certain facts relevant to this docket that, by DOE’s own read of the law, should make it easier for northern states to obtain waivers. For example, DOE notes:

It appears to the Department that in the context of residential furnaces and boilers, where regional climatic effects can have significant impact on whether a specified energy conservation standard would be technologically feasible and economically justified in that region, such regional climatic effects will be important in DOE’s assessment of whether there are “unusual and compelling state and local energy interests” for state energy conservation standards. *States having higher-than-average, population-weighted heating degree days (HDDs) based on long-term National Oceanographic and Atmospheric Administration data would seem to have the best prospects for demonstrating “unusual and compelling” interests to support a waiver of preemption in the particular circumstances presented here.*


On the face of it, these quoted DOE comments, as well as other comments DOE made about how it might apply the waiver rules in the context of a state’s request to implement a 90% AFUE standard, all suggest that a Northern state — particularly one which has a higher-than-average number of HDDs; that already has a high saturation of 90% AFUE units and whose manufacturing suppliers would have less of a burden in shipping more 90% units to that state; that applied to DOE in conjunction with contiguous states; and that had already tried various

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PROPOSED AMENDMENTS TO ENERGY POLICY AND CONSERVATION ACT
TO ALLOW FOR REGIONAL STANDARDS
April 2007

CONCEPTUAL DESCRIPTION:

The purpose of this proposal is to allow the Department of Energy (“DOE”) to adopt appliance efficiency standards that vary by climate region, for products such as central air conditioners, boilers and furnaces. The proposal allows DOE to adopt up to 3 regionally-differentiated standards, in order to carry out the statutory intent of implementing the highest efficiency standards that are “technologically feasible and economically justified.”

PROPOSED CHANGES

I. Changes to the definition of “energy conservation standard”

§ 6295: At the end of § 6295 (6) [def. of “energy conservation standard”], add a new sentence:

“Nothing in this definition shall be interpreted to preclude the Secretary from adopting up to, but no more than, three regionally- or zonally-differentiated standards for a particular consumer product, if doing so will better carry out the intent of this subchapter to increase the energy efficiency of consumer products when compared to a single national standard.”

§ 6311: At the end of § 6311(18), add a new sentence:

“Nothing in this definition shall be interpreted to preclude the Secretary from adopting up to, but no more than, three regionally- or zonally-differentiated standards for a particular category of equipment, if doing so will better carry out the intent of this subchapter to increase the energy efficiency of products and equipment.”

II. Changes to labeling rules

§ 6294: Add a new paragraph (9) at end of current § 6294(c)(8):

“For any product for which the Secretary has adopted regionally- or zonally-differentiated standards, the Secretary shall require the manufacturer to affix to the product a label or tag that includes the name, number or other identifying information of the regional or zonal standard with which the product complies, and such other information as the Secretary deems necessary to allow any distributors, retailers or ultimate purchasers to determine that the product complies with the standard or standards in effect for the region in which the product will be sold or installed.”

1 Drafted by National Consumer Law Center in response to a request by the House Energy and Commerce Committee to present testimony on appliance efficiency standards.

2 All section references are to title 42 of the United States Code.
§ 6315: Add an additional paragraph at the end of § 6315(b):

“For any category of equipment for which the Secretary has adopted regionally- or zonally-differentiated standards, the Secretary shall require the manufacturer to affix to the product a label or tag that includes the name, number or other identifying information of the regional or zonal standard with which the product complies, and such other information as the Secretary deems necessary to allow any distributors, retailers or ultimate purchasers to determine that the product complies with the standard or standards in effect for the region in which the product will be sold or installed.”

III. Changes to information requirements

§ 6296: Add a new sentence at the end of the first sentence of § 6296(d):

“To ensure compliance with any regionally- or zonally-differentiated standards, the Secretary may additionally require each manufacturer of a covered product to submit information or reports to the Secretary regarding the locations to which products with varying levels of efficiency were shipped.”

IV. Prohibited acts and enforcement

§ 6302: Add a new paragraph (6) at the end of existing § 6302(a)(5):

“for any manufacturer, distributor, retailer or private labeler to ship or sell a new covered product for which the Secretary has adopted a zonally- or regionally-differentiated standard knowing that the product will be installed in a location for which the standard adopted by the Secretary is stricter than the rated efficiency of the product; provided that this prohibition shall not apply to room air conditioners, should the Secretary adopt regionally- or zonally-differentiated standards for room air conditioners.”

§ 6303: Add a new sentence at the end of existing § 6303(b):

As used in subsection (a) of this section, and in the context of any alleged violation subsection (a)(6) of section 6302, “knowingly” means (1) a manufacturer, distributor, retailer or private labeler who sells any new covered product directly to an ultimate purchaser (whether the consumer, or any contractor, agent or other person purchasing on behalf of the consumer) with actual knowledge that the purchaser will install the product in a region or zone other the region or zone for which it is rated; (2) a manufacturer or distributor who ships any new covered product to a retailer with actual knowledge that the retailer will sell that particular product to a purchaser who will install the product in a region or zone other than the region or zone for which it is rated, or with actual knowledge that the retailer fails to take reasonable steps to ensure compliance with subsection (a)(6) of section 6302.