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ACHIEVING—AT LONG LAST—APPLIANCE EFFICIENCY STANDARDS

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND AIR QUALITY

OF THE

COMMITTEE ON ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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ACHIEVING-AT LONG LAST-APPLIANCE EFFICIENCY STANDARDS

TUESDAY, MAY 1, 2007

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND AIR QUALITY,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:00 a.m., in room 2322 of the Rayburn House Office Building, Hon. Rick Boucher (chairman) presiding.

Members present: Representatives Butterfield, Barrow, Wynn, Inslee, Baldwin, Hooley, Matheson, Hastert, Upton, Shimkus, Pickering, Walden, Burgess, and Barton.

Staff present: Sue Sheridan, John Jimison, Laura Vaught, Chris Treanor, Margaret Horn, David McCarthy, Kurt Bilas, Peter Kielty, Matthew Johnson, Legislative Analyst, and Garrett Golding.

OPENING STATEMENT OF HON. RICK BOUCHER, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Mr. BOUCHER. The subcommittee will come to order. This morning we will examine appliance efficiency standards and hear from appliance and equipment manufacturing groups, as well as efficiency advocates and officials responsible for implementation of Federal and State energy efficiency programs. It is our intention to develop legislative provisions from today's hearing for inclusion in the energy independence legislation which this committee will consider and report to the full House during the course of the next several weeks and that will be considered on the House floor during the month of July.

Federal law has required the establishment of energy efficiency standards for a group of 20 categories of home appliances since 1975. However, there have been longstanding problems with the implementation of these required standards. Earlier this year, the Government Accountability Office produced a report which I had requested, along with Chairman Dingell and Mr. Markey, on the Department of Energy's record with regard to setting appliance efficiency standards. The GAO report indicated that DOE has failed to set standards for 17 of the 20 categories of appliances originally required by law.

In fact, DOE missed all 34 of the statutory deadlines for developing the standards. These delays have spanned more than 30 years and encompass administrations of both political parties. The GAO

estimates that Americans have, to date, spent $28 billion for energy that they could have avoided if the standards that should have been adopted had, in fact, been adopted. Moreover, these inefficient appliances will continue operating in American homes and businesses for years to come. It is, therefore, clear that the failure to meet the deadlines for issuing standards has been a major problem and that the past failures have populated our homes and businesses with appliances significantly less efficient than they should have been.

Despite these longstanding delays and associated problems, there has recently been progress. The DOE entered into a consent decree in November 2006 in which the Department promised the court it would meet a new set of short-term deadlines to make up for the deficiencies and to date, DOE has, in fact, met those deadlines. DOE Assistant Secretary for Energy Efficiency and Renewable Energy, Andy Karsner, who we will hear from today, has an admirable record during his time in that position. And I want to commend him for the work that he has done. He has pledged to make up the backlog of overdue standards. He is to be commended for that program and we all look forward to hearing his testimony this morning about the work that he is overseeing.

Further progress has been reached by the affected industries and efficiency advocacy groups, which have reached a number of consensus agreements on new standards for various products. Some of these consensus agreements have been adopted into law and others are subject to the DOE regulatory process at the present time or are being proposed to this subcommittee for legislative enactment.

While this recent progress is, indeed, promising, serious concerns surrounding the appliance efficiency program remain. The GAO report identified a number of obstacles to improvements in the program. Among the report's conclusions are areas that clearly warrant further examination, including the fact that DOE lacks the program management practices to ensure that the program is kept up to date. Questions about whether DOE has the staff and budget resources to make up for the backlog on pending standards. Whether the department's product testing procedures need to be updated and conducted more frequently. The extent to which a State is preempted from adopting its own standard for a product that is covered by Federal law, even if the DOE has failed to meet its own deadlines for imposing regulatory treatment for those particular products. And whether the DOE can and should expedite rulemaking proceedings in cases where a consensus exists between the affected industry and efficiency advocates.

Other questions also warrant further consideration. DOE has concluded that it is prevented by law from setting more than one national standard for a given category of appliance. This appears to be an unreasonable limitation. For example, significant climate variations among zones of the Nation suggest that for heating and air conditioning equipment, different efficiency standards might be, to quote the statute, "technologically feasible" and "economically justified." As a result, the recently adopted DOE standard for furnaces, at 80 percent thermal efficiency, is below State standards in a number of the northern States and is actually below the effi-

ciency rating that is achieved by 99 percent of the furnaces already on the market.

Another matter of concern is whether or not DOE should be able to set more than one performance standard for a covered product. For example, should they be able to set both a heating efficiency standard and a fan motor efficiency standard for a furnace? In other words, is it appropriate, in some cases, to have multiple standards for various functions of a single product? There is also a question regarding whether DOE should be able to dictate design features for a covered product that may have a role in energy efficiency, but would also have other roles, such as whether a switch must be provided to turn a product, which is normally designed to go into standby mode, completely off.

Today's witnesses will provide us with an in-depth analysis of the status of the DOE program, as well as suggestions for possible statutory improvements to that program and an overview of areas in which consensus has been reached. And I want to say welcome to all of our witnesses. We will hear your testimony shortly.

It is now my pleasure to recognize the ranking member of this subcommittee, the gentleman from Illinois, Mr. Hastert, for 5 minutes.

OPENING STATEMENT OF HON. J. DENNIS HASTERT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. HASTERT. Thank you, Mr. Chairman. Thank you for holding this hearing. Energy efficiency is certainly an essential element of energy security. The hearing today is particularly timely as we head into our peak months of energy use, both in electricity and in transportation. Efficiency gains we have already achieved in the U.S. economy are impressive. The total amount of energy used in this country's recent years has not grown as much as our economy. That being said, much of our economic growth has been spurred by productivity gains made possible by innovations that allow us to use less energy to accomplish the same amount of work in factories, offices, and even at home.

But far more needs to be done and we should not wait any longer to make our cars, our buildings, our appliances more energy efficient. If we want to lessen our dependence on unstable sources of foreign oil and meet our growing overall demand for electricity, we simply must look harder at what we could do to be more energy efficient. The Energy Policy Act, which we passed last Congress, did just that. We set efficiency standards for Federal buildings, raised the level for commercial and household appliances and created tax incentives for increased energy efficiency and conservation of energy.

I think it is now important that we hear from the Department of Energy. We need to uncover the major reasons for DOE's delays in setting efficiency standards. We also need to hear what the department is doing to correct the situation and what further steps require legislation. It is also important to hear from experts in the State government, industry, and other stakeholders. Mr. Chairman, we need to make sure that in trying to be careful with legislation we don't make the standard setting process more complicated or time consuming than it needs to be. At the same time,

the process must be flexible so that the standards can keep pace with new developments in energy and more efficient technology.

Lighting technology is a good example of what we see current standards not keeping pace with technology. PolyBrite International, for instance, is a company based in Illinois. It makes light emitting diode light bulbs that look and feel the same as the bulbs that we put in our homes or any of the lighting that we have right here in this committee room. The difference is these bulbs are 100 percent green with no mercury or hazardous material. They last up to 10 years and they emit no heat or UV rays and use 90 percent less energy consumption than everyday bulbs. They are 90 percent more energy efficient than lighting that we use in this country.

The energy savings cost the Federal Government alone in using these types of bulbs could be billions of dollars a year. Mr. Upton and Ms. Harman have taken the lead to ensure cost-saving environmentally safe technology like this is utilized. I commend them for these efforts and look forward to supporting them as they move legislation forward to upgrade lighting efficiency standards in the United States.

However, we must also look beyond lighting efficiency. Vehicles, heating and cooling systems and building design are all other areas we need to look closely at to understand what we can do to achieve more energy efficiency without asking people to compromise safety, security, comfort in the settings. I welcome our witnesses and look forward to their testimony to learn more on what they feel this Congress and particularly, this committee, can do to encourage new technologies and speed the efficiency standards process along.

Mr. Chairman, again, thanks for holding this hearing and I yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Mr. Hastert. The gentlewoman from Oregon, Ms. Hooley, is recognized for 5 minutes.

Ms. HOOLEY. Thank you, Mr. Chairman. I have a statement that I will submit for the record, but just wanting to say that in 1983, which is a couple of years ago, when I served on the Oregon legislature, one of the things we tried to do, along with California, is improve the standards for appliances, so it is interesting that 24 years later I am sitting here at a hearing doing the same thing, so I am looking forward to your hearing and your testimony.

Mr. BOUCHER. Thank you very much, Ms. Hooley. And I would announce that Members who elect to waive an opening statement will have the time for that opening statement added to their period for propounding questions. The gentleman from Michigan, Mr. Upton, is recognized for 3 minutes.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman. I appreciate your leadership on this issue in having this hearing this morning. I would say that there is a great frustration among many in this Congress, and I also know in the administration, that we have not been able to see a standard given for appliances with energy efficiency. It is a great frustration.

I can remember well when Secretary Bodman came to testify before this committee, I want to say 2 or 3 years ago, and in that

opening testimony, he, in fact, shared that frustration and was curious to know about the morale in the Department, knowing that they had been decades overdue in terms of promulgating these regulations that frankly, the industry wants. The American industry DOEs want energy efficient standards and despite the pushes and prods by the Congress, the legislation, we have really seen nothing move through the door, whether it be, perhaps, DOE or through OMB.

So I look forward to this hearing. I look forward to hearing the testimony of our able witnesses and hopefully, this will, in fact, start a spark to see these regulations promulgated and the appliances built and come into consumers' homes all across this great Nation and Mr. Speaker, or Mr. Chairman, I yield back my time.

Mr. BOUCHER. Thank you very much, Mr. Upton.

Mr. UPTON. I was looking at Mr. Hastert.

Mr. BOUCHER. I am told it is not a bad job. The gentleman from Georgia, Mr. Barrow, is recognized for 3 minutes.

Mr. BARROW. Mr. Chairman, I apologize for stepping out for a second. I will waive the opportunity for an opening.

Mr. BOUCHER. Mr. Barrow waives an opening statement. The gentleman from Utah, Mr. Matheson, is recognized for 3 minutes.

Mr. MATHESON. I will waive.

Mr. BOUCHER. Mr. Matheson waives his opening statement. And the gentleman from Oregon, Mr. Walden, is recognized.

Mr. WALDEN. Thank you, Mr. Chairman. I will waive my opening statement.

Mr. BOUCHER. Mr. Walden waives his statement, as well.

Mr. BOUCHER. We now welcome our panel of witnesses and I will say a brief word of introduction about each.

Mr. Andrew Karsner is the Department of Energy's Assistant Secretary for Energy Efficiency and Renewable Energy. And as I said previously, he has made a commendable commitment to improving the efficiency program at DOE.

Art Rosenfeld is a commissioner on the California Energy Commission. Mr. Rosenfeld's outstanding work in the area of efficiency spans a number of decades, including his work as co-founder of the American Council for an Energy Efficient Economy and his leadership on a Nobel Prize winning particle physics group.

Mr. Evan Gaddis is the president and chief executive officer of the National Electrical Manufacturers Association.

David Myers is vice president for building efficiency with Johnson Controls and is testifying on behalf of the Air Conditioning and Refrigeration Institute and the Gas Appliance Manufacturers Association.

Joseph McGuire is the president of the Association of Home Appliance Manufacturers.

Doug Johnson is the senior director for technology policy and international affairs at the Consumer Electronics Association.

Andrew deLaski is the executive director of the Appliance Standards Awareness Project.

And Charles Harak is the National Consumer Law Center representative. That center is located in Boston.

We want to say welcome to each of our witnesses and without objection, your prepared written statement will be made a part of

the record. We would welcome now your oral summary and I ask that you keep that to approximately 5 minutes. And Mr. Karsner, we will be happy to begin with you.

STATEMENT OF ALEXANDER KARSNER, ASSISTANT SECRETARY, ENERGY EFFICIENCY AND RENEWABLE ENERGY, U.S. DEPARTMENT OF ENERGY

Mr. KARSNER. Thank you, Chairman Boucher, Ranking Member Hastert, members of the committee and let me begin by saying thank you for your confidence and generous praise in your opening remarks. Any success that we are having is largely due to the career professionals and Federal employees, some of whom are sitting behind me: David Rogers and Rob Lewis and Mike McKay and their responsiveness to a new era of organization. I also want to thank you for the opportunity to testify today on energy conservation standards programs at the Department of Energy.

As is well known, over the last three decades, the Department has fallen behind in setting and updating required standards. The frustration felt by Congress and by many stakeholders is amply justified. I understand the skepticism as to whether the Department can remedy this longstanding problem. Past delays are the results of many factors over many years and cannot be traced to any single administration or management team. I am not here to defend that history, but I do want to provide some context.

This is a challenging area of significant complexity, but the scale of potential energy savings for our Nation demands that we address it with renewed vigor and commitment. By law, energy conservation standards settings must incorporate both the cost and benefits to the consumer and the Nation, as well as the impact on manufacturers. The Department's technical and economic analysis must be thorough, accurate and publicly vetted with stakeholders to support the very difficult decisions involved in setting standards levels that are safe, technologically feasible, economically justified and result in significant conservation of energy as is required by law.

Energy conservation standards are generally established by three phase public process: an Advance Notice of Proposed Rulemaking, what we call an ANPR; Notice of Proposed Rulemaking, the NPR; and a final rule. In addition to the cost benefit analyses and factors that Congress directed the Department to consider in rulemakings and the public comments requirements, the Department must also conduct reviews for 13 other requirements, such as Regulatory Flexibility Act and the National Environmental Policy Act of 1969 or NEPA.

Many of these reviews require preparation of additional analyses and/or reviews by other entities such as the Office of Management and Budget, the Small Business Administration, the Department of Justice and the Federal Trade Commission, for example. Nearly one-third of the time to produce a conservation standard is devoted to accomplishing these required external reviews. Since arriving at the Department of Energy last year, I have made efficiency standards a top priority, as has Secretary Bodman. The Department is unequivocally committed to addressing the backlog of rulemakings and meeting all of its statutory requirements.

On January 31, 2006, the Department submitted a report to Congress on its standards activities prepared in response to section 141 of the Energy Policy Act of 2005. The report publicly laid out our action plan and schedule for rulemakings out to the year 2011. Since committing to this schedule for the standards program, I am happy to report the Department has met 100 percent of its targets. We have completed eight rulemakings since EPAct 2005, including test procedure rulemaking and codification of prescribed standards and it made significant progress on others that were under way prior to EPAct 2005.

In 2006 alone, in fact, we began rulemakings for 12 additional products. These recent accomplishments represent a pace substantially more aggressive than at any time prior in the Department's history. Final rules for electric distribution transformers and residential furnaces and boilers are presently on schedule to be issued by September 30 of this year. The Department has published a Notice of Proposed Rulemaking for single product test procedure, residential central air conditioners and heat pumps and a final rule for multiple test procedures.

Our Department's senior leadership has demonstrated a strong commitment to improving the energy conservation standards programs. In 3 successive years the President has requested budget increases for this program. In addition, the flexibility provided by the fiscal year 2007 Continuing Resolution allowed the Department to shift additional funding into accelerating efficiency standards. These increased resources in combination with streamlining and accelerating our internal processes are indeed making a difference and have led to real efficiency gains.

One example of the process improvements we are making is the use of product bundling within a single rulemaking to achieve significant economies of scale. For example, for the home appliance rulemaking, we brought together four product categories that, for the most part, are manufactured by the same companies. This bundling allows us to address the backlogged rulemaking for residential dishwashers and cooking products, while at the same time meeting the new EPAct 2005 deadline for commercial clothes washers and residential dehumidifiers.

I am pleased to say that as a result of the collective efforts of industry and other stakeholder groups, a consensus agreement has been reached on dishwashers and dehumidifiers, as well as other home appliance products. In addition to bundling similar products, we have organized staff and contractors into seven technology teams; heating, transformers and motors, lighting, home appliances, space cooling, commercial refrigeration and battery chargers and external power supplies.

The Department is also implementing a substantially improved document review and clearance process with an intra-agency crosscutting review team that includes the Appliance Standards Program in our shop, the Office of General Counsel, and the Office of Policy and International Affairs. In February, Secretary Bodman sent legislation to Congress requesting authorization to streamline the standards process and bring more efficient products to market even sooner.

This fast track legislative proposal would allow the Department to move directly to a final rule for certain products when a clear consensus for standards exist among the manufacturers, efficiency advocates and other stakeholders. In some cases, directly proposing a final rule will shorten the time to a completed standard by nearly a third and shave off months, possibly a year or more off of the rulemaking process.

I would like to conclude by emphasizing the Department has been diligently implementing the productivity enhancements described in the Department's January 31, 2006 report to Congress. These enhancements are enabling the Department to meet aggressive schedule of rulemakings designed to clear the backlog of delayed actions that accumulated during prior years and simultaneously fulfill all the new requirements of the Energy Policy Act of 2005.

Our multi-year schedules are firm and they are achievable. The Department is demonstrating concrete progress and we intend to keep this momentum going. We want an open and positive dialog with Congress and stakeholders to ensure that the government can keep its commitments. We must—and we are—moving forward.

Mr. Chairman, this concludes my prepared statement and I would be happy to answer any questions the committee may have.

[The prepared statement of Mr. Karsner follows:]

STATEMENT OF

ALEXANDER KARSNER

ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY

U.S. DEPARTMENT OF ENERGY

BEFORE THE

COMMITTEE ON ENERGY AND COMMERCE

U.S. HOUSE OF REPRESENTATIVES

May 1, 2007

Mr. Chairman and members of the Committee, thank you for the opportunity to testify on the energy conservation standards program at the Department of Energy (DOE). Appliance efficiency standards have proven potential to greatly reduce energy use, and are the most cost-effective means of delivering energy savings in the mid-term.

Established Federal standards for appliances and other equipment have made a significant contribution to energy efficiency. By the end of this year, it is anticipated that Federal residential energy efficiency standards that have gone into effect since 1988 will save a cumulative total of 34 quadrillion Btus (quads) of energy by the year 2020, and 54 quads by 2030. The estimated cumulative net present value of consumer benefits amounts to $93 billion by 2020 and grows to $125 billion by 2030.[1] There is even greater potential for energy savings in the future as the Department adopts new standards and updates existing ones.

STANDARDS PROGRAM HISTORY

I would like to give you some background history of the program, an overview of where we are now, and outline our plan for successful implementation in the coming years. The standards program has been shaped and expanded by several pieces of legislation beginning with the Energy Policy and Conservation Act (Pub. L. No. 94-163; EPCA) of 1975, which required DOE to set energy conservation targets for specified residential appliances. That law was amended and updated in 1987 by the National Appliance Energy Conservation Act (Pub. L. No. 100-12; NAECA). NAECA established initial standards for 11 types of residential appliances and included requirements and deadlines for updating those standards through rulemakings conducted by the Department using criteria included in the law. The Energy Policy Act of 1992 (Pub. L. No. 102-486) expanded coverage to include additional equipment such as commercial heating, air conditioning, and water heating equipment as well as distribution transformers, certain lamps, and electric motors. And finally, the Energy Policy Act of 2005 (Pub. L. 109—58; EPACT 2005) imposed new standards and expanded the Department's authority to regulate a range of new products.

[1] Department of Energy, Report to Congress on Appliance Energy Efficiency Rulemakings, including Battery Chargers and External Power Supplies, January 31, 2006.

Congressional legislation has been instrumental and definitive in shaping the Department's efficiency standards program. In particular, EPACT 2005 provided additional stimulus to governmental efforts to accelerate and prioritize energy efficiency standards. We fully recognize that the process needs improvement. Over the last two years we have revamped our internal processes as well as sought to work with Congress and stakeholders to complete all pending rulemakings as expeditiously as possible.

CURRENT STATUS AND PROCESS

As is well known, over the last three decades the Department has fallen behind in setting and updating required standards. The frustration felt by Congress and by many stakeholders is amply justified. I understand the skepticism as to whether the Department can remedy this long-standing problem. Past delays are the result of many factors over many years, and cannot be traced to a single administration or management team. I am not here to defend that history, but I do want to provide some context. This is a challenging area of significant complexity, but the scale of potential energy savings for our Nation demands that we address it with renewed commitment.

By law, energy conservation standards setting must incorporate both the cost and benefits to the consumer and nation, as well as the impact on manufacturers. The Department's technical and economic analyses must be thorough, accurate, and publicly vetted with stakeholders to support the very difficult decisions involved in setting standards levels that are safe, technologically feasible, economically justified, and result in significant conservation of energy, as required by law. As prescribed by EPCA, energy conservation standards are generally established by a three-phase public process: advance notice of proposed rulemaking (ANOPR), notice of proposed rulemaking (NOPR), and a final rule. DOE seeks extensive public comment during both the ANOPR and NOPR phases of the rulemaking process. The last step in the rulemaking process is the publication of a final rule in the *Federal Register*. The final rule promulgates standard levels based on all of the analyses and explains the basis for the selection of those standards. It is accompanied by a final Technical Support Document.

In addition to the cost-benefit analyses and factors that Congress directed the Department to consider in rulemakings and the public comment requirements, the Department must also conduct reviews for 13 other requirements, such as the Regulatory Flexibility Act and the National Environmental Policy Act of 1969. Many of these reviews require preparation of additional analyses and/or reviews by other entities such as the Office of Management and Budget, Small Business Administration, Department of Justice, and Federal Trade Commission. Then, after receipt of comment from these agencies, DOE may be required to prepare additional analyses or changes. Nearly one-third of the time to produce a conservation standard is devoted to accomplishing these required external reviews.

In 1996, seeking ways to improve the rulemaking process while fulfilling all legal requirements, the Department published "Procedures for Consideration of New or Revised Energy Conservation Standards for Consumer Products" (the "Process Rule"). 61 FR 36974 (July 15, 1996). The Process Rule set guidelines for developing efficiency standards designed to provide for more productive interaction between the Department and interested parties, especially during the early stages of the rulemaking and analytical processes. These changes have led to more collaboration among stakeholders and the Department, and fewer conflicts, but in some cases they may have added to the time required to complete certain rulemakings. And, as we have all come to realize, such delays have real consequences in terms of lost energy savings and economic benefits.

RENEWED DEPARTMENT COMMITMENT TO STANDARDS PROGRAM

Since arriving at the Department of Energy last year, I have made efficiency standards a top priority, as has Secretary Bodman, who has overseen significant progress during his tenure. The Department is unequivocally committed to addressing the backlog of rulemakings and meeting all of its statutory requirements. On January 31, 2006, the Department submitted a report to Congress on its standards activities prepared in response to Section 141 of EPACT 2005. The report publicly laid out our action plan and schedule for rulemakings out to the year 2011. Since committing to this schedule for the standards program, the Department has met 100 percent of its

targets, a new trend we intend to maintain. We have completed eight rulemakings since EPACT 2005, including test procedure rulemakings and codification of prescribed standards, and have made significant progress on others that were underway prior to EPACT 2005. In 2006 alone, we began standards rulemakings for 12 additional products. These recent accomplishments represent a pace substantially more aggressive than at any prior time in our history.

Final rules for electric distribution transformers and residential furnaces and boilers are on schedule and expected to be issued by September 30th of this year. The Department has published a notice of proposed rulemaking for a single-product test procedure (residential central air conditioners and heat pumps) and a final rule for multiple test procedures. The final rule for the test procedures adopted included:

- ceiling fans;
- ceiling fan light kits;
- dehumidifiers;
- medium base compact fluorescent lamps;
- battery chargers;
- external power supplies;
- torchieres; unit heaters;
- automatic commercial ice makers;
- commercial prerinse spray valves;
- illuminated exit signs;
- traffic signal modules and pedestrian modules;
- refrigerated bottled or canned beverage vending machines;
- very large commercial package air-conditioning and heating equipment;
- commercial refrigerators, freezers, and refrigerator-freezers; ice-cream freezers;
- commercial refrigerators, freezers, and refrigerator-freezers with a self-contained condensing unit and without doors; and
- commercial refrigerators, freezers, and refrigerator-freezers with a remote condensing unit.

As indicated above, since publication of the initial report to Congress last year, the Department has initiated five standards rulemakings, affecting twelve products. These twelve products are residential water heaters, pool heaters, direct heating equipment, dishwashers, ranges and ovens, dehumidifiers, commercial clothes washers, incandescent reflector lamps, fluorescent lamps, incandescent general service lamps, beverage vending machines, and a complex set of commercial refrigeration products (counted as one product here). The Department has met all obligations as scheduled in last year's report to Congress, and will endeavor to meet all future deadlines as well.

Our Department's senior leadership has been vocal and demonstrated a strong commitment to improving the energy conservation standards program. In three successive years, the President has requested budget increases for this program; the fiscal year 2008 request seeks $13.6 million. In addition, the flexibility provided by the FY 2007 continuing resolution allowed the Department to shift additional funding into accelerating efficiency standards. These increased resources, in combination with streamlining and accelerating our internal process, are making a difference, and have led to real efficiency gains.

An example of the process improvements we are making is the use of product bundling within a single rulemaking. Prior to issuing our report to Congress, each of our priority rulemakings dealt only with a single product at a time. Therefore, in redesigning our process we recognized the significant economies of scale associated with bundling multiple products into a single rulemaking, when appropriate. For example, for the home appliance rulemaking we brought together four product categories that for the most part are manufactured by the same companies. This bundling allows us to address the backlogged rulemaking for residential dishwashers and cooking products while at the same time meeting the new EPACT 2005 deadline for commercial clothes washers and residential dehumidifiers. We are on schedule to publish an ANOPR on this rulemaking this summer, but I am pleased to say that, as a result of the collective efforts of industry and other stakeholder groups, a consensus agreement has been reached on dishwashers and dehumidifiers, as well as other home appliance products. It is possible that the bundled approach to rulemaking may have helped stimulate the development of the consensus stakeholder recommendations. The Department made technical resources available to the

negotiation parties at their request. It is our understanding that this analytical support provided a foundation on which a consensus could be developed. We also understand that the parties that developed the consensus proposal have submitted their proposal to Congress. We enthusiastically support the concept of consensus standards and look forward to the opportunity to review the specific recommendations in the proposal.

Regarding additional categories of appliances and equipment with significant unrealized potential for cost-effective energy efficiency gains, I would cite our current five-year plan included in our January 31, 2006, report to Congress. That plan, which addresses all rulemakings mandated by law, covers many products that could produce significant energy savings and some that have much less potential. For instance, distribution transformers, which handle all electricity going into homes, institutions, and businesses, have a much greater energy savings potential than pool heaters, which are more of a niche product. While the magnitude of the energy savings and emission reductions that will result from efficiency standards for these products is impossible to predict accurately, we are confident that the net benefits for consumers and the country will be large.

STRATEGIES FOR SUCCESS

I would like to highlight some of the Department's strategies on how we plan to continue to expedite standards setting. In addition to bundling similar products, we have organized and manage staff and contractors into seven technology teams to focus on similar areas. Those areas are heating, transformers and motors, lighting, home appliances, space cooling, commercial refrigeration, and battery chargers and external power supplies.

The Department is also implementing a substantially improved document review and clearance process with an intra-agency Crosscutting Review Team that includes the Appliance Standards Program, the Office of General Counsel, and the Office of Policy and International Affairs. This team identifies and addresses critical legal and policy issues early in the rulemaking and analysis process and provides the technology teams with improved clarity and direction on such issues.

Finally, there are a number of legislative proposals to modify or supplement the current statutory requirements governing the standards program standards.

In February, Secretary Bodman sent legislation to Congress requesting authorization to streamline the standards process and bring more efficient products to market sooner. This fast-track legislative proposal would allow the Department to move directly to a Final Rule for certain products when a clear consensus for a standard exists among manufacturers, efficiency advocates, and other stakeholders. By using this process, we would be able to promulgate an energy efficiency standard directly when all relevant interests jointly have negotiated and submitted an agreed proposed standard that meets all statutory criteria. In some cases, directly proposing a final rule would shorten the time to a completed standard by nearly a third and shave months off the rulemaking process. To be clear, if the Department determines that a consensus does not exist, this proposal would not preclude rulemaking; it would simply require the Department to use the traditional three-stage process. The proposal is consistent with existing statutory directives and OMB guidance on use of consensus proposals.

Other pending legislative proposals would fix various problems with the existing statute, provide DOE with needed flexibility in some areas, establish statutory efficiency standards for several products, and mandate DOE to develop standards for other products. We are hopeful that constructive legislation in this area will be enacted before the end of this year.

Looking forward, the Department's current rulemaking schedule proposes issuing a final rule for commercial refrigerators in January 2009, in addition to the two final rules expected this fall for electric distribution transformers and residential furnaces and boilers. But an opportunity exists to accelerate rulemakings for many other products. We believe there are incentives already in place to encourage the achievement of new or improved standards through consensus recommendations. From the perspective of stakeholders, consensus proposals reduce uncertainties in the pace and content of rulemakings. These proposals often contain provisions of value to stakeholders which are not typically considered in a rulemaking but increase the benefits and mitigate the burdens of standards. In this regard, we are aware that there are ongoing stakeholder discussions to develop consensus standards proposals for several different

products. Our legislative proposal for expedited rulemaking would grant DOE the authority to respond quickly to these recommendations, accelerating the promulgation of the standards and of the corresponding energy savings.

Legislating appliance standards that have achieved the consensus of stakeholders is another, perhaps the most time-effective way, to implement new and revised efficiency standards. Should this avenue be considered for any product, we would appreciate the opportunity to work with Congress on technical and definitional details to avoid future complications and problems.

In addition to the fast track authority we seek for consensus proposals, there may be other opportunities to streamline the rulemaking process. This Committee has raised the issue of modifying the criteria or expediting the process for revised appliance standards. We agree that this is an important and complex topic, and would welcome the chance to work with the Committee on proposals for improving the process.

CONCLUSION

I would like to conclude by emphasizing that the Department has been diligently implementing the productivity enhancements described in the Department's January 31, 2006 report to Congress. These enhancements are enabling the Department to meet its aggressive schedule of rulemakings, designed to clear the backlog of delayed actions that accumulated during prior years, and simultaneously fulfill all new requirements of EPACT 2005. Our multi-year schedules are firm and achievable. The Department is demonstrating concrete progress, and we intend to keep the momentum going. We want an open and positive dialogue with Congress and stakeholders to ensure that the Department keeps its commitments. We must -- and we are – moving forward.

Mr. Chairman, this concludes my prepared statement, and I would be happy to answer any questions the Committee members may have.

Mr. BOUCHER. Thank you very much, Mr. Karsner. Dr. Rosenfeld, we will be happy to hear from you.

STATEMENT OF ARTHUR ROSENFELD, COMMISSIONER, CALIFORNIA ENERGY COMMISSION, SACRAMENTO, CA

Mr. ROSENFELD. Good morning, Mr. Boucher, Mr. Hastert and committee. Before I talk about legislation, actually, my job has been made a little easier there because if I take the opening remarks of Mr. Boucher and Mr. Hastert and they ask should DOE have more powers and more resources, I think if I answer yes to all of your questions, I will have done, sort of, my job.

I want to take a couple of minutes just to give sort of a pep talk on behalf of, I think, all of the witnesses here. We are all happy to be loved again with all this interest in energy efficiency and we all represent energy efficiency. To show how important energy efficiency has been in terms of saving money for the United States as a whole and then to take the point of view for California, for a moment.

[Slide]

If we could have the first figure, not just my name. That is a plot of energy intensity. Energy intensity is the amount of primary energy which it takes to make a dollar of gross domestic product. It is the amount of energy which we need every year per dollar.

The horizontal line is the embargo in 1973. The heavy blue line, which has been coming down slowly in energy intensity before the embargo and the light red line, which shows a big red wedge, is the business-as-usual scenario. We were improving. We were improving about less than half percent per year. Then suddenly you see the effect of energy policy. You see a wedge opening up as we put in building and appliance standards, automobile efficiency standards and prices were raised, to get our attention, from OPEC. And that wedge represents a huge savings.

This plot is published every month by the Energy Information Agency, but they don't put my two little marks at the right, which is the dollars. We actually spent, last year, for our energy bill in this country $1 trillion, which is 7.5 percent of our gross domestic product. But if you take the business-as-usual line, if we hadn't had energy policy and some structural change, it would have been $1.7 trillion. Folks, we are saving $700 billion every year through having improved our energy efficiency, typically with a 5-year payback, so that almost nobody noticed.

That is a lot of money. That is $700 billion, $500 billion of which is energy policy, represents the annual budget of the Department of Defense, including the Iraq war. We are all conscious of that. We are seldom conscious that just good policies have made this advantage. Having made that point, I will show the second slide, only for 30 seconds.

[Slide]

It is exactly the same information, except in terms of energy itself, so you can see a huge wedge of avoided costs, even though the energy services went up. We have more cars, more homes, more TVs, bigger everything, and yet we are saving $500 billion a year.

Now to make a couple remarks as a Californian. Can I have the next plot?

[Slide]

Here I am not talking about raw energy, because I don't want to get involved with gasoline, which we have sort of neglected since 1985, so I am going to talk about electricity only where California controls its own destiny. What you can see is the good energy policies in California have caused—the yellow line is California electricity per capita. The upward sloping gray line is the United States electricity per capita. They were growing roughly 6 percent a year before the embargo.

We, in California, introduced building standards and appliance standards and conservation programs for the utilities to beat the standards and we have kept electricity use constant per person for 30 years now, even though everything is bigger and there are more loads and Gross Domestic Product per disposable income went up 80 percent, we managed to keep electricity use constant with better refrigerators, better air conditioners, better buildings.

How much of that comes from standards? I will show you the next plot and my last one.

[Slide]

This is an attempt by the Energy Commission to show how much of that blue wedge can be attributed to building standards, appliance standards and our utility programs to beat everything that the standards require, if possible, and you will see that appliance standards alone represent more or less one quarter of the whole picture. Now, those standards are not just Federal standards, but when the Feds leave us a hole, we go ahead and pass advanced standards and so that is Federal plus State standards. And we are very proud of this record.

From our point of view, DOE is, in some sense, a blessing, a mixed blessing. They do some good things, but they are usually a little bit weak on the standards and almost invariably late, so that my general argument is for more flexibility, more powers to DOE, a lot more resources for DOE so they can get the standards out on time. We are slightly against legislative consensus standards. We think you have to do those now to catch up. But in general, we think the good analysis with a good staff by DOE is the way to hunker down in the future.

I will particularly make amends to Mr. Boucher's question about should DOE be able to address separate features like we want clothes washers to also have a water characteristic, because water is expensive in California and we are short on it. We want air conditioners to be able to have thermostatic expansion in addition to co-efficiency of performance. We want all those efficient things.

The last point I am going to make, since I am into 6 minutes, is a plea for the country to, in fact, for DOE to have the power of clarification. The DOE has the power to do the question which you, Mr. Boucher, addressed, which is to have more than one climate zone for heaters and—so let us say two, north and south of the Mason-Dixon line, and three zones for air conditioners. And I do want to make the point about air conditioners, because it is not so well-known. The point I want to describe here is when you say break the country into two climate zones, you think of, again, the north, where air conditioners run only a thousand hours a year and

Miami or Phoenix, where they run 4,000 hours a year and you need better air conditioners.

What is not understood so well is that an air conditioner in, say, Atlanta, is a very different object from an air conditioner in, say, Phoenix. In Atlanta, its main job is to take like a 90 degree very damp air and drip the water out and that is why it is called air conditioning instead of just cooling. Whereas in Phoenix, all we are interested in, or California, is 115 degrees outside but no need to drip any water out. So an Atlanta air conditioner is basically a dripper and a Phoenix air conditioner is basically a cooler.

With the help of DOE we did runs to look at what would happen if we optimized an air conditioner for the dry West, as opposed to just one air conditioner for the country and it is in my appendix C, we found out that with a 3-year payback and a total for its cost to the manufacturer of $200 or retail, maybe $400, and a payback time of about 3 years, that we could get a 15 percent improvement in co-efficient performance. That means in air conditioning demand, on a hot afternoon in Fresno or Phoenix, and we in California are just not about to give up the opportunity for a 15 percent reduction in air conditioning load, which is a third of our total load on a hot afternoon.

Mr. BOUCHER. Dr. Rosenfeld, I am going to have to ask you to conclude. We are almost 4 minutes beyond.

Mr. ROSENFELD. Luckily, I am through.

Mr. BOUCHER. Thank you, sir. Well, you did a very nice job and we thank you.

Mr. ROSENFELD. Thank you, sir.

[The prepared statement of Mr. Rosenfeld follows:]

UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON ENERGY AND COMMERCE

SUBCOMMITTEE ON ENERGY AND AIR QUALITY
HONORABLE RICK BOUCHER, CHAIRMAN

HEARING:
"ACHIEVING - AT LONG LAST –
APPLIANCE EFFICIENCY STANDARDS"
May 1, 2007
10:00 a.m.
2322 Rayburn House Office Building

TESTIMONY OF ARTHUR H. ROSENFELD, Ph.D.
COMMISSIONER
CALIFORNIA ENERGY COMMISSION

TO OBTAIN CRUCIAL IMPROVEMENTS
IN APPLIANCE EFFICIENCY STANDARDS,
FEDERAL APPLIANCE LAW MUST BE CHANGED,
AND THE ACTIVITIES
OF THE DEPARTMENT OF ENERGY
MUST BE IMPROVED

Introduction and Summary

Chairman Boucher, Ranking Member Hastert, Members of the Subcommittee, Ladies and Gentlemen:

Thank you for the opportunity to be here today.

First, I want to give a brief overview of the under-appreciated importance of efficiency to the economy in terms of energy and dollar savings. The first figure in Appendix B shows the downward trend in energy intensity going back to 1949, and highlights the change that occurred following the 1973 oil embargo. Before 1973 energy intensity, measured in terms of energy per dollar of GDP, was improving at a rate of about 0.4% per year—which reflects the fact that technology has been improving and is incorporated into the economy. However, the 1973 oil crisis both raised prices and motivated us to create energy policies like CAFÉ that saved a lot of energy, and the rate of energy intensity improvement has increased to 2.1% per year.

The second figure shows what this change meant in terms of energy. The blue line is reality; i.e., after 1973 physical energy supply increased from 75 Quads per year to 100 Quads. The red line shows that if the rate of efficiency improvement had stayed at 0.4%, physical energy supply would have been 175 Quads. This means that since 1973 we added 25 Quads of physical energy, and 75 Quads of efficiency, so efficiency met 75% of our new energy needs. It also means that our energy bill, which is now about $1.0 trillion per year, would be been $1.7 trillion, or $700 billion per year higher than it is today.

The third figure shows what California achieved over a similar period, compared to the U.S. as a whole, in terms of electricity use per person. You can see that both the U.S. and California were increasing at about 4% per year—and that California is slightly lower due to our milder climate. But in 1973 California's electricity use per person becomes flat, while the U.S. continues to grow at about 2% per year. The result is that California's electricity use per person is about one-half that of the U.S. If California had continued to grow at the U.S. rate, the light blue wedge shows that our electricity use would be 50% higher. Even though California's electricity prices are higher than the U.S. average price, bill savings from this 50% avoided use, in 2005, were $165 per person, so, for 36 million Californians, over $5 billion per year, a good stimulus to the California economy.

The fourth figure shows electricity savings attributed to our three major efficiency initiatives: utility funded programs, and efficiency standards for buildings

and appliances (both federal and state appliance standards). Based on our detailed analysis of changes in end-use efficiency, utility programs are responsible for about one-half of the savings, and building and appliance standards split the remaining half equally. This concludes my pep-talk on the importance of efficiency in general and of standards in particular.

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Since 1987, when NAECA was enacted, DOE has been charged with implementing the most important appliance efficiency law in the world, a law in which Congress, with great foresight, established a foundation of energy efficiency for a few basic appliances and then told DOE to build great things. Unfortunately, the law has failed to achieve anything near its promise, in part because of DOE's failures, but also partly because of flaws in the statute. DOE has massively failed to improve the efficiencies of appliances on a nationwide basis, and the law, with DOE's support, has been a roadblock to the states' efforts to fill the gap the DOE has left.

This testimony describes needed changes in the law and needed changes at DOE. To summarize, they are:

I. Changes in the Statute

A. Adoption of Standards:

1. Simplify the rulemaking process – eliminate the ANOPR, reduce the required complexity of analysis; eliminate or streamline OMB review.

2. Establish meaningful deadlines for standards updates: if DOE misses a deadline, preemption of state standards for that appliance ends immediately.

3. Clarify that DOE has broader authority than it has interpreted:

a. DOE can establish different standards for different regions, based on, e.g., climate differences.

b. DOE can regulate all aspects of an appliance.

4. Standards adopted by DOE with a sound analytic basis, achieving the maximum improvement in energy efficiency that is

technologically feasible and economically justified, are preferable to negotiated standards without such a basis.

B. Preemption of state standards:

1. Revise the current disproportionate criteria for preemption waivers, and allow a state standard to take effect if the benefits of the standard exceed the burdens.

2. Allow states to base their performance-based building codes on heating, cooling, and water heating appliances that exceed the federal minimum standards.

3. Allow states to regulate aspects of covered appliances that DOE has not regulated.

4. Establish that preemption takes effect only upon the effective date of a federal efficiency standard.

C. Enforcement:

1. Direct DOE to implement a thorough, vigorous, and meaningful enforcement program.

2. Let states enforce the federal efficiency standards.

We are eager to work with this Subcommittee, DOE, and stakeholders to craft the statutory language needed to make these important changes.

II. Changes at DOE

Congress needs to ensure that the Administration and DOE will:

A. Hire more staff.

B. Create a culture of commitment and enthusiasm for energy efficiency.

I also want to take advantage of my appearance to praise the EnergyStar program, which of course is a key market mechanism that goes beyond codes and standards. In California, state and local governments, utilities, and many others use EnergyStar to help customers find and invest in energy-efficient products and services that pay back within a few short years – a big win for everyone. I encourage you to keep this very successful program focused on its important role of identifying highly cost-effective products that go beyond standards, and to maintain its funding.

I. Changes in the Statute

Although EPCA has produced some efficiency gains, much more could be accomplished. There are three areas in which improvement is needed: adoption of federal standards, preemption of state standards, and enforcement.

A. Adoption of Standards.

1. Simplify the rulemaking process

Rulemaking at DOE is a long, complicated process – too long and too complicated. Since 2001 California has adopted efficiency standards (along with test methods, data-submittal rules, and labeling requirements) for 44 appliances – in proceedings subject to a statute much like the federal Administrative Procedure Act and with post-adoption review by a control agency (as DOE's regulations as subject to post-adoption review by OMB). During the same period (since 2001), DOE adopted no standards for appliances, other than codify the standards that were enacted by Congress in the Energy Policy Act of 2005. Note that the EPAct 2005 standards were largely based on standards that had been developed and adopted by the California Energy Commission.

The problems are threefold. First, DOE begins its rulemakings with the publication of an Advanced Notice of Proposed Rulemaking (ANOPR), which is subject to public comment; then DOE publishes a Notice of Proposed Rulemaking (NOPR), which is also subject to public comment. This is unnecessary; the ANOPR should be eliminated.

Second, DOE has subjected itself to an extraordinarily complex and detailed technical analysis through its "Process Rule." I am hesitant to criticize DOE on this point, because a thorough analysis, based on appropriate methodologies, data, and

assumptions, must be the basis of any regulation. But DOE's approach often goes too far, appearing to seek the very last bit of data, or the ultimate in precision, even where clear answers can be obtained with a minimum of inquiry: paralysis by analysis. Sometimes exhaustive scrutiny is necessary – for example, if the cost-effectiveness of a proposed standard is a close question. But if, say, under all reasonable assumptions a standard has a payback of two to five years, and the appliance has a lifetime of ten years, additional work does nothing but waste time. The Process Rule should be eliminated or substantially changed.

Third, OMB's review often creates long delays. OMB should be subject to strict deadlines (with perhaps a short, one-time extension), and if the agency fails to reach a decision on time, approval should occur by operation of law.

2. Establish meaningful deadlines for standards updates: if DOE misses a deadline, preemption of state standards for that appliance ends immediately.

The recent case of *New York v. Bodman* highlighted DOE's utter failure to meet EPCA's deadlines for updating the efficiency standards according to the schedules established by Congress. Although DOE is now subject to a court order requiring updates on a reasonable schedule, which means, at least in theory, that DOE can be held in contempt of court if it does not meet the deadlines, that consequence cannot make up for the loss of energy savings that inevitably results if DOE fails to act on time. Congress should ensure that efficiency gains foregone if DOE fails to meet the deadlines (which should be established in terms of the effective dates of updates, not merely DOE's own action.) The most simple and most effective way to accomplish this is to end preemption of state standards for an appliance if DOE misses the update deadline for that appliance. That way, a state could adopt a standard in advance, but the standard would not take effect unless it was needed to fill a vacuum left by DOE inaction. (Appropriate statutory drafting could ensure that manufacturers would not be subject to multiple, conflicting state standards.)

3. Clarify that DOE has broader authority than it has interpreted.

Several opportunities for major energy (and water) savings have been lost because DOE has interpreted EPCA in an unnecessarily crabbed, narrow fashion. Congress should make several points clear.

a. DOE can establish different standards for different regions, based on, e.g., climate differences.

A key barrier in setting efficiency standards for space heating and cooling appliances has been DOE's position that Congress intended to prohibit the agency from adopting standards the reflect the conditions in the country's different climate zones. This meant that DOE was forced to adopt space conditioning standards based on "average" weather that ignored climates that were hot or cold. Fortunately DOE has recently indicated that it is open to the idea that heating appliances should be more efficient in northern climates, so as to effectively break the U.S. into **two** climates for heating.

In Appendix C, I explain why it is imperative, for cooling, to define **three** zones—hot/dry, hot/humid, and cool. To solidify the case for multiple climate zones, EPCA should be amended to clarify that DOE can adopt regional standards where appropriate, and where undue disruptions to the industry can be avoided.

b. DOE can regulate all aspects of an appliance.

Many appliances have more than one efficiency attribute. Several, for example, use both energy and water (e.g., clothes washers, dishwashers), and DOE should be able to establish both energy efficiency and water efficiency requirements for them. Still others use both natural gas and electricity (e.g., heating equipment that burns natural gas to produce heat and consumes electricity to power components). Some use only one type of energy, but have more than one important measure of energy efficiency (e.g., central air conditioners can be rated in terms of EER (Energy Efficiency Ratio) which depends on the actual outdoor temperature, or SEER (Seasonal EER) which is EER measured at a single seasonal average temperature, which, for the U.S. as a whole, for the cooling season, is about 82 degrees F). Finally, some appliances have several important energy-using components (e.g., to continue with air conditioners, electricity may be used to run the condenser, fans, motors, blowers, air handlers, and the like; in addition, components such as thermal expansion valves (TXVs) may be cost-effective efficiency improvements).

But DOE says it cannot take a thorough approach to energy efficiency. Instead, it has generally interpreted EPCA as prohibiting the adoption of more than one standard for an appliance. There is little justification for this in the statute, and none whatsoever in intelligent energy (and water) policy. If a standard is cost-effective and technically feasible, DOE should adopt it. Thus Congress should make clear that DOE has, and should exercise, the authority to:

establish both water and energy efficiency standards for the same appliance;

adopt different energy (or water) metrics for the same appliance (e.g., EER and SEER for air conditioners);

regulate all energy-or water-using components within a regulated appliances; and

require prescriptive components in any appliance.

A closely related matter is the states' authority to regulate where DOE has been active. Please see part I.B.3. of this Testimony, below.

4. Standards adopted by DOE with a sound analytic basis, achieving the maximum improvement in energy efficiency that is technologically feasible and economically justified, are preferable to negotiated standards without such a basis.

The most important of the federal appliance laws, the National Appliance Energy Conservation Act of 1987 (NAECA), was the result of extensive negotiations among states, efficiency advocates, and industry. Since then, there have been periodic negotiations resulting in changes to the law or to DOE's regulations, and this activity has increased in the past several years. This is good, yes – all sides on a contentious issue reaching agreement? Well, no. In general, negotiated standards have come about only because the negotiators were frustrated with DOE's long delays or were worried about what Congress might do in the absence of an agreement, and the usual result has been lowest-common-denominator standards that are much less effective than "the maximum improvement in energy efficiency [or] water efficiency [that DOE] determines is technologically feasible and economically justified." This is what the law requires, what citizens' pocketbooks want, and what the country's environmental health needs – but it far from what has resulted from negotiated standards.

Yet some stakeholders want to make negotiated standards an even more prominent feature of the regulatory landscape, by creating a streamlined rulemaking process for them. While I praise those stakeholders' tireless efforts, and while I am confident that their motives are good, I must respectfully disagree. With the changes I have outlined above – helping DOE to meet deadlines by eliminating the ANOPR, reducing complexity, and shortening or eliminating OMB review; providing an

important consequence for further delay by eliminating preemption when DOE misses deadlines); and ensuring that DOE knows that it has full authority to adopt needed standards – the DOE rulemaking process, supported by significant Congressional oversight and, if necessary, vigorous judicial review, will, I believe, produce the largest and most cost-effective efficiency gains in the least period of time.

B. Preemption of state standards.

1. Revise the current disproportionate criteria for preemption waivers, and allow a state standard to take effect if the benefits of the standard exceed the burdens.

Under current law, DOE considers three factors when deciding whether to waiver federal preemption for a state appliance standard: the state's interests in the standard, the potential burden on the national appliance industry, and the potential loss of consumer utility. This is reasonable, as far as it does; these are all important interests. What is not reasonable is that the law says that if a state standard would cause *any* "significant burden" on any aspect of the national appliance industry, or would result in the unavailability in the state of *any* appliance feature (no matter how trivial), then DOE *cannot* grant a waiver, even if the benefits of the state standard vastly outweigh the burdens. This does not make sense – why should the federal government prevent a state from taking action that is, when considering both state and national interests, beneficial? Indeed, when the courts consider, under the Commerce Clause of the U.S. Constitution, challenges to state laws that potentially burden interstate commerce, the laws are generally upheld unless "the burden on interstate commerce *clearly exceeds* the local benefits." (*Brown-Forman Distillers Corp. v. New York State Liquor Authority*, 476 U.S. 573, 579 (1986).) In essence, this is 180 degrees away from the current EPCA approach.

I propose a reasonable compromise: in considering preemption waivers, DOE should weigh the three current EPCA criteria (state interest, industry burden, consumer utility), and grant a waiver the state's interests predominate.

2. Allow states to base their performance-based building codes on heating, cooling, and water heating appliances that exceed the federal minimum standards.

For thirty years, California has led the nation in the development of flexible, "performance-based," "energy budget" building codes. Performance-based codes set

a "budget" in terms of energy use per square foot of building space, and then "authorize builders to . . . trade off the efficiencies of the various building components so long as [the] energy goal is met." (House Report on NAECA, p. 39.) Thus builders can get "extra credit" for installing equipment of more-than-minimum specifications (e.g., a highly efficient air conditioner), and then "trade off" the extra credit by using more energy in another part of the building (e.g., reducing the amount of insulation in the ceiling or increasing the number or size of windows) in a way that reduces costs or makes the building more attractive to buyers.

When NAECA was enacted, Congress appropriately recognized that such codes provide important economic incentives to builders, and that the appliance efficiency requirements in such codes tend to create a smaller burden on the appliance industry that do state standards that are applicable at the point of sale. This is in large part because manufacturers and distributors usually ship products to retail outlets before consumers buy, but they deliver to a building site only after a contractor places an order, which allows more flexibility. Unfortunately, Congress did not go far enough in responding to these facts. The major way in which EPCA treats state building codes differently from state point-of-sale standards is merely that states can enforce the *federal minimum* efficiency standards though the states' building codes (in contrast, the states cannot enforce the federal efficiency standards at the point of sale). This is a very small benefit to the states and creates no efficiency gains: the states cannot *require* equipment exceeding the minimum federal efficiency, and even flexible energy budgets must be based on minimum-efficiency equipment.

I propose a minor change to the law that will have minimal if any burdens on the industry, but will substantially increase energy (and water) efficiency while at the same time reduce the overall cost of owning and operating a home or other building. Very simply, Congress should authorize a state to base the energy budgets in a performance-based building code on appliances with more-than-federal-minimum efficiencies, if the state finds that the resulting budget is technically feasible and cost-effective, and would not cause undue burdens on interstate commerce. Note that I am not even proposing that states be allowed to *require* greater-than minimum efficiencies. I am simply saying that when a state determines that an energy budget based on, for example, a SEER 15 air conditioner, is cost-effective for its citizens, then the federal government should not stand in the way. Builders would still be free to install federal-minimum-efficiency equipment in the building; the great attractiveness of my proposal is that the people actually in the field, on the ground, would be able to choose the combination of building components (air conditioner, furnace, water heater, lighting, insulation, roofing material, windows, etc.) that is

cheapest, and thereby provide the best deal for the buyer – while providing the maximum feasible amount of energy (and water) efficiency.

3. Allow states to regulate aspects of covered appliances that DOE has not regulated.

Part I.A.3.b., of my Testimony, above, discussed the lost efficiency opportunities resulting from DOE's failure to regulate all energy- (and water-) using aspects of appliances. The corollary of my recommendation there – which was to ensure that DOE knows that it has the legal authority to do a thorough job – is to ensure that where DOE does not act, the states can. Therefore, EPCA should clarify that where, for example, DOE has established an SEER standard for an air conditioner, but has not adopted an EER standard, the states are not preempted from doing the latter.

4. Establish that preemption takes effect only upon the effective date of a federal efficiency standard.

The basic principle of preemption seems simple enough – when the federal government regulates, state standards are preempted. But EPCA establishes several different start dates for preemption, appliances have different start dates for preemption, sometimes dependent on the time of adoption by the state, sometimes on whether a standard has been established in statute or is left to DOE, and so on. These variations are unnecessary, confusing, and unjustified. Congress should enshrine the basic principle in the law.

C. Enforcement.

DOE has never had an enforcement program for the federal appliance standards, and under the current provisions of EPCA, the states cannot themselves enforce the federal standards. With billions of consumers dollars (and tons of greenhouse gas emissions) at stake, these omissions must be rectified. Congress should provide adequate funds for DOE to verify manufacturers' performance claims through independent testing, as well as to survey for non-complying appliances being offered in retail outlets – and should require DOE to report regularly to the appropriate Congressional committees to demonstrate that DOE is taking its enforcement responsibilities seriously.

II. Changes at DOE

The statutory changes I have discussed above are necessary to get the most from the federal appliance program – but they are not sufficient. DOE needs to adopt new standards, update existing standards, and launch a major enforcement program. *Many* more staff are needed, and Congress must insist that the agency be adequately funded. But even a full complement of workers is not enough, if they do not have the will and dedication to succeed. Here Congress can cajole, coax, and encourage, but it is up to the Executive Branch to create a culture of commitment and enthusiasm for energy efficiency.

APPENDIX B

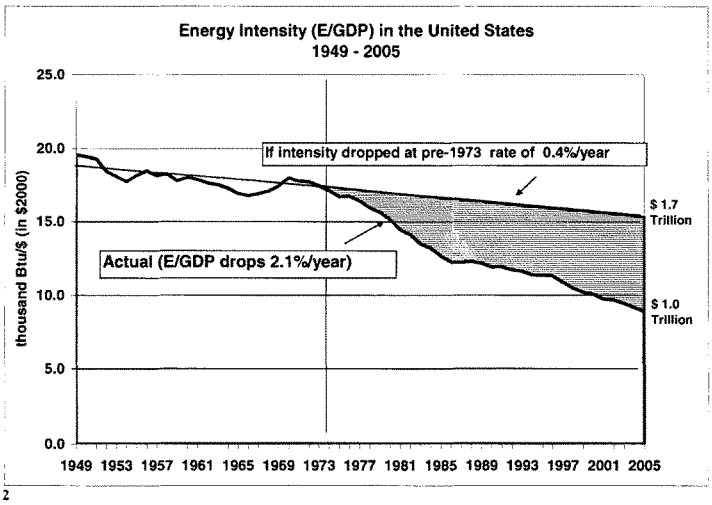
INTRODUCTORY SLIDES

The Un-Appreciated Importance of Standards

Hearing on Appliance Standards
House Committee on Energy and Commerce
May 1, 2007

Arthur H. Rosenfeld, Commissioner
California Energy Commission
(916) 654-4930
ARosenfe@Energy.State.CA.US

http://www.energy.ca.gov/commission/commissioners/rosenfeld.html
or just Google "Art Rosenfeld"



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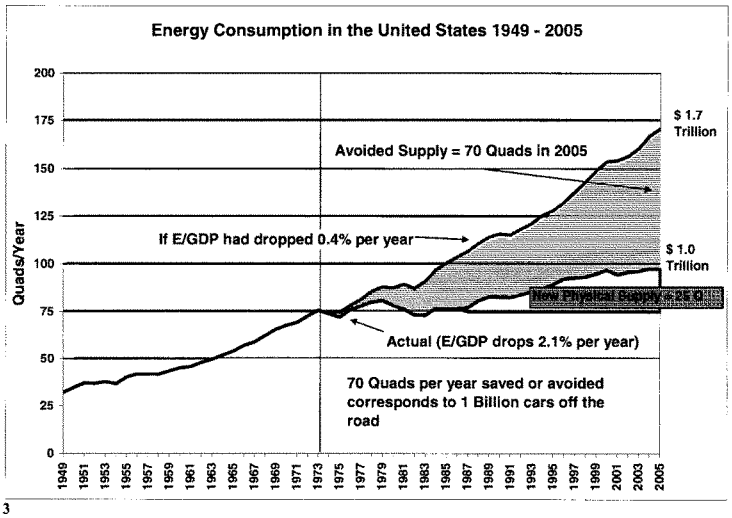
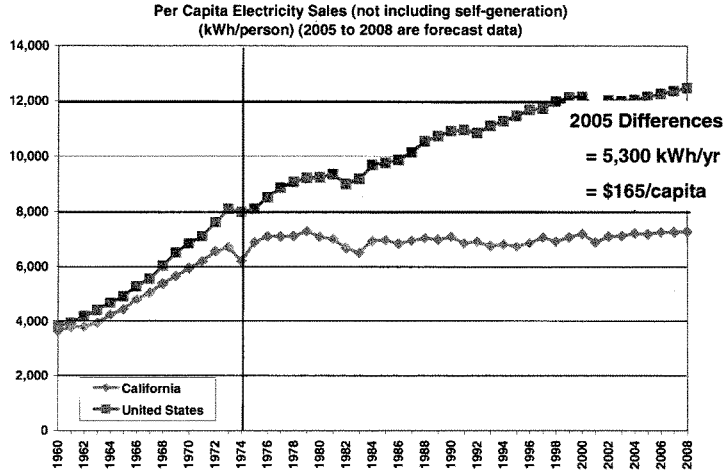
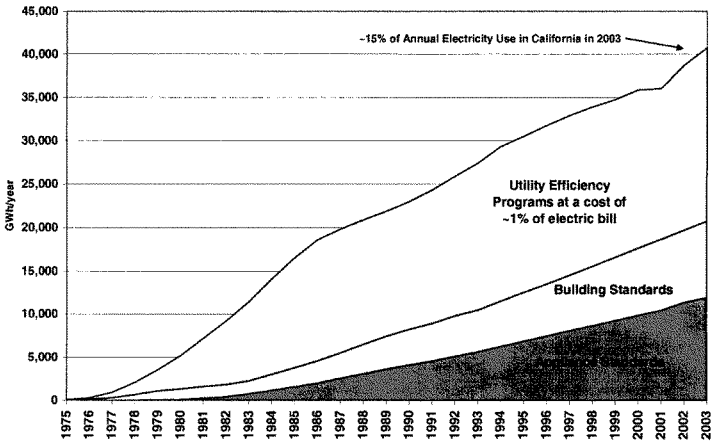

Energy Consumption in the United States 1949 - 2005
Quads/Year
Avoided Supply = 70 Quads in 2005
If E/GDP had dropped 0.4% per year
$ 1.7 Trillion
$ 1.0 Trillion
Actual (E/GDP drops 2.1% per year)
70 Quads per year saved or avoided corresponds to 1 Billion cars off the road

3


Per Capita Electricity Sales (not including self-generation)
(kWh/person) (2005 to 2008 are forecast data)
2005 Differences
= 5,300 kWh/yr
= $165/capita
California
United States

4

Annual Energy Savings from Efficiency Programs and Standards



5

APPENDIX C

WE NEED REGIONAL STANDARDS FOR CLIMATE-SENSITIVE APPLIANCES

Here we have an absurd situation which is a severe handicap for aggressive states like California. For its Title 24 New Building Energy Performance Standards, California has 16 climate zones; yet the entire US has only one climate zone for heating and cooling appliances

Thankfully DOE plans to grant waivers, to cold states, **for home furnaces and boilers** but that still has two defects:

1 With the cold tier removed, warm states will have to comply with a national standard which is too strict, so they also will want waivers.
2 It has been very difficult to get waivers, on any appliances, from DOE --- states should not have to put up with this waiver barrier.

It is far better just to give DOE the power to create several climate zones.

In the case of air conditioning (a/c) the minimum number of regions is not two, but three. The reason for three is that an a/c unit designed for Atlanta or Miami is different from one designed for Phoenix or the Central Valley of California. In Atlanta an a/c spends most of its time (and uses most of its energy) condensing water vapor out of damp 90 deg. F outside air. So the a/c is mainly a dehumidifier. In contrast in Phoenix it runs mainly at temperatures above 100 deg. F, so its job is merely to cool, but not dehumidify, dry outside air. So the Phoenix a/c is mainly a chiller.

Technical Note To dry air in the soggy South the cold coil of an a/c runs at ~50 F, with water dripping from it. Then when the cold damp air heats up to room temperature it is dry enough to be comfortable. In Phoenix the cold coil can run up to 10 F hotter (so up to ~60 F) and keep the room equally comfortable. The 60 F air requires slightly higher air flow (larger fan and ducts) but is thermodynamically more efficient than cooling down all the way to 50 F. Hence, for the same first cost, a Phoenix a/c system can (and should) be designed to be more efficient than its Atlanta counterpart.

At the back of this text are seven slides extracted from a longer 2005 presentation (courtesy of DOE). A series of computer runs started with the current US-wide a/c baseline (SEER 13 = Seasonal Energy Efficiency Ratio 13), which is optimized for

roughly Pennsylvania climate. The runs covered three cost-effective modifications, and calculated the gains in performance and in Simple Payback Period (SPP).

Slide 2 shows that Design 1 was simply to increase the area of the cold coil of the heat exchanger (for a retail cost of $100). Design 2 called, in addition, to a blower motor upgrade to a more efficient, variable speed, model (for #350). Let's stop with those two modifications, and see the gains in the large, hot-dry Phoenix market.

Slide 4, design 2 shows an 18% gain in annual kWh use, and a gratifying drop in peak demand of 0.75 kW (15%). Slide 6, shows a Simple Payback Period of just 3.7 years, clearly an attractive gain for hot-dry Western states.

DOE should complete this modeling experiment and come up with parameters (like SEER and EER – Seasonal Energy Efficiency Ratio, and Energy Efficiency Ratio) for three independently optimized a/c's. I'll call them ----
SEER Southeast, optimized for Atlanta climate,
SEER Southwest, for Phoenix, and
SEER North, for Chicago
Then DOE will be able to join States and Efficiency Advocates in calling for more US climate zones.

A state like California, with its 16 climate zones for building standards, would then specify SEER Southwest for its warmer zones, and SEER North for its cooler zones. Even more than three US climate zones would help a/c efficiency, but manufacturers will probably object to even three, and even more strongly to four or more.

Economic Evaluation of Residential Air Conditioner Designs for Hot and Dry Climates

Arthur Rosenfeld, California Energy Commission
Gregory Rosenquist, Lawrence Berkeley National Laboratory
C. Keith Rice, Oak Ridge National Laboratory

ARI Spring Product Section Meeting
Reston, VA. Update to April 18, 2005
(version 3.1, April 20, 2007)

ARosenfe@Energy.State.CA.US

DOE has funded research at ORNL to develop A/C designs for hot/dry climates

- Several Hot/Dry designs were developed by ORNL relative to a conventional baseline design
- Three Hot/Dry designs were adapted for economic evaluation
  - Baseline design: 13 SEER, R-410A
  - Hot/Dry designs
    - Design 1: 1.4X Evap HX surface area
    - Design 2: 1.4X Evap HX surface area; ECM Blower Motor
    - Design 3: 1.4X Evap HX surface area; ECM Blower Motor; Rated Ducts

	System		Evaporator				Compressor	Ducts
Design	SEER	Hot/Dry EER Out: 115°F In: 80°F/62°F	Face Area *Sq.ft.*	Flow *CFM*	Fan Power 115°F; 80/62°F *Watts*	Evap Temp Out: 95°F In: 80°F/67°F	*Percent of Baseline Displacement*	Type / Ext. Static *Inches H_2O*
Baseline	13.1	7.5	5.0	1200	355	48°F	-	Typical / 0.5"@1200 CFM
Design 1	13.8	8.0	7.2	1200	330	52°F	94%	Typical / 0.5"@1200 CFM
Design 2	14.6	8.4	7.2	1200	265	52°F	91%	Typical / 0.5"@1200 CFM
Design 3	15.4	9.2	7.2	1500	250	55°F	84%	Rated / 0.15" fixed

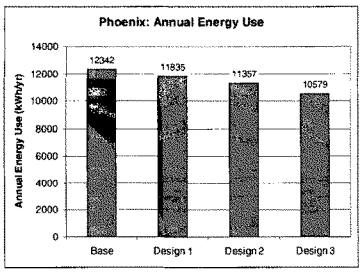
2

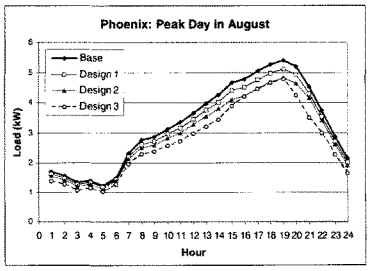
Prototypical house chosen for two hot/dry locations: Fresno, CA and Phoenix, AZ

- California prototypical house for Fresno
- Fresno house modeled in Phoenix (only weather changed)
- Both locations modeled with DOE-2
  - — Square footage: 2258 sq.ft.
  - — Number of floors: 2
  - — Floor type: Slab-on-grade
  - — Exterior wall
    - Area: 1584 sq.ft.
    - Insulation: R-13
  - — Ceiling insulation: R-30
  - — Windows
    - Area: 251 sq.ft.
    - Window-to-Wall Ratio: 16%
    - R-value: R-1.2 (double-glazing)

3

Designs yield total home annual energy and peak demand savings in Phoenix





4

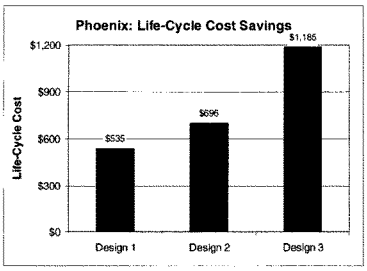
Consumer price of more efficient designs increase with efficiency

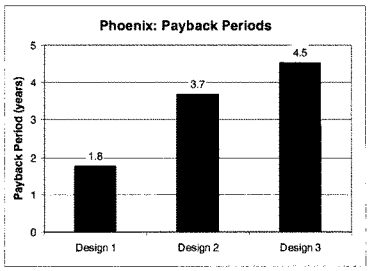
	Manufacturer Cost					Δ Consumer Price		
	Compressor	Evap Coil	Evap Motor	Total	Δ Cost	Δ Price	Δ Ducts	Δ Total
Baseline	$168	$113	$61	$342	-	-	-	-
Design 1	$158	$172	$61	$391	$49	$101	-	**$101**
Design 2	$153	$172	$185	$510	$168	$348	-	**$348**
Design 3	$141	$172	$185	$497	$155	$322	$500	**$822**

- Manufacturer cost estimates from 2001 DOE Technical Support Document

5

All designs provide both better LCC savings and shorter payback periods in Phoenix





6

Summary of Analysis

- All three Hot/Dry A/C designs developed by ORNL provide LCC savings and relatively short payback periods
  - LCC savings range from:
    - ~$300 to ~$1200 based on residential electric utility tariffs
  - Payback periods range from 2 to 7 years
  - LCC savings and payback periods are relative to a 13 SEER baseline design
- To exploit full savings potential:
  - Manufacturers need to offer equipment designed for Hot/Dry climates
  - California needs to revise building standards to ensure good ducts

7

Mr. BOUCHER. Mr. Gaddis.

STATEMENT OF EVAN GADDIS, PRESIDENT AND CEO, NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION, ROSSLYN, VA

Mr. GADDIS. Chairman Boucher, Ranking Member Hastert, members of the committee, I am Evan Gaddis, president and CEO of the National Electrical Manufacturers Association. NEMA's 430 member companies make products for the generation, transmission, distribution, control and end use of electricity. I am pleased to be here today to present our association's views on the important role of the national efficiency standards program and to offer our comments on experiences involving consensus standards, legislative changes to the statute and role of Federal pre-emption.

NEMA is experienced with the DOE program as centered on lighting, electrical motors and distribution transformers. The deployment of energy efficient products is the cheapest, cleanest and quickest source of meeting national energy and environmental goals. Our industry stands at the very heart of our national effort to achieve a reduced dependence on fossil fuels, a cleaner environment and a higher standard of living across the globe. NEMA supports a robust national energy conservation standards program under the Energy Policy and Conservation Act, EPCA. We believe that a strong national program of standards, test procedures and labeling information is critical to effectively maximize energy savings for the Nation and the consuming public.

Products are manufactured and distributed on a national and sometimes global basis and it is key that energy conservation regulation for products occur at the Federal level. NEMA has considerable experience with negotiation consensus standards and we support congressional enactment of these proposals. For instance, NEMA and the American Council of Energy Efficient Economy have submitted joint recommendations for a new standard for industrial electric motors. Electric motors consume 65 to 70 percent of electrical energy used in commercial and industrial motor driven systems like pumps, fans and compressors. Thus, increases in motor efficiency translate to significant energy savings for industrial and manufacturing end users. The consensus proposal, if enacted by Congress, with an effective date of 2011, is estimated to save 8 billion kilowatt hours by 2030 with a net energy savings to consumers of almost $500 million.

NEMA is also engaged in negotiation with interested parties on new standards for light bulbs. Lighting use in the U.S. consumes some 20 to 22 percent of all electricity generated and 30 percent of the energy consumed in an office building to use for lighting and 5 to 10 percent of residential energy use is for lighting. It is estimated that a comprehensive consensus agreement that works with market forces could result in $18 billion in annual energy savings and avoid more than 158 million tons of carbon dioxide. We believe, based on our experience with consensus standards negotiations and agreements, that EPCA should be amended to include procedures for consensus agreements to be quickly acted upon by the Department of Energy.

To date, our consensus agreements have been enacted through legislative action. While this has had the desired effect of setting minimum efficiency levels and advancing energy savings, it is not practical to expect Congress should have to legislate each time a consensus agreement is reached. That is why we support changes to EPCA to permit stakeholders to submit, through a petition process, their consensus agreement for the Department of Energy to expeditiously consider and act upon.

Mr. Chairman, a fundamental tenet of the Energy Policy Conservation Act is the significant and longstanding principle of Federal pre-emption. NEMA supports efforts to improve and strengthen a national energy conservation program and keeping Federal pre-emption intact. Some have proposed that Federal pre-emption for a federally covered product should lapse if the Department of Energy misses a rulemaking deadline for that product.

To us, this misses the point. Manufacturing should not be penalized because of the government's lapse. If deadlines are missed, the agency must be called to task by Congress. Placing products that should be Federal regulated under a patchwork of State regulations is a significant burden for manufacturers, distributors and retailers. The consumer and the country are best served by having a national energy efficiency program.

And finally, document review and clearance processes with DOE must be streamlined and resources and budgets for the Codes and Standards program within DOE must be adequate to perform the task. Mr. Chairman, let me thank you for having this hearing on DOE standards program. It is a key component of the Nation's energy efficiency efforts and NEMA is committed to working with you and the subcommittee to enhance these programs.

[The prepared statement of Mr. Gaddis follows:]

Statement of the National Electrical Manufacturers Association

Before the

Energy and Air Quality Subcommittee,

Committee of Energy and Commerce

U.S. House of Representatives

May 1, 2007

"Achieving – At Long Last – Appliance Efficiency Standards"

Chairman Boucher, Ranking Member Hastert, and Members of the Subcommittee:

On behalf of the National Electrical Manufacturers Association (NEMA), I am Evan Gaddis, NEMA president and CEO. NEMA is the trade association of choice for the electrical manufacturing industry. Founded in 1926 and headquartered near Washington, D.C., its approximately 450 member companies manufacture products used in the generation, transmission and distribution, control, and end-use of electricity. These products are used in utility, medical imaging, industrial, commercial, institutional, and residential applications. Domestic production of electrical products sold worldwide exceeds $120 billion. In addition to its headquarters in Rosslyn, Virginia, NEMA also has offices in Beijing, São Paulo, and Mexico City.

National Electrical
Manufacturers Association
www.nema.org

1300 North 17th Street, Suite 1847
Rosslyn, VA 22209
(703) 841-3200
FAX (703) 841-5900

I am pleased to be here today to present our Association's views on the importance and role of the national energy efficiency standards program, and to offer our comments on experiences involving consensus standards, legislative changes to the statute, and role of federal pre-emption.

I would like to note that our member companies strongly support advancing energy efficiency in the marketplace. Energy efficiency is the cheapest, cleanest, and quickest source of energy. Our industry stands at the very heart of our national effort to achieve a reduced dependence on fossil fuels, a cleaner environment, and a higher standard of living across the globe. Energy efficient technologies exist, and NEMA companies are actively engaged in the research, engineering, manufacturing and promotion of them. What we all must strive for is wider recognition, deployment, and use of today's state-of-the-art products and technologies, and support for emerging technologies.

Advancing energy efficiency in our economy through greater deployment and use of energy efficient technology comes about through a mix of policy approaches: building codes, product standards, consumer education, product labeling, voluntary programs like Energy Star®, government procurement, and energy tax incentives.

NEMA supports a robust national energy conservation standards program under the Energy Policy and Conservation Act (EPCA), as amended. We believe that a strong national program of standards, test procedures and labeling/information disclosure is critical to effectively maximize energy savings for the Nation and the consuming public.

Products are manufactured and distributed on a national (and sometimes global) basis, and it is key that energy conservation regulation for products occur at the federal level.

Mr. Chairman, I am aware that the Subcommittee is interested in the role that negotiated consensus standards play as part of the national program, so let me briefly highlight some of NEMA's views:

Consensus Standards

Electric Motors

Electric motors consume 65-70% of the electrical energy used in commercial and industrial motor-driven systems, like pumps, fans, and compressors. Thus, increases in motor efficiency translate to significant energy savings for industrial and manufacturing end-users.

NEMA developed the first energy-efficient motor standard (MG-1) and defined levels for an "energy efficient" electric motor in 1987. In the Energy Policy Act of 1992, Congress adopted the NEMA definitions and integral 1-200 horsepower, general-purpose, poly-phase electric motors became federally-covered products. In 2002, NEMA, in consultation with the Consortium for Energy Efficiency, established new "premium efficiency" motor levels and began a significant marketing and promotion effort for NEMA Premium® by its members and through the Motor Decisions Matter national campaign. The Energy Policy Act of 2005 (Section 104) requires the use of NEMA Premium motors for federal procurement and purchasing.

In late 2006, NEMA began discussions with state representatives and advocacy groups to explore changes and expansion of the 1992 motor efficiencies in light of motor

performance changes, technology, and market changes. The result of these discussions has yielded a significant consensus proposal, which NEMA and ACEEE transmitted to the House and Senate on March 22, 2007. The consensus proposal expands motor efficiencies in three important ways:

1. Increases the minimum efficiency standards for the 1-200 HP category to the "NEMA Premium" levels,
2. Adds 7 motor designs in the 1-200 HP range that were excluded from EPACT 1992 to current federal efficiency levels, and
3. Adds general purpose motors 201-500 HP to current federal efficiency levels.

The Department of Energy is currently scheduled to complete a final rule on possible revisions to the existing standard for integral 1-200 horsepower motors by June 2011, with an effective date likely to be 2014. Our consensus recommendations would accelerate this timetable if enacted by legislation by three years to achieve savings as early as 2011, and would greatly increase the scope of federally-covered products. ACEEE estimated the savings attributable to these joint recommendations to be 8 billion kilowatt hours by 2030, with a net energy savings to consumers of almost $500 million.

Incandescent Reflector Lamps

Incandescent reflector lamps, used in downlights/recessed lighting fixtures, were added as a federally-covered product pursuant to the Energy Policy Act of 1992. NEMA participated in the negotiations and development of the 1992 act, and worked closely with the Department of Energy, Federal Trade Commission, and energy efficiency advocate stakeholders in implementing the bill. Certain incandescent reflector lamp shapes known as bulged reflector, elliptical reflector, and blown PAR were not subject to federal

efficiency regulations as defined by Congress. It should be noted that DOE did prescribe a wattage cap of 65 watts on ER/BR products. During intervening decade, there has been market growth in the ER/BR designs, along with improved technologies and new product options.

In 2005, NEMA joined with the American Council for an Energy Efficient Economy (ACEEE), states, and non-governmental organizations to negotiate a consensus agreement to revise the definition of federally-covered product and set lamp efficacy levels. A consensus agreement was reached, which has served as the basis for several state efficiency bills.

On May 31, 2006, DOE announced (71 FR 30834) the opening of a lamp rulemaking proceeding to consider changes to the 1992 lamp rules affecting general service incandescent, incandescent reflector, and general service fluorescent lamps. NEMA participated in the informational June public hearing, and announced along with ACEEE and others that a consensus proposal would be submitted for DOE consideration. On November 20, 2006, a submission was made to the Department of Energy with proposed rulemaking language for the consensus agreement. DOE's lamp rulemaking schedule is planned to be final by June 2009, with rules effective June 2012.

On July 18, 2006, NEMA and ACEEE transmitted to the House and Senate the set of proposed recommendations for possible inclusion in an energy efficiency standards title in future energy legislation with an effective date of January 1, 2008.

Our experience with the negotiations on the incandescent reflector lamps was positive, and we urge the Committee to consider incorporating our consensus agreement in new energy efficiency legislation. The proposal is included in S. 1115 introduced

April 17, 2007, and we believe that it should be legislated rather than wait for the DOE rulemaking to conclude and take effect in 2012.

General Lighting

Lighting use in the U.S. consumes some 20-22 percent of all electricity generated. Thirty percent of the energy consumed in an office building is used for lighting, and 5-10% of residential energy use is for lighting.

I am pleased to report that on April 3, 2007, the member companies of the NEMA Lamp Section (representing over 95% of the "light bulb" market) announced a joint industry commitment to support public policies that will transform the U.S. market to more energy-efficient lighting within a decade. This joint position came about in response to a growing number of proposals at the international, state and local levels that called for the banning of incandescent lamps in the marketplace.

NEMA views such a market transformation as a matter of national importance. Accordingly, new rules for this paradigm shift need to be established on a national level and require federal action and oversight in order to avoid confusion in the marketplace. Central to this commitment is the setting of standards that will eliminate the least efficient products from the market, based on the following six principles:

- The market transformation must be orderly and target as a starting point the least efficient medium screw base A-line incandescent lamps from 40 through 100 watts in widespread use today.
- Performance standards must be used to accomplish the transformation.
- Performance standards must be technology-neutral.
- The market transformation will take up to a decade.

- The set of A-line incandescent lamps to be addressed includes clear, frost, soft white and enhanced spectrum. Performance standards will be needed for each of these types.
- The market transformation should begin with strategies that will save the most energy.

We note that in the absence of a federal solution, states and localities should follow these principles when deliberating on this matter.

Prior to the April 3 announcement and subsequent to it, NEMA lamp members have been engaged in a series of negotiations with non-government organizations, advocacy groups, state government representatives, and industry organizations with an aim to develop a standards consensus proposal for submittal to Congress. Those negotiations are on-going at the time of preparing this testimony, and we will report to the Committee on their status.

Energy Policy Act of 2005

I would also like to note that NEMA worked with on six consensus agreements with advocacy organizations that were ultimately included by Congress in the Energy Policy Act of 2005 (EPACT 2005). These include:

- Illuminated Exit Signs (effective January 1, 2006)
- Traffic Signal and Pedestrian Crosswalk Modules (effective January 1, 2006)
- Medium-Screw Base Compact Fluorescent Lamps (effective January 1, 2006)
- Low Voltage Dry-Type Distribution Transformers (effective January 1, 2007)
- Energy Saving (T34) Fluorescent Lamp Ballasts (January 1, 2009)
- Mercury Vapor Lamp Ballasts (January 1, 2008)

Expediting New Energy Efficiency Standards

We believe, based on our experience with consensus standards negotiations and agreements, that the Energy Policy and Conservation Act should be amended to include procedure thereby such consensus agreements can be quickly acted upon by the Department of Energy. To-date, our consensus agreements have been enacted through legislative action. While this has had the desired effect of setting minimum efficiency levels and advancing the energy savings to be realized, it is not practical to expect that Congress should have to legislate each time a consensus agreement is reached. That is why we support changes to EPCA to permit stakeholders to submit through a petition process their consensus agreement, and for the Department of Energy to expeditiously consider and act upon it.

The Secretary of Energy has submitted a proposal for "expedited rulemaking" authority, and in the Senate, S. 1115 "The Energy Efficiency Promotion Act of 2007" contains a Section 204 to provide the Secretary of Energy the authority to conduct an expedited rulemaking based on an energy conservation standard or test procedure if submitted as a "consensus proposal".

We believe the benefits of accelerating adoption of consensus proposals benefit the Nation when more efficient, competitive products enter the marketplace at an earlier date than would otherwise be the case if handled in the regular DOE rulemaking proceedings. In addition, manufacturers benefit by improvement in their planning processes occasioned by the increased certainty of earlier finalization of consensus standards. Finally, federal regulators and all stakeholders would benefit from reduced

burdens of paperwork, unnecessary rounds of otherwise mandated process and procedures, and legal costs.

NEMA supports an "expedited rulemaking" authority and recommends the Committee include such a procedure as a meaningful modification to the EPCA statute.

Federal Pre-Emption

A fundamental tenet of the Energy Policy Conservation Act, as amended, is the significant and longstanding principle of federal preemption for overseeing energy efficiency standards, and NEMA supports efforts to improve and strengthen the operation and administration of a national energy conservation program.

The twin cornerstones of the "comprehensive national energy policy" enacted by Congress in 1975 to implement EPCA (S. Conf. Rep. No. 94-516 at 116 (1975) are:

1. The establishment of national standards for energy efficiency, testing and information disclosure for "covered products," and
2. Express Federal preemption of State laws and regulations respecting energy efficiency standards, testing, and information disclosure for those covered products.

The exceptions to Federal preemption were intentionally narrow: (a) State petitions for waivers required that States show there were "unusual and compelling State and local interests" that were "substantially different in nature and magnitude from those of the Nation generally," so that achieving the waiver would be difficult; (b) State procurement standards would be permitted; (c) and a narrowly drawn exception for State and local building codes that must meet seven requirements.

For many federally-covered products, standards have been established by Congress in the various acts; in the case of other covered products, Congress has delegated to the Department of Energy and the Federal Trade Commission the authority to determine uniform national standards and policy. In both cases, conscious decisions were made to exclude from regulation a certain subset of covered products because the expected energy savings was small compared to the burden of achieving that savings. For example, in 1992, when Congress enacted energy efficiency standards for electric motors, it specifically excluded from regulation certain definite purpose and special purpose motors. At the same time, Congress excluded from regulation certain "special applications" of general service fluorescent lamps and general service incandescent lamps, and delegated to the Secretary of Energy the authority to further determine by rule that standards "would not result in significant energy savings because such lamp is designed for special applications or has special characteristics not available in reasonably suitable lamp types. Current "special application" lamps include, for example, medical and dental uses.

Where Congress or the Secretary of Energy have declared that there shall be no regulation for a federally-covered product (or subset of products) because agency determination concluded regulation will not result in significant energy savings, or because substitutes are not available, federal pre-emption remains intact. To do otherwise would grant States the ability to regulate after the Secretary of Energy, in the course of a rulemaking to prescribe standards for new covered products or in any amended standards, has determined that a covered product should be excluded from regulation. In making this determination, a public process has been followed that

includes evaluation of the projected amount of energy savings, technical feasibility of a standard, economic impact on manufacturers, the decline in the performance of products, and any lessening of competition, and other factors.

When a State or an interested citizen believes that the exclusions from federal regulation should be revisited, Congress should insist, as it always has, that the interested parties bring the policy debate on this important Federal question to Congress or the Secretary of Energy. Congress has always eschewed opening a wide door to the development of "a patchwork of numerous conflicting State requirements," H.R. Rep. No. 100-11 at 19 (1987). Energy efficiency is a national issue that requires a national solution.

Some have proposed that federal pre-emption for a federally-covered product should lapse if the Department of Energy, as the administrator of the national program, misses a rulemaking deadline for that product. To us, this "stick" misses the point. Manufacturing should not be penalized because of the Government's lapse. If deadlines are missed, the agency must be called to task by Congress (as it did in Section 141 of EPACT 2005). Resources and budgets need to be adequate to perform the tasks and workload assigned by Congress and statute, efficiencies need to be internally evaluated, and document review and clearance processes must be streamlined within the agency.

EPCA also provides for certain remedies where DOE misses statutory deadlines by permitting any person to commence a civil action against DOE where there is an alleged failure by DOE to perform any non-discretionary act or duty under EPCA. 42 USC §6305(a). EPCA requires the courts to expedite the disposition of such civil

actions. Persons also have the right to petition DOE to commence a rulemaking to enact or amend a rule.

Conclusion

In closing, Mr. Chairman, let me thank you for having this oversight hearing on the DOE standards program. It is a key component of our Nation's energy efficiency efforts, and NEMA is committed to supporting and working with you and the Subcommittee to make appropriate changes to strengthen and enhance the statute and operation of the program.

From our experience, we believe that:

1. An expedited rulemaking authority by the Department of Energy to adopt consensus standards agreements would benefit the Nation.
2. Absent an expedited rulemaking process, Congress should legislatively enact consensus standards proposals.
3. Federal preemption for federally-covered products needs to remain intact.
4. Document review and clearance processes must be streamlined within the agency.
5. Resources and budgets for the Codes and Standards program must be adequate to perform the tasks, workload, and timelines assigned by statute.

Mr. BOUCHER. Thank you very much, Mr. Gaddis. Mr. Myers.

STATEMENT OF C. DAVID MYERS, VICE PRESIDENT, BUILDING EFFICIENCY, JOHNSON CONTROLS, INC., MILWAUKEE, WI

Mr. MYERS. Thank you, Mr. Chairman, Ranking Member Hastert and the members of the subcommittee. My name is Dave Myers. I am President of the Building Efficiency business at Johnson Controls and I am here today on behalf of two associations, ARI and GAMA. Thank you for inviting me.

Our organizations represent a domestic manufacturing industry with combined shipments of over $50 billion annually, contributing over $2.3 billion in positive trade balance. Our organizations manufacture furnaces, boilers, water heaters, heat pumps, air conditioners and refrigeration equipment for both residential and commercial applications. We have more than 240,000 American men and women working in our companies. Our industry has long supported energy efficiency.

We joined forces with the public interest groups and the States to work on the 1987 appliance efficiency law called NAECA. We worked on national standards and a sensitive review schedule. We were also at the table on putting together the Energy Policy Acts of 1992 and 2005. Taken together, energy efficiency laws are based on three concepts. First, initial national standards; second, periodic reviews of those standards and third, pre-emption of State actions that can result in a patchwork quilt, inconsistent with our national policy.

Our current appliance efficiency policy has been quite effective, but today's policy debate threatens to depart from this effective three-part effort. Recent discussion of regional standards is a clear departure from an effective national policy on energy efficiency. Such regional standards present four major challenges.

First, they produce great difficulties in enforcement. Today, original equipment manufacturers actually enforce meeting the standards for all products that are manufactured and we have certification programs in place to support that. In the future, with regional standards, it will require local contractors at individual site installations to bear the burden of ensuring that all compliance is met with regulations and standards. There is no resource or mechanism in place to do that today. There will be an incremental cost to be able to support that and effectiveness will be a challenge.

Second, regional standards undermine the economies of scales in our industry. Cost of manufacturers and the incremental cost of investment to manufacture will increase. There will be complexity of the process and we will have to meet a wide variety of different standards that may be in place.

Third, they will increase the cost to the consumer with disproportionate impact on those living on fixed incomes. It will include a higher cost of enforcement; higher cost of production, as I just discussed; also, higher costs of installation and could take away economic choices of each individual consumer.

Fourth, and most importantly, in my mind, is they may even discourage turnover in existing appliances to upgrade to more efficient products.

Recently, our air conditioning industry adopted the 13 SEER minimum standards in 2006. We immediately saw a 25 percent decline in new air conditioner sales with a corresponding increase of 25 percent in after market parts sales. Consumers were clearly making a choice not to buy the more expensive efficient units and chose to repair or maintain inefficient units in the marketplace. In addition, there is also conflicting interests. For example, a landlord who bears the cost of the initial new equipment purchase may choose not to make that investment because the economic gain is paid by the tenants who are paying the utility bills, so therefore he will not see a direct correlation to the benefit of investing in more expensive equipment that is more efficient.

In addition, although the DOE DOEs not have authority to prescribe regional standards, there is already a waiver process in place for compelling cases. By contrast, Federal pre-emption, as envisioned in our efficiency laws, ensures predictability and consistency in our regulations. Our industry has always supported substantial progress and innovation in efficiency improvements. In fact, I view them as the primary reasons we are leading in the U.S. marketplace, as well as competitive globally.

And with the impact of legislation of design, I also see a challenge in being able to compel innovation in our products if we get into the specification of types of design in products. That said, we must walk a fine line. Policies that create arbitrary distinctions among States and regions and drive costs to consumers may run at cross purposes to the policy objectives of energy efficiency.

In conclusion, much can be achieved and not just with the stick, but with the carrot. We support sensible standard setting, but we must have other policies to encourage installation of new, efficient equipment. For action beyond the Federal standards, we must recommend tax incentives and education and certification programs. One of the keys is also to improve the current process within DOE, as Assistant Secretary Karsner pointed out.

For example, the Cool and Efficient Buildings Act in front of the House now would provide an incentive to upgrade to new, more efficient equipment. We also support legislation of incentives to create a catalyst for homeowners to upgrade to more efficient products. We would also support an expedited process for adopting consensus agreements. We believe it is as critical to address the installed base of equipment as it is the new equipment and future sales. In this way, I believe consumers, public interest, States and industry can all win together. Thank you for your time.

[The prepared statement of Mr. Myers follows:]

Testimony of C. David Myers
Johnson Controls, Inc.
On behalf of the Air-Conditioning and Refrigeration Institute and
the Gas Appliance Manufacturers Association
Before the
Committee on Energy and Commerce
U.S. House of Representatives

May 1, 2007

Testimony of C. David Myers
On behalf of the Air-Conditioning and Refrigeration Institute and
the Gas Appliance Manufactures Association
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May 1, 2007

Mr. Chairman, Members of the Committee, my name is C. David Myers and I am Vice-President and President, Building Efficiency, Johnson Controls, Incorporated. I appreciate this opportunity to talk with you today about energy policy, energy efficiency, and ways that we believe that government can collaborate with industry to promote new and effective efficiency and conservation programs.

Today, I am speaking on behalf of ARI and GAMA, the national trade associations representing manufacturers of residential and commercial furnaces, boilers, water heaters, residential and commercial air conditioning systems, and commercial refrigeration products. This industry is a domestic manufacturing industry with combined shipments valued at over $50 billion annually, and we contribute a positive $2.3 billion to the U.S. balance of trade. Our 365 member companies employ over 240,000 American men and women in every state in the union.

Our member companies have a long history of support for energy efficiency. ARI and GAMA were principal supporters of the National Appliance Energy Conservation Act of 1987 (NAECA). By joining forces with the Natural Resources Defense Council, other environmental groups, and a number of states, we negotiated the initial national minimum standards and standards review schedule for a wide range of residential products. Five years later, we negotiated the national minimum standards for commercial products that were enacted in the Energy Policy Act of 1992. Recently, we negotiated national standards for commercial unit heaters, commercial refrigeration products, large packaged air-conditioning units, and commercial icemakers that were included in the 2005 Energy Policy Act. Last year, we negotiated new national minimum standards for residential and commercial boilers, and we are completing an agreement to set standards for walk-in refrigerators and freezers.

Importantly, the success of NAECA, EPACT and the consensus process has always been based on a commitment to three essential elements: (1) legislated initial national standards; (2) a schedule for periodic review of the standards by DOE; and (3) strong federal preemption of state and local regulation of NAECA-covered products.

This brings me to our concerns within the current policy debate. There are those who would have this Committee discard the fundamental principles of national efficiency

standards, periodic reviews, and preemption. Instead, they urge you to amend the law to allow the promulgation of regional minimum efficiency standards and weaken federal preemption. We strongly oppose these policies because they would not accomplish the goal of reducing energy demand and would instead lead to the inability of DOE to administer and enforce these programs.

Regional standards are impossible to enforce without federal government involvement at the point of installation of every covered product. It would also complicate product distribution and would create additional bureaucratic red tape. Today, enforcement of the national standards is directed at the manufacturing level or at the point of entry for imported products. ARI's and GAMA's performance certification programs assist DOE standards enforcement by verifying that products covered by those programs satisfy applicable federal standards.

If uniform national standards were replaced by regional standards, enforcement would have to shift to the retail level -- far beyond the resources of DOE. Ineffective or inconsistent standards enforcement would result in market uncertainty for manufacturers, which would make product planning and distribution unpredictable and much more difficult.

Regional standards would also undermine economies of scale in our industry. When identical units of a good or a service can be produced on a larger scale with less lower input costs, economies of scale can be achieved. This means that prices can decline and our industry can remain competitive in the face of low-cost imports. This is an important point. We are a U.S. based manufacturing industry competing with global interests that have a seemingly unlimited supply of inexpensive labor. Achieving economies of scale allows us to remain competitive and to continue to operate successfully in the United States.

Congress should not assume that regional standards would result in faster or greater energy efficiency savings. Because of the impossibility of enforcement and the inability of manufacturers to control the distribution of their products, significant energy savings would be unlikely to occur quickly. . The current program is successful because manufacturers, through the ARI and GAMA certification programs, can ensure that no products below the federal minimum are manufactured or imported for sale in the United States. This guarantee and enforcement mechanism would be unavailable if regional standards were implemented.

It is also important to understand that simply raising minimum efficiency levels will not increase the replacement rate of lower efficient products with those that are more efficient. Revised residential air conditioning standards took effect in January of 2006, increasing the minimum efficiency level from a 10 to a 13 seasonal energy efficiency ratio (SEER). During the debate regarding the revision to the standard, we raised concerns that pushing the standard to a 13 SEER level would lead to a greater number of repairs rather than replacement due to increased cost. This is exactly what has occurred.

When consumers have had to choose between repair or replacement that was costlier than anticipated, they have chosen to repair older, less efficient equipment rather than install the newer, more efficient equipment.

Proof of this phenomenon is illustrated by the approximately 25 percent increase in parts sales in 2006, coupled with a corresponding decline in new equipment sales. The policy of relying on higher minimum standards alone has ensured that older, less efficient equipment remains in service longer because of higher costs. We would expect to see a similar decline in sales of heating products – for the same reasons.

Regional standards would significantly increase cost to consumers, with a disproportionate impact on those living on fixed incomes or near the poverty level. Highly efficient equipment costs more because they use more raw materials such as copper, aluminum, and steel; and the use of more costly components such as thermo expansion valves and variable frequency drives.

For example, the average cost increase resulting from the recent shift to a 13 SEER minimum standard is approximately $700.00 per unit. (This excludes additional significant costs for installation of larger units in space-constrained areas.) Regional standards would push this cost significantly beyond the $700 increase per unit, because manufacturers would not have the economies of scale that occur with a national standard.

In the United States, there are 13.2 million homeowners with incomes below $21,920.00 per year; another 9.8 million – or 23 million total – with incomes below $35,072; and an additional 11.8 million – or 34.8 million total – with incomes below $52,608 according to the National Low Income Housing Coalition. It is simply inaccurate to suggest that those in low-income brackets do not purchase homes and therefore would be unaffected by the costs associated by increased standards. For older Americans, there is a significant burden too. Half of the households headed by persons 65 and older live on less than $37,000 annually.

Setting regional standards would make new equipment unaffordable for many seniors, working families, and low-income consumers, many of whom own single family homes and many of whom rely on air conditioning for their health and well being. Furthermore, most consumers will never receive a payback from the energy savings over the entire life of the equipment because of these cost increases.

ARI and GAMA strongly support federal preemption as the key to successful appliance efficiency policy because it ensures predictability and consistency in regulations particularly regarding energy performance standards, labeling requirements, information disclosure, and marketing. It also allows manufacturers to avoid duplicitous or inconsistent state regulations. We oppose a policy that promotes the dissolution of federal preemption when the DOE fails to set efficiency standards for a covered product, or when the DOE deliberately decides not to set an efficiency standard for a covered product because it was deemed not technically feasible or economically justified.

Concern about whether DOE is fulfilling its statutory responsibilities in this area should be addressed through Congressional oversight of the agency rather than by automatic abdication of federal authority to the states.

GAMA and ARI firmly believe in voluntary self regulation, but we agree that there are certain issues that require government oversight in order to ensure fair competition to protect consumers. It is when the federal government fails to actively manage these issues that special interest groups begin advocating for state or regional appliance standards. However, because most states lack the resources to implement and -- more important -- to enforce, these regulatory programs, they are unable to achieve expected energy savings and instead create confusion among consumers. Federal standards programs that provide strong preemption provisions eliminate these issues.

For the HVACR industry to produce efficient, reliable products, preemption and energy conservation regulations must be streamlined to fit one national standard. This will provide our industry with consistent policies that will not disrupt the heating and cooling appliance marketplace. ARI and GAMA strongly support the current system administered by DOE and we urge Congress not to undercut a program that has worked and continues to work by providing significant actual energy savings, while preserving economic competitiveness and good manufacturing jobs

Effective Alternative Energy Efficiency Policy

If it is the purpose of this policy debate to find ways to save energy as soon as possible, creating regional standards and dismantling preemption are not the answer. Instead, we support policies that focus on a combination of effective minimum efficiency standards, federal efficiency programs, consumer incentives, research programs, and worker training and certification. Specifically:

- **Residential Energy Efficiency Initiatives**: Incentives, rebates, and other voluntary programs to encourage the purchase of higher efficiency residential products and the earlier replacement of older less efficient and environmentally friendly products in residences today.

- **Commercial Energy Efficiency Tax Policy:** Pass the "Cool and Efficient Buildings Act" to accelerate the current 39-year depreciation schedule for HVACR equipment to encourage the purchase of newer, energy efficient, more environmentally friendly, commercial cooling equipment in buildings and reflect the actual useful life of the equipment.

- **Worker Education and Certification:** Enhanced education and training through worker training programs, shifting general education funding to applied technology programs, stronger state licensing and technician certification. The Industry Competency Exams (ICE) and the North American Technician Excellence (NATE), provide the industry endorsed benchmarks so that equipment is installed and repaired correctly to reach optimum performance.

- **Federal Efficiency Programs:** Continued federal funding and use of innovative financing mechanisms, to help increase the energy efficiency of government owned housing and buildings. We also call on federal and state governments to institute aggressive programs to expedite the replacement of all CFC chillers, saving energy and protecting the environment.

- **Research and Development:** Comprehensive energy policy must include significant funding for research and development of energy efficient technologies including research for the next generation of air conditioning and commercial refrigeration equipment

It is our hope that we can work with the committee to fully develop these and similar policies to encourage, promote, and achieve actual and sustained energy savings.

Mr. Chairman, thank you for the opportunity to present the views of our industry on energy efficiency and energy policy. I would be pleased to answer any questions you or other committee Members might have, and I should add that the expertise of our industry is at your service to aid you in arriving at appropriate decisions in this important matter.

Thank you,

C. David Myers
Vice-President and President, Building Efficiency
Johnson Controls, Inc.

Mr. BOUCHER. Thank you very much, Mr. Myers. Mr. McGuire, we will be happy to hear from you.

STATEMENT OF JOSEPH MCGUIRE, PRESIDENT, ASSOCIATION OF HOME APPLIANCE MANUFACTURERS, WASHINGTON, DC

Mr. MCGUIRE. Thank you, Mr. Chairman and members of the subcommittee. AHAM represents manufacturers of the vast majority of home appliances sold in the United States. AHAM members' commitment to energy efficiency is evidenced by nearly 60 percent decrease in clothes washer energy consumption, 47 percent refrigerator energy consumption decrease and the 38 percent drop in dishwasher energy consumption since 1990. The National Appliance Energy Conservation Act provides the framework for appliance efficiency standards. Many AHAM products are covered by it, including refrigerators, clothes washers, dryers, dishwashers, ranges and ovens, room air conditioners and dehumidifiers.

Federal residential appliance standards that have gone into effect since 1988 or which will take effect by the end of this year will save a cumulative total of 34 quads of energy by 2020 and 54 by 2030. Over half the energy savings are attributable to refrigerator freezers currently in third generation standards and about to commence a rulemaking for fourth generation standards next year; and clothes washers currently in third generation standards and which will undergo a rulemaking for fourth generation standards very soon.

In the case of DOE covered products produced by AHAM members, all products have gone through DOE appliance efficiency standards rulemakings, while some, as mentioned above, have gone through multiple regulatory proceedings. The same few full line companies have absorbed much of the cost of the multiple rulemakings and standards.

We believe there are two fundamental strengths of the current program. The first is the process used to determine if appliance standards are justified. The law requires DOE to determine if standards will result in significant energy savings based on maximum technological feasibility. DOE must then determine if the potential energy savings will justify the resulting cost to consumers and manufacturers and whether the standards result in the loss of any product functionality or feature. The resources to complete such analyses are difficult to find at the Federal level and even harder at the State level.

The second strength is Federal pre-emption. It is the most effective way to achieve significant energy savings. NAECA was enacted in response to the growing tendency of States to enact appliance standard programs. While well-intentioned, these various State efforts were creating a vulcanization of the national market and forcing manufacturers to consider multiple product and manufacturing lines. Consumers would be the losers in such a regime by bearing the impact of increased costs of production. NAECA establishes a process for States to seek exemptions from pre-emption if they can show unusual and compelling circumstances.

AHAM opposes proposals to limit or suspend Federal pre-emption, such as when DOE determines that no standard is justified. We also oppose proposals to authorize DOE to establish re-

gional standards for products. Such efforts would create the same problems NAECA was meant to address. The Federal system DOEs have it flaws. For example, in every administration resources have been the Achilles heel of DOE standards office, but these instances should not be the cause for abandoning the Federal approach in going back to a State by State system.

AHAM believes there are steps to improve the current system, including adequate funding for DOE. We also think DOE should revisit and strengthen its process improvement rule, which provided a forum for all stakeholders to participate in priority setting. We support DOE with the authority to abbreviate its rulemaking process if stakeholders have come to an agreement on a new efficiency standard and Congress should be open to agreements negotiated amongst stakeholders and appliance efficiency that might expedite policy decisions and break new ground in environmental protection and energy efficiency.

Mr. Chairman and members of the subcommittee, the agreement that we are announcing today on multiple appliances seeks to legislate new appliance efficiency standards for several covered products, recommends to DOE and EPA that they adopt new strict Energy Star specifications for these products and seeks to extend the manufacturers tax credit for super efficient appliances to more products. A consensus based agreement also provides, for the first time, national water efficiency standards for residential clothes washers and dishwashers. This agreement also calls for new DOE rulemakings for several products, including refrigerator freezers.

These new standards, when combined with the provisions of the agreement I just mentioned, will result in total energy savings ranging from 7.5 to nearly 15 quads, additional water savings of up to 68 million acre feet and consumer utility savings will range from $38 billion to $68 billion, depending on the cost justification of various standards options. We hope this agreement will be included in committee legislation. On behalf of the appliance industry, we appreciate the opportunity to testify before the subcommittee and would welcome your questions. Thank you very much.

[The prepared statement of Mr. McGuire follows:]

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Testimony Of
Joseph M. McGuire
President
Association of Home Appliance Manufacturers
Before the
Subcommittee on Energy and Air Quality
Of the
Committee on Energy and Commerce
U.S. House of Representatives

May 1, 2007

Mr. Chairman and Members of the Subcommittee, thank you for providing me the opportunity to testify on appliance efficiency standards. My name is Joe McGuire and I am President of the Association of Home Appliance Manufacturers (AHAM) which is the national trade association representing the manufacturers of the vast majority of home appliances sold in the United States. AHAM members include producers of major, portable and floor care home appliances, and companies that supply these manufacturers. I am here today to testify as a part of the Committees' consideration of energy efficiency legislation, and to announce a historic voluntary agreement on new appliance efficiency standards and incentives, which we hope become included in law

AHAM and its members have been very involved in the development and evolution of the federal appliance efficiency standards program, including the several legislated changes to the program, most notably the National Appliance Energy Conservation Act of 1987 and the Energy Policy Act of 2005. AHAM members are also partners in the Energy Star program which builds on the minimum efficiency standards of DOE to help transform the market for high efficiency appliances.

The home appliance industry's commitment to efficiency is evidenced by the nearly 60% decrease in clothes washer energy consumption, 47% refrigerator energy consumption decrease and the 38% drop in dishwasher energy consumption since 1990.

I. BACKGROUND ON FEDERAL APPLIANCE ENERGY STANDARDS

The National Appliance Energy Conservation Act (NAECA) was enacted in 1987 and provides the statutory framework for appliance energy efficiency standards. Under this law, DOE is required to establish and revise minimum energy efficiency standards for many AHAM home appliances including refrigerators, clothes washers and dryers, dishwashers, ranges and ovens, room air conditioners and dehumidifiers. While the appliance standards program administered by DOE is far from perfect, it has been very productive in the case of home appliances and enormous energy and carbon savings have resulted. In addition, it has become clear in the marketplace that the DOE appliance standards program works very well in partnership with market awareness programs such as Energy Star and incentive programs such as tax credits to deliver more efficiency.

Federal residential energy efficiency standards that have gone into effect since 1988, or will take effect by the end of this year, will save a cumulative total of 34 Quads of energy by 2020 and 54 Quads by 2030. The cumulative net present value of the consumer benefits of the standards amounts to $93 billion by 2020 and $125 billion by 2030. Over half of the energy savings are attributable to refrigerator/freezers, currently in third generation standards, and about to commence a rulemaking for fourth generation standards next year, and clothes washers,

currently in third generation standards and will undergo a rulemaking for fourth generation standards.

In the case of DOE covered products produced by AHAM members, all products have gone through DOE appliance efficiency standards rulemakings, while some, as mentioned above, have gone through multiple regulatory proceedings. The same few full line companies have absorbed much of the cost of multiple rulemakings and standards.

There are two fundamental strengths of NAECA, and other amendments to energy law, that in our view need to be maintained. The first is the process used to determine if appliance standards are justified. The law requires DOE to determine if significant energy savings can be saved by appliance standards employing standards which are based on maximum technological feasibility and economic justification. DOE must then determine if the potential energy savings will justify the resulting costs to consumers and manufacturers and whether the standards result in the loss of any product functionality or feature. This type of analysis is appropriate but complex if done correctly. For example, DOE relies on the National Institute of Standards and Technology and Lawrence Berkeley Laboratory to perform engineering and economic analyses. The resources to complete such analyses are difficult to find at the federal level and even harder at the state level.

This leads me to the second fundamental strength of NAECA. AHAM believes that a federal program of appliance standards is the only way to achieve significant energy savings, while also providing manufacturers with nationwide standards and a national marketplace,

instead of a patchwork of state standards that increases distribution and manufacturing costs. The national market concept embodied in NAECA is a benefit for consumers for whom economies of scale and global competition result in lower cost products and a full range of product features.

NAECA was enacted in 1987 in response to the growing tendency of states to enact appliance standards programs. While well intentioned, these various state efforts, which were in response to a perceived lack of action at the federal level, were creating a balkanization of the national market, and forcing manufacturers to consider multiple product and manufacturing lines. Consumers would be the losers in such a regime by bearing the impact of the increased costs of production.

In fact, since the first federal energy act in the 1970s, and particularly since the enactment of NAECA in 1987, the essential policy of federal energy law has been to provide for federal standards for a range of energy consumer products, a schedule of rulemakings for possible revisions to the standards, and complete preemption of state standards, with limited and specific exceptions. Since then, and as subsequently updated for commercial and plumbing products, the law has been successful in saving many quads of energy, limiting the need for new power plants, limiting utility emissions, avoiding carbon emissions and placing billions of dollars in utility bill cost savings in consumers' hands.

Under the federal scheme, states are generally preempted from implementing their own standards for products covered under the federal act unless they receive an exemption from

preemption from the Department of Energy (DOE). States must pass a strict test which shows unusual and compelling state energy needs, the state has exhausted non-regulatory options and the proposed state regulation would not limit product functionality or features. Since 1987, there has only been one petition for exemption from preemption, by California for a water use requirement for clothes washers, which was denied by DOE. The petition was not supported by any of the efficiency advocacy groups which helped craft the preemption language of NAECA.

In addition, I want to note that it has been proposed to eliminate federal preemption for products for which the Department of Energy has determined that no standard is warranted. For instance, if the DOE had conducted a rulemaking, and in its analysis determined that there were no feasible opportunities to increase the energy efficiency of products without causing adverse impacts on consumers or manufacturers, then such a determination would trigger a lapsing of federal preemption. The provision would encourage states to adopt separate appliance standards for such products which could differ and which would balkanize the market, driving up manufacturer and consumer costs. Such a "balkanized" patchwork set of state standards would have detrimental impacts on consumer choice, distribution, design and planning, requiring multiple retooling costs. This result is what the federal energy law is meant to prevent. Importantly, one more pressure will have been added to eliminate domestic production in order to gain the flexibility of sourcing to foreign producers. Ironically, states could impose standards on exactly those products which have been demonstrated not to be worthy of standards.

It also has been proposed to authorize DOE to establish regional standards for space heating and air conditioning products – including room air conditioners – allowing different

energy efficiency standards in different parts of the country. Such a patchwork of state efficiency standards would require manufacturers to produce different products for different parts of the country, which would have the result of increasing costs, burdening distribution and limiting consumer choice. Compliance would be a nightmare. This is unreasonable.

AHAM's product scope which includes room air conditioners have never been considered for regional standards, and no exemption from federal preemption petition has ever even been rumored by any state or region. Room air conditioners have been subject to two federal standards, and a third is pending under a DOE schedule submitted to Congress and federal court order.

Admittedly, the federal system has its flaws. In every administration, resources have been the Achilles heal of DOE's standards office. In addition, the multiple requirements and products added to the federal system by NAECA, EPACT of 1992 and EPACT of 2005 have created multiple statutory deadlines for DOE that cannot practically be met. We have learned much since 1987 and part of what was learned is that if DOE, through an objective analysis, subject to public comment, determines a standards update is not a priority or necessary, then this should not result in a statutory violation. But it does, and resource limitations result in additional violations.

But these instances should not be the cause for abandoning the federal approach and going back to a state-by-state system. The states do not have the resources, expertise or needed national perspective to undertake these regulations, and the result is a negative for consumers

and energy conservation. The choke points in the system have been dealt with over the years through considered negotiations by manufacturers, advocacy groups and state energy officials. AHAM has been involved in more of these negotiations than any industry group. The result has been steady progress in appliance efficiency. Do manufacturers and advocacy groups agree on every aspect of these issues? No. But we have always agreed that national standards, predictability and certainty are important.

And we have also learned that minimum standards can do the most good for energy efficiency when combined with market awareness programs like Energy Star and market transformation programs like manufacturer tax credits. Essentially manufacturers are more likely to agree to more stringent appliance standards if the added investment can be partially recouped through tax credits designed to reward production of products that exceed the federal standards. The concept employs strict performance metrics and rolling baselines to ensure manufacturers are moving the needle with their production.

From a public policy process standpoint, AHAM believes there are steps the Congress can take to deliver new energy savings to the nation in the area of appliances, and to lock in procedures that will incentivize DOE and stakeholders to keep their eyes on the ball. First, as mentioned before, DOE needs to be authorized and appropriated sufficient funds to carry out these programs and to meet statutory deadlines. Second, DOE should revisit and strengthen its Process Improvement Rule which provided a forum for all stakeholders to participate in priority setting for appliance efficiency regulations and which fostered an informal regulatory negotiations climate. We believe that this rule has served the system well, but certainly DOE

and stakeholders should consider how to expedite the rulemakings, particularly those under court order. This review can be best accomplished, not by the Congress, but by the reinstitution of the advisory committee terminated by the previous administration.

Third, DOE should be required to review all covered products at a regular interval, say every five years, to determine if updates are necessary. Fourth, federal preemption of states should not be suspended. There are already provisions in federal law for states to petition for exemptions from preemption and to sue DOE if final rules are considered inadequate. States should participate in the Process Improvement Rule dialogues to influence DOE actions. Fifth, DOE should report to Congress on a regular basis on its progress in meeting deadlines and the choke points, if any, for failure to do so.

Sixth, we support providing DOE with authority to abbreviate its rulemaking process if stakeholders have come to an agreement on a new efficiency standard. We support this provision as it assists DOE in adopting standards for which there is no controversy and that which haws been fully vetted by industry and advocacy organizations.

And lastly, as I hope is the case today, Congress should be open to agreements negotiated among stakeholders on appliance efficiency that might expedite policy decisions and break new ground in environmental protection and energy efficiency. That was the case in 2005 and we hope again in 2007.

II. THE ENERGY POLICY ACT OF 2005

EPACT '05 included appliance efficiency standards for dehumidifiers effective in 2007 and 2012. In addition, the law provided for national appliance efficiency standards for commercial clothes washers, including a water conservation standard for these products. The law also required that DOE conduct a review of battery chargers and external power supplies to determine if they merit efficiency standards. DOE was also required to consider stand-by power when promulgating appliance efficiency standards and revising test procedures. Other important provisions included DOE matching funds for state rebate and incentive programs for appliances. Lastly, the law included provisions that provide for increased transparency in the Energy Star program when it develops new specifications.

EPACT '05 also included an appliance manufacturer tax credit for the production of super energy efficient clothes washers, dishwashers and refrigerators. The Credit, which will expire at the end of this year, was originally estimated to save almost 8 million metric tons of carbon and 1.2 trillion gallons of water.

In addition, in 2000 AHAM and the efficiency advocates concluded an agreement on minimum standards for clothes washers which were also estimated to result in up to 5 quads (quadrillion Btus) of energy saved and about 6 to 11 trillion gallons of water saved by 2030.

III. 2006/2007 INDUSTRY ADVOCATE NEGOTIATIONS

Mr. Chairman, AHAM believes that the energy savings embodied in EPACT '05 will be significantly exceeded by the agreement that appliance manufacturers and advocacy groups are announcing today on multiple appliances. The agreement seeks to legislate new appliance efficiency standards for several covered products, recommends to DOE and EPA that they adopt new strict Energy Star specifications for these products, and seeks to extend the manufacturers' tax credit for super efficient appliances to more products. Our consensus-based agreement which includes stakeholders from the industry, the Department of Energy, and efficiency organizations also provides for the first time, national water efficiency standards for residential clothes washers and dishwashers.

The agreement being announced today will, through a combination of new legislated appliance efficiency standards, updated Energy Star specifications and tax credits will result in a national energy savings of up to 3.3 quads. The agreement will also, through new water use requirements, result in a savings of 10.8 million acre feet of water, the equivalent of over two and a half years of domestic water use in the United States. And finally, consumers will save up to $14.7 billion in utility payments.

This agreement also calls for new DOE rulemakings for several products including refrigerator/freezers and residential clothes washer efficiency. These new standards, when combined with the provisions of the agreement I just mentioned will result in additional energy savings ranging from 7.5 to 14.6 quads, additional water savings of 35 to 68 million acre feet, the

equivalent of over seventeen years of national domestic water use. Consumer utility savings will range from $37 to 68 billion, depending on the cost justification of various standards options.

This agreement represents a cooperative approach between the industry and advocacy groups that our industry has encouraged for many years. While we fully support the DOE appliance standards program and its rulemaking process, we also look for opportunities to develop consensus with other stakeholders. The DOE appliance standards rulemaking process involves in-depth analyses that measure the potential for future energy savings from a new standard while also considering the impact of new standards on consumers – and manufacturers. These important elements of the rulemaking process are contained in the Process Improvement Rule, which has guided DOE decision-making for many years. AHAM works closely with the Department during these rulemakings, and supports DOE's efforts there.

In some instances, however, it is appropriate, and timely, for the industry to conduct direct negotiations with advocacy groups to determine if there are standards that are mutually acceptable. During these negotiations many of the same DOE analyses are conducted that form the basis for the discussions and the ultimate outcome. In the negotiations that I will be discussing today, DOE provided important analyses which assisted the parties in coming to an agreement.

The agreement, which we hope will be included in committee legislation, establishes first-ever water conservation standards for clothes washers and dishwashers along with a new energy standard for dishwashers. The new clothes washer and dishwasher standards build upon

the already highly efficient products on the marketplace today and requires that manufacturers continue to increase their energy and water efficiency. The legislation also provides for new energy efficiency standards for dehumidifier products, and requires DOE to conduct a new rulemaking to determine future refrigerator standards.

Lastly, and in order to ensure that federal standards keep pace with technological developments, the legislation requires DOE to conduct future rulemakings on dishwashers and clothes washers to determine if new energy and water standards are warranted, and if so, what they should be.

The consensus agreement also includes an extension of the highly successful appliance manufacturers' tax credit. This extension is an improvement and tightening-up of the tax credit enacted by the last Congress which has been applicable in 2006 and 2007. It provides manufacturers with per unit credits for producing more super-efficient appliances than they have produced in the past. The credit only applies to incremental, additional production based on a rolling historic two-year base period.

* * * *

On behalf of the appliance industry, we appreciate the opportunity to testify before your committee and would welcome your questions.

AHAM
association of home appliance manufacturers

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Summary of AHAM Testimony Before the Subcommittee on Energy and Air Quality

May 1, 2007

- The home appliance industry's commitment to efficiency is evidenced by the nearly 60% decrease in clothes washer energy consumption, 47% refrigerator energy consumption decrease and the 38% drop in dishwasher energy consumption since 1990.
- While the appliance standards program administered by DOE is far from perfect, it has been very productive, in the case of home appliances, and enormous energy and carbon savings have resulted.
- There are two fundamental strengths of NAECA: the process used to determine if appliance standards are justified and federal preemption of state standards.
- AHAM believes that a federal program of appliance standards is the only way to achieve significant energy savings, while also providing manufacturers with a national marketplace instead of a patchwork of state standards that increases distribution and manufacturing costs.
- AHAM opposes lapsing of federal preemption which would encourage states to adopt separate appliances standards which would balkanize the market, driving up manufacturer and consumer costs.
- AHAM opposes regional appliance standards which also require manufacturers to produce different products for different parts of the country, increasing costs, burdening distribution and limiting consumer choice.
- The states do not have the resources, expertise or needed national perspective to undertake these regulations, and the result is a negative for consumers and energy conservation.
- DOE needs to be authorized and appropriated sufficient funds.
- DOE should revisit and strengthen its Process Improvement Rule.
- DOE should be required to review all covered products at a regular interval.
- Congress should be open to agreements negotiated among stakeholders on appliance efficiency that might expedite policy decisions and break new ground in environmental protection and energy efficiency.
- In 2000, AHAM and the efficiency advocates concluded an agreement on minimum standards for clothes washers which will result in up to 5 quads (quadrillion Btus) of energy saved and about 6 to 11 trillion gallons of water saved by 2030.
- EPACT '05 included an appliance manufacturer tax credit for the production of super energy efficient appliances. It will save almost 8 million metric tons of carbon and 1.2 trillion gallons of water.
- AHAM is today announcing a new agreement with advocates which seeks to legislate new appliance efficiency standards for several covered products, recommends to DOE and EPA that they adopt new strict Energy Star specifications for these products, and seeks to extend the manufacturers' tax credit for super efficient appliances to more products.
- The agreement provides for the first time, national water efficiency standards for residential clothes washers and dishwashers.
- The agreement being announced today will, through a combination of new legislated appliance efficiency standards, updated Energy Star specifications and tax credits will result in massive energy and water savings.

Mr. BOUCHER. Thank you, Mr. McGuire. Mr. Johnson.

STATEMENT OF DOUGLAS JOHNSON, SENIOR DIRECTOR, TECHNOLOGY POLICY AND INTERNATIONAL AFFAIRS, CONSUMER ELECTRONICS ASSOCIATION, ARLINGTON, VA

Mr. JOHNSON. Thank you, Chairman Boucher and Ranking Member Hastert and members of the committee. We commend the subcommittee for holding this hearing on the important issue of energy efficiency and appreciate the opportunity to provide views of our membership. Our members are committed to energy efficiency and conservation and we have taken a comprehensive, multifaceted approach to addressing energy efficiency.

First, our industry understands its obligation to inform consumers about the energy needs of their products. This year we launched a new consumer Web site called *mygreenelectronics.org*. In addition to pointing consumers toward electronics recycling options close to their homes, this site includes a number of tools which enable consumers to identify and purchase energy efficient products. We are very proud of this site and we urge you to pay it a visit.

Promoting the use of industry-led standards for energy efficiency is also critical. Recently, CEA developed two new industry standards for energy use in set top boxes. We also supported the development of a new standard for measuring power consumption in digital televisions, as the current decades old standard for measuring power consumption is inappropriate for today's DTVs.

Together, these voluntary standards initiatives transform the market and deliver more energy efficient products to consumers and businesses. We also have taken every opportunity to showcase and promote energy efficient products. At January's International CES, the world's largest annual trade show for consumer technology, we spotlighted the importance of energy efficiency and conservation, including displays of energy efficient products and technologies, conference sessions on energy efficiency and public policy and design award for products.

In addition, CEA, in partnership with the Information Technology Industry Council is holding an energy efficiency product technology demonstration on Capitol Hill on May 16 and we welcome your attendance. Finally, we have worked cooperatively with government agencies to promote voluntary market oriented programs like Energy Star, which highlight and support energy efficient product design and purchasing.

As you know, the market for consumer electronics is dynamic, highly competitive and characterized by rapid innovation, significant time-to-market pressures, rapid rates of market penetration, rapid transformation from one technology to another. In this way, our products are vastly different from the more established products, such as residential, industrial and commercial appliances.

Government industry partnerships like Energy Star provide the flexibility, market orientation, competitive incentive and consumer recognition that are necessary for our dynamic industry. Most importantly, Energy Star has had a long and established track record of success, as measured by energy savings and reduced greenhouse gas emissions. As the U.S. Environmental Protection Agency's lat-

est annual report on Energy Star indicates, the Energy Star program for consumer electronics and residential office equipment has saved 18.8 kilowatt hours of energy and avoided emissions totaling 3.8 million metric tons of carbon equivalent. Since 1992, there have been 1.1 billion purchases of Energy Star consumer electronics products.

While these accomplishments are positive, we are deeply concerned by a recent increase in State legislative activity related to appliance efficiency standards. Some of these bills have targeted product categories not addressed by DOE standards, including external power supplies, also known as AC power adapters. So far, seven States have enacted laws or regulations establishing energy efficiency standard for external power supplies and others may soon join them. This developing patchwork of inconsistent State regulations is harmful to consumers and innovation.

Consumer electronics is a global industry with a global network of supply and distribution. The existence of multiple requirements across different States and regions creates design, manufacturing and supply chain difficulties, harming efficiency and increasing the cost of final products for consumers. For that reason, we urge quick Federal action on establishing a national energy efficiency standard for external power supplies. This is important not only to prevent divergent State activity, but also to facilitate harmonization across North America and internationally.

In conclusion, we believe this committee's focus on energy efficiency is important and necessary. Electronics are a part of an energy saving solution. Home networking products help save energy by providing increased control over home heating, lighting and cooling systems. Information technology and telecommunications products allow tele-working and remote access to information and entertainment, which saves fuel and reduces greenhouse gas emissions. As policymakers consider programs and policies that support the efficient use of energy, we urge Congress to support innovation and promote consumer oriented initiatives like Energy Star, which are the keys to energy efficiency achievements for the consumer electronics industry.

Thank you again for this opportunity to share CEA's position on this important public policy issue. I look forward to addressing any questions you may have.

[The prepared statement of Mr. Johnson follows:]

Before the Committee on Energy and Commerce
Subcommittee on Energy and Air Quality
United States House of Representatives

"Long-standing Problems with DOE's Program for Setting Efficiency Standards Continue to Result in Forgone Energy Savings"

Statement of Douglas K. Johnson
Senior Director, Technology Policy & International Affairs
Consumer Electronics Association

May 1, 2007

Introduction

Chairman Boucher, Ranking Member Hastert, and Members of the Committee:

My name is Doug Johnson and I am Senior Director, Technology Policy and International Affairs for the Consumer Electronics Association (CEA). CEA is the principal U.S. trade association of the $155 billion consumer electronics industry. CEA's more than 2,100 members are involved in the design, development, manufacturing, distribution and integration of audio, video, in-vehicle electronics, wireless and landline communication, information technology, home networking, multimedia and accessory products, as well as related services that are sold through consumer channels. CEA's members include large and small manufacturers as well as many of the leading retailers. CEA also produces the nation's largest annual trade event, the International CES. We commend the Subcommittee for holding this hearing on the important issue of energy efficiency and appreciate the opportunity to provide the views of our membership.

The consumer electronics industry designs, makes and sells products and services that enable people to stay connected, informed and entertained. Innovation, complemented by voluntary programs and initiatives, is the primary driver of energy efficiency in the electronics industry. In order to meet consumer expectations, our products must use electricity efficiently and effectively. This is essential to minimize heat generation, the prime enemy of component performance and longevity. Using electricity efficiency also is essential to minimizing costs associated with design and components, such as heat sinks. Beyond design, there also are major industry trends which naturally drive, support and sustain the increasing energy efficiency of electronics. These trends include convergence, miniaturization, portability and the transition from analog to digital technology.

CEA's members are committed to energy efficiency and conservation.

For many years, the consumer electronics industry has worked cooperatively with government agencies in pursuit of successful voluntary, market-oriented programs and initiatives, such as Energy Star, which highlight and support energy efficient product design and purchasing. More recently, the consumer electronics manufacturers have focused on new industry-led standards at the national, regional and international levels that relate to and uphold energy efficiency. Together, these voluntary initiatives have transformed the market and delivered more energy efficient electronics to consumers and businesses.

As the consumer electronics industry's principle trade group, CEA has taken a comprehensive, multi-faceted approach to addressing energy efficiency for our industry sector. Specifically:

1. CEA conducts research and analysis to ensure that policy makers and the public have accurate information.

Many estimates of consumer electronics energy consumption have relied upon data developed in the late 1990s. Yet, consumer electronics products have changed dramatically over the last decade, as have their energy consumption characteristics, particularly due to technological change and innovation but also due to the success of the Energy Star program. To provide better data to policy makers, CEA commissioned a recently completed independent analysis of consumer electronics energy use that covered all significant energy-using product categories in our industry. This landmark study provides a more refined assessment than prior studies, particularly for product usage, and also helps to counter inaccurate claims about consumer electronics energy use which have clouded many policy debates and news reports. The full report, titled "Energy Consumption by Consumer Electronics in U.S. Residences," is available on CEA's website at www.ce.org/energy. Among the findings are the following:

- Excluding digital televisions (DTVs), residential consumer electronics consume 11% of residential electricity and 4% of total U.S. electricity;
- Annual residential consumer electronics electricity consumption equals 147 TWh, excluding DTVs;

- There has been dramatic growth in the installed base of products, especially PCs, computer monitors, set-top boxes and DVD players;
- Active-mode power consumption varies with device type and has increased for TVs and PCs but decreased for computer monitors;
- With the exception of set-top boxes, standby power consumption has generally decreased, a testament to the effectiveness of the Energy Star program.

As indicated, the only significant category excluded from this study is digital televisions. The existing standard for measuring TV energy consumption in on-mode is outdated and inappropriate for measuring power consumption for today's digital televisions. To address this issue, an international industry standards development committee involving a wide variety of private and public sector stakeholders recently completed the draft of a new standard that will provide a fair measurement of TV energy use across all types of DTV displays. As planned, CEA has begun a project to collect TV power consumption data using the new international draft standard so that CEA's overall energy use study can be updated this spring. The DTV data also will be provided to support the Energy Star program, which is revising its specification for televisions.

In addition to the energy use analysis, CEA commissioned another study, to be completed this spring, which examines the energy-saving and emissions-reducing benefits of using consumer electronics products for teleworking and e-commerce. We would be glad to provide the results of our study to this committee and other interested parties.

2. CEA has been a leader in developing industry standards supporting energy efficiency.

In addition to the U.S Department of Energy (DOE) standards setting process, the industry standards setting process provides another stakeholder forum for developing standards relevant to energy efficiency. CEA, an American National Standards Institute-accredited standards development organization, has developed two voluntary industry standards related to energy use in set-top boxes. As noted earlier, CEA and its members also have supported the development of a new international industry standard for measuring power consumption for today's digital televisions, as the current decades-old standard is inappropriate for today's DTVs.

3. CEA informs consumers about the energy use of consumer electronics.

CEA believes that our industry has a responsibility to inform consumers about the energy use of their products. This year, CEA launched a new consumer education initiative built on myGreenElectronics.org, a comprehensive resource focused on the energy-conscious and environmentally responsible use of consumer electronics at all phases of a product's life cycle. The energy efficiency portion of the site presents common-sense consumer tips for saving energy with electronics. Additionally, on Earth Day last month, CEA added an energy-use calculator to myGreenElectronics.org which allows consumers to calculate and understand, in terms of watts and dollars, how much is required on average to power their electronic products. Finally, the website includes a tool that enables consumers to search for products for which energy efficiency is a selling point.

4. CEA showcases and promotes energy-efficient products.

CEA has used the International CES trade show as a platform to highlight the importance of energy efficiency and conservation, including displays of energy efficient products and technologies; conference sessions on energy efficiency and public policy; and an eco-design award for environmentally-friendly products.

In addition, CEA, in partnership with the Information Technology Industry Council, will host an energy efficiency product technology demonstration on Capitol Hill on May 16th which promises to be interesting and informative, and we welcome your attendance.

Achievement of energy savings and efficiency in the consumer electronics industry occurs independently of DOE process.

The market for consumer electronics is dynamic, highly competitive and characterized by rapid innovation, significant time-to-market pressures, rapid rates of market penetration, and rapid transition from one technology to another. Consumer electronics products are vastly different by design, function, consumer use and performance than the residential, industrial and commercial appliances and electro-mechanical equipment that have been subject to the DOE standards and rulemaking process. Unlike residential, industrial and commercial appliances, which tend to be designed for a single purpose, consumer electronics typically offer several features and functions and are used in at least three ways that distinguish them from appliances. First, people use consumer electronics to communicate with one another; they also use consumer electronics for entertainment; and, finally, people use consumer electronics to receive and store information.

In light of these characteristics and considerations, the best public policy for encouraging and supporting energy efficiency in the consumer electronics industry is the Energy Star program. This government-industry partnership program provides the necessary flexibility, market-orientation, competitive incentive and consumer recognition that support energy efficiency for our dynamic industry. Most importantly, Energy Star has a long and established track record of success.

Voluntary, consumer-oriented programs such as Energy Star are working and have resulted in significant energy savings and reduced greenhouse gas emissions.

The consumer electronics industry is a strong supporter of the voluntary, market-driven and national approach to saving energy represented by the federal Energy Star program (www.energystar.gov). This successful government-industry effort, which benefits from strong participation by manufacturers, captures a broad range of consumer electronics and creates a competitive incentive for energy savings. The Energy Star program, coupled with the natural trends toward energy efficiency in electronics design, provides consumers with the products and features they demand, along with a logo recognized by almost two-thirds of consumers.

Energy Star is clearly the best policy approach to saving energy in the consumer electronics sector, and it has resulted in significant energy savings and reduced greenhouse gas emissions. As the U.S. Environmental Protection Agency's latest annual report on Energy Star indicates, the Energy Star program for consumer electronics and residential office equipment has saved 18.8 billion kWh of energy and avoided emissions

totaling 3.8 million metric tons of carbon equivalent. Also, according to EPA, consumer electronics accounted for 31 percent of energy saved by all residential products in the Energy Star program. In addition, consumer electronics including computers and monitors represent 55 percent or 1.1 billion of the two billion purchases of Energy Star products since 1992.

A patchwork of inconsistent state regulations is harmful to consumers and innovation.

There has been a significant increase in state legislative activity related to appliance efficiency standards, largely as a result of advocacy efforts in response to concerns about the DOE rulemaking process. Some state legislation has targeted product categories not addressed by the DOE efficiency standards process, including external power supplies. Also known as AC power adapters, these devices are used to power a wide range of commercial and consumer products and a wide variety of consumer electronics, including mobile phones, PDAs, laptop computers, monitors, digital cameras and camcorders.

The Energy Policy Act of 2005 directed DOE to establish a test procedure, hold a scoping workshop and conduct a determination analysis of energy conservation standards for battery chargers and external power supplies. This effort is now underway, but, to date, seven states already have enacted laws or promulgated regulations establishing an energy efficiency standard for external power supplies. The consumer electronics industry has been working to ensure harmonization among the regulatory approaches in these states. However, the potential exists for some of these states to alter their regulations and for

other states to adopt new and potentially different energy efficiency standards for external power supplies. This would result in a decentralized, divergent and economically inefficient approach to achieving energy efficiency for these devices.

Consumer electronics is a global industry with a global network of supply and distribution. The existence of multiple requirements across different states and regions creates design, manufacturing, and supply chain difficulties, harming efficiency and increasing the cost of final products for consumers.

CEA urges quick national action on external power supplies.

Whether by an expedited DOE process or by Congress directly legislating standards for external power supplies, CEA supports quick federal action on establishing a national energy efficiency standard for external power supplies. This is important not only to preempt future and potentially divergent state activity but also to facilitate harmonization regionally across North America and internationally.

Conclusion

In many ways, electronics are part of an energy savings solution. Many home networking products help save energy by providing increased control over home heating, cooling and lighting systems. Information technology and telecommunications products allow teleworking and remote access to information and entertainment content, both of which save fuel and reduce greenhouse gas emissions. In addition, electronics are key enabling

technologies that drive energy efficiency in various other industrial sectors such as automobiles and manufacturing.

This committee's focus on energy efficiency is important and necessary. As policy makers consider programs and policies that support the efficient use of energy, we urge Congress to support innovation and promote consumer-oriented initiatives like Energy Star which are the keys to energy efficiency achievements for the consumer electronics industry.

Thank you again for the opportunity to share CEA's position on this important public policy issue. I look forward to addressing any questions you may have.

Mr. BOUCHER. Thank you, Mr. Johnson. Mr. deLaski.

STATEMENT OF ANDREW DELASKI, EXECUTIVE DIRECTOR, APPLIANCE STANDARDS AWARENESS PROJECT, BOSTON, MA

Mr. DELASKI. Mr. Chairman, Ranking Member Hastert, members of the committee, my name is Andrew deLaski and I am the executive director of the Appliance Standards Awareness Project and I have served in that capacity since 1999. ASAP is a coalition project with a Steering Committee representing the energy efficiency organizations, consumer organizations, environmental organizations, utility industry and State government. The Project works to advance cost-effective appliance and equipment efficiency standards at both the State and Federal level.

Since 1999, I have been involved in every single major DOE appliance standards rulemaking process. I have also worked actively on appliance standards at the State level in more than a dozen States through both legislative and regulatory proceedings. Eleven States have enacted or otherwise adopted various appliance and equipment standards since 2004. This State action has prompted renewed manufacturer interest in expansion of the Federal standards program. Standards first enacted by various States formed the basis of the 15 consensus standards included in the Energy Policy Act of 2005 and those consensus standards, I would submit, are one of the biggest energy saving components of the 2005 act.

So I am deeply honored to be here today to have the opportunity to share with the committee some of my views with respect to the Federal program and some recommendations for how it might be improved. In my oral testimony, I will first summarize some of the current and potential impacts of the Federal appliance standards program. I will next discuss DOE's recent performance implementing the Federal appliance standards program and I will close with some specific recommendations for legislative reforms. In my written testimony I address the seven specific questions the committee raised in the invitation to testify today.

The Federal appliance standards program has delivered enormous energy and economic benefits since 1987. Analysis by the American Council for Energy-Efficient Economy, one of the sponsors of my project, estimates that existing standards will save nearly 400 billion kilowatt hours per year by 2020. That is with on-the-ground-today standards already in place. These standards will cut U.S. electricity use by approximately 9 percent from levels that otherwise would have been reached. Already existing standards will cut peak electricity demand by 144,000 megawatts by 2020. That is the equivalent to the output of about 288 500 megawatt power plants.

For consumers, the already existing standards on the ground today have a net present value of approximately $234 billion. For the environment, those savings translate to about 315 million metric tons less carbon dioxide emissions per year, about 4.5 percent reduction of 2020 project emissions. These are big savings. However, DOE's failure, as we have already heard today, to meet deadlines as documented by the GAO report, show that the savings are smaller than what they should have been. The opportunity has been even larger.

DOE's recent commitment to get the appliance standards program back on track by establishing firm deadlines and sticking to them is good news. We estimate that by issuing new standards for products which DOE already has the authority and the obligation to review and set standards, DOE could add at least another 200 billion kilowatt hours in annual savings and cut carbon dioxide emissions by another 165 million metric tons per year or about 2.2 percent of projected emissions for the year 2020.

But these savings will only be achieved if DOE establishes appropriately strong standards. Meeting a deadline is one important goal, but you also have to set an appropriately strong standard. In each of the three most recent proposals for new standards concerning home furnaces, home boilers and electric distribution transformers, DOE has issued weak standards. In the case of furnaces, DOE has proposed a single national standard met, as mentioned in Chairman Boucher's opening comments, met by 99 percent of current sales. Notably, DOE rejected State calls for regional standards in their proposed rule, saying they lack legal authority to set such standards.

For boilers, DOE rejected a consensus agreement recommended by manufacturers and advocacy organizations. With regard to transformers, DOE has rejected a standard supported by the very electric utility industry which purchase this equipment. In several cases, DOE has indicated its hand are tied legally. If the law is the problem, as DOE indicates, then Congress should clarify the law. I am also heartened that DOE recently reopened the comment period with regard to transformers and appears to be looking at the possibility of setting a stricter standard than originally proposed for transformers.

Several reforms to the law are needed to help ensure that DOE will be better able to capture the savings from cost effective standards in the future. We have six specific recommendations.

First, we recommend that Congress authorize DOE to establish limited regional standards for heating and cooling products only. The same furnace standard DOEs not make sense for Michigan as makes sense for Mississippi, nor DOEs the same air conditioner standard make sense for Georgia as makes sense for Sacramento. The clear needs of different regions of the country should not be subjugated to manufacturer preference to have a single national pre-emptive standard. Regional standards for some products are absolutely necessary to achieve the intent of the law to maximize cost effective national energy savings.

Second, DOE should authorize DOE applied additional multiple efficiency measures to a single product. A single measure is sometimes inadequate to represent a product's energy consumption. DOE should have greater flexibility to capture all aspects of a product's energy consumption in its efficiency standards.

Congress should require DOE to conduct a furnace standard rulemaking on a firm schedule. DOE has the authority to do this now without a firm schedule. We are concerned this rulemaking just won't happen.

DOE also should review appliance standards on a regular basis. As we heard, one of the principles of the statute is to set a standard and also require DOE to review these standards periodically.

However, once these requirements are completed, then they are going to be pre-empted, but there are no further reviews. We think Congress should direct DOE to review all standards on a periodic basis on a forward-going basis.

If DOE fails to review a standard, we believe that pre-emption of State standards should sunset. The potential for pre-emption to expire will dramatically increase the pressure for DOE and all stakeholders to work diligently to ensure that we get adequate national standards. If deadlines are missed, authority should return to the States.

And finally, I recommend that the Congress clarify that pre-emption only applies when there is a Federal standard. Federal law should not pre-empt State standards in those instances where DOE has failed to act or chosen not to exercise its authority. Congress should make clear that no Federal standards equals no Federal pre-emption.

This concludes my oral remarks. Thank you again for the opportunity to testify today.

[The prepared statement of Mr. deLaski follows:]

Testimony of Andrew deLaski,

Executive Director

Appliance Standards Awareness Project (ASAP)

Before the Subcommittee on Energy and Air Quality of the House Committee on Energy and Commerce

Hearing entitled:

"Achieving –At Long Last – Appliance Efficiency Standards"

May 1, 2007

Introduction

Mr. Chairman, Ranking member Hastert, and members of the Committee:

My name is Andrew deLaski and I am the executive director of the Appliance Standards Awareness Project (ASAP) and have served in that capacity since 1999. ASAP is a coalition project led by a Steering Committee consisting of representatives from energy efficiency organizations, consumer organizations, environmental organizations, the utility industry and state government. The Project works to advance cost-effective appliance and equipment energy efficiency standards at both the federal and state level.

Since 1999, I have been involved in every major DOE appliance standards proceeding. I have also worked actively on appliance standards at the state level in more than a dozen states, through both legislative and regulatory proceedings. Eleven states have enacted or otherwise adopted various appliance and equipment standards since 2004. This state action prompted renewed manufacturer interest in expansion of the federal standards program. Standards first enacted by various states formed the basis for some fifteen strong efficiency standards negotiated between advocacy organizations, states and manufacturers for inclusion in the Energy Policy Act of 2005. These standards formed one of the biggest energy savings components of that Act.

I am deeply honored to have the opportunity today to share with the Committee some of my views with respect to the federal appliance standards programs and recommendations for how it might be improved.

In this testimony, I will first summarize some of the current and potential impacts of the federal appliance standards program. I will next discuss DOE's recent performance in implementing the

Federal appliance standards program. Finally, I will address each of the seven specific questions raised by the Committee in my invitation to testify before you today, including presenting specific recommendations for legislative reforms.

Summary and recommendations

The federal appliance standards program has delivered very large energy and economic benefits since 1987. Analysis by the American Council for an Energy-Efficient Economy (ACEEE) estimates that existing standards will save nearly 400 billion kilowatt hours per year by 2020, cutting U.S. electricity use by 9% from the levels it would otherwise have reached. Already existing standards will cut peak electricity demand by 144,000 megawatts by 2020, an amount roughly equivalent to the output of 288 power plants at 500 MW each. For consumers, the existing standards are delivering net benefits of about $234 billion. For the environment, the savings translate into about 315 million metric tons less carbon dioxide emissions per year, or about 4.5% of projected 2020 U.S. emissions.

These savings are very large. However, DOE's failure to meet deadlines as documented in the GAO report means that they are smaller than what should have been accomplished had DOE carried out its responsibilities as intended by Congress.

DOE's recent commitment to get the appliance standards program back on track by establishing and sticking to a schedule is good news. We estimate that, by issuing new standards, many of which are overdue, DOE could add at least another 200 billion kilowatt hours of savings per year and further cut carbon dioxide emissions by another 165 million metric tons per year, or 2.2% of

projected 2020 emissions.

But these savings will only be achieved if DOE establishes appropriately strong efficiency standards. In each of the three most recent proposals for new standards (concerning home furnaces, home boilers and electric distribution transformers), DOE has issued weak standards. In the case of furnaces, DOE set a standard met by 99% of current sales. For boilers, DOE rejected a consensus agreement between manufacturer and advocacy groups. With regard to transformers, DOE has rejected a standard supported by the very electric utility industry which purchases this equipment. In several cases, DOE has indicated that its hands are tied legally. If the law is the problem, as DOE indicates, than Congress should clarify the law.

Several reforms to the law are needed to help ensure that DOE will be better able to capture the savings from cost effective standards in the future. These include:

Recommendation #1. Authorize DOE to establish limited regional standards for heating and cooling products. The same furnace standard does not make sense for Michigan as makes sense for Mississippi; nor does the same air conditioner standard make sense for Georgia as makes sense for Sacramento. The clear needs of different regions of the country should not be subjugated to manufacturer preference to have a single standard in all fifty states.

Recommendation #2. Authorize DOE to apply multiple efficiency measures to a single product. A single measure is sometimes inadequate for representing a product's energy use or efficiency. DOE should have greater flexibility to capture all aspects of a product's energy consumption in its standards.

Recommendation #3. Require DOE to conduct a furnace fan rulemaking. This rulemaking offers among the largest potential of any potential new standard, but DOE considers it voluntary.

Recommendation #4: Require regular reviews of all appliance standards. Because technology continues to improve, so will the potential for improved standards. Because states are preempted forever, it is crucial that DOE conduct regular reviews of all standards to determine if updates are warranted.

Recommendation #5: Sunset preemption if DOE misses deadlines. The potential for preemption to expire will increase the pressure on DOE and all stakeholders to work diligently to ensure the agency meets such deadlines. When the deadlines are missed, authority should return to the states.

Recommendation #6: Clarify that preemption only applies when there is a federal standard. Federal law should not preempt state standards in those instances where DOE has failed to or chosen not to exercise its authority. Congress should make clear that no federal standards = no federal preemption.

A. DOE is finally meeting deadlines, but failing to deliver energy savings.

The GAO report, "Long-standing Problems with DOE's Program for Setting Efficiency Standards Continue to Result in Forgone Energy Savings," documented that DOE missed every single

deadline set for it under the appliance standards statutes since 1987. By 2005, DOE was as much as a decade late on twenty-two overdue appliance standard reviews and updates. In January 2006, in response to language added by this Committee to the Energy Policy Act of 2005 (EPAct), DOE prepared a report explaining its view of why so many deadlines had been missed and proposing a plan to come into compliance. Concurrently, several states and NGOs brought suit citing DOE's violations of the legal deadlines for these 22 overdue standards. This suit (*New York v. Bodman/NRDC v. Bodman*) resulted in a consent decree signed last fall. The consent decree largely confirms the schedule published by DOE in January 2006 and subjects DOE's schedule compliance to court oversight.

Since publication of DOE's January 2006 schedule, the agency has done an excellent job of meeting deadlines. The agency has initiated several major rulemakings covering 15 categories of products. Last fall, DOE finally issued proposed rules for the two major rulemakings begun in 2001: residential furnaces and boilers and electric distribution transformers and appears on schedule to issue final rules for these products this September. It's good news that DOE is now meeting deadlines.

However, even if DOE meets all deadlines in its plan, standards that are already years overdue will not be effective until 2013 and later. Keeping to a schedule will get more difficult as DOE must make policy decisions at more advanced stages of the rulemakings processes.

Sticking to the schedule is only part of the job. It is also DOE's obligation to set appropriately strong standards: after all, the law exists to save energy. To quote the law, new or amended standards, "shall be designed to achieve the maximum improvement in energy efficiency ....which

the Secretary determines is technologically feasible and economically justified (42 USC 6295(o)(2)(A)."[1] DOE's recently proposed standards have fallen seriously short of this target.

- **Residential boilers:** DOE rejected a consensus proposal from boiler manufacturers and efficiency organizations (including mine). The agency claimed it lacked the legal authority to act on the joint recommendation because it includes an annual efficiency performance minimum and two prescriptive requirements (one prohibits standing pilot lights, the other requires a "temperature reset" feature which results in savings not captured by the performance minimum.) Instead DOE has proposed a standard that relies only on a performance minimum which manufacturers claim to be onerous.[2] We estimate that the joint recommendation rejected by DOE would result in roughly double the energy savings as DOE's proposed standard. The recommended standards would save roughly 170 million therms natural gas per year, or enough to heat about a quarter million typical homes.

- **Residential furnaces:** Natural gas fired furnaces are the most common heating equipment. DOE's analysis shows a standard set at 90% is cost effective *on average* for the nation as a whole. But the average masks wide disparities between the coldest and warmest states. In a nutshell, a 90% efficiency standard makes solid economic sense in the northern half of the country, but is only marginally cost-effective or not cost-effective at all in the

1 In determining economic justification, the Secretary must take into account six criteria: economic impacts on manufacturers; the lifecycle savings for consumers from improved standards; the magnitude of projected national energy and water savings; any impacts on product performance; any impact on competition; and the need of the nation to save energy or water, as the case may be.
2 DOE has proposed an Annual Fuel Utilization Efficiency for gas boilers of 84%. Under the consensus agreement, this level would be lower at 82%. But the prescriptive requirements more than make up for the lower AFUE rating,

warmest states. Many stakeholders including numerous states urged DOE to consider regional standards. Instead, DOE has proposed to apply an 80% standard to the entire country. This standard is meaningless since 99% of current furnace sales already meet or beat 80% efficiency.

DOE rejected cost-effective regional standards which would result in very large economic and energy benefits on the grounds that it lacks legal authority to set such regional standards. We estimate that a regional 90% standard applied to the coldest states would net consumers about $8 billion and save enough gas to heat more than 3 million homes annually.

- **Electric distribution transformers:** DOE proposed a standard last fall that fell short of the agency's usual practice of giving great weight to standard levels which minimize overall costs for equipment purchasers. A dozen major utility companies called on DOE to consider setting a stronger standard which would minimize lifecycle costs for purchasers and increase energy savings by about 50%. In time the savings from this standard would grow to 26 billion kilowatt hours per year, roughly enough to meet the needs of every home in Kentucky. Fortunately, in March, DOE reopened the docket and indicated a willingness to consider higher standards. At that time, the Edison Electric Institute and the American Public Power Association, representing 80% of all transformer purchases, joined in calling for DOE to set stronger standards (see Attachment). To date, manufacturers have not voiced support for this stronger standard. The burden is on DOE to choose an appropriately

yielding a standard that manufacturers find less onerous and which yields significantly larger savings than the DOE proposal.

strong standard without the benefit of a "consensus" recommendation easing the path for the Department's decision makers.

To summarize DOE's recent performance, we are heartened by DOE's commitment to its schedule, but keeping a good schedule offers little benefit to the nation if DOE continues to set standards that save little energy or leave large, cost-effective energy savings untapped.

B. **Opportunities for significant potential energy savings.**[3]

The table below is copied from a report jointly published by my organization and the American Council for an Energy-Efficient Economy (ACEEE) in March 2006. It shows the potential energy savings from various pending DOE proceedings. Based on this analysis, ten regulated product categories offering the greatest potential energy savings are, in descending order: residential central air conditioners and heat pumps; furnace fans; refrigerators; residential furnaces and boilers; electric distribution transformers; fluorescent lamp ballasts; fluorescent lamps; clothes dryers; industrial motors and residential water heaters.

Combined, these various updated standards offer the potential to save nearly 200 billion kilowatt hours per year, an amount roughly equal to 5% of total U.S. electricity use. These savings would result in very large reductions in carbon dioxide emissions. Using projected 2020 emission factors,

3 This section responds to Questions #1 and #2: #1. "In which categories of appliances and equipment is there significant unrealized potential for cost-effective energy efficiency gains that could appropriately be captures through new or improved appliance standards." #2: "What are the potential gains in energy savings and carbon emission reductions?

resulting carbon dioxide reductions would be about 165 million metric tons per year, or about 2.2% of projected 2020 U.S. emissions.

There are several reasons to expect that these estimates are too low. The forward march of technology and markets continually generates new opportunities for energy savings. For example, recent announcements by light bulb manufacturers have indicated a potential transition to new light bulb technologies that would save enormous amounts of energy and money. New analysis indicates that further updates to the residential clothes washer standard also could result in large savings. We cannot always predict where the best, most cost-effective savings opportunities will come from. Therefore, it's important that DOE keep up with all of the reviews of existing standards required, no matter where they rank in any ordering. For any given product, DOE can always decide, if warranted, to leave a given standard unchanged.

Potential Savings from DOE Rulemakings

Product	Annual Energy Use	Units	Estimated Savings (%)	Annual Savings Once Stock Turns Over TWh	TBtu
Residential:					
Battery chargers	6	TWh	34%	2	21
Central AC & HP	243	TWh	20%	49	510
Clothes dryers	100	TBtu	10%	NA	10
Clothes dryers	81	TWh	10%	8	84
Dehumidifiers	12	TWh	10%	1	13
Direct heaters	110	TBtu	8%	NA	9
Dishwashers	260	TBtu	11%	NA	28
External power supplies	67	TWh	7%	5	51
Freezers	19	TWh	10%	2	20
Furnaces & boiler effic.	4,907	TBtu	5%	NA	221
Furnace fans	56	TWh	49%	28	287
Pool heaters	82	TBtu	19%	NA	16
Ranges & ovens	287	TBtu	13%	NA	36
Refrigerators	85	TWh	25%	21	222
Room AC	27	TWh	9%	3	26
Water heaters	1,386	TBtu	4%	NA	54
Water heaters	116	TWh	2%	3	26
Commercial:					
Beverage vending machines	10	TWh	10%	1	11
Boilers	584	TBtu	3%	NA	18
Clothes washers	20	TBtu	21%	NA	4
Distribution transformers	75	TWh	27%	20	209
Fluorescent ballasts	227	TWh	7%	16	171
Fluorescent lamps	227	TWh	5%	11	118
Gen'l service incand. lamps	65	TWh	5%	3	34
Ice-makers	7	TWh	10%	1	8
Incand. reflector lamps	38	TWh	17%	6	66
Motors	403	TWh	2%	8	84
PTACs/PTHPs	13	TWh	13%	2	17
Reach-in refrig. & freezers	13	TWh	30%	4	40
Supermarket refrigeration	25	TWh	20%	5	51
TOTAL			Electricity	198	2,068
			Fuels		395
Grand total					**2,463**

Notes:
* Annual energy use for 2020 from EIA (2005) if available; otherwise used best available current year figures
* Percentage savings from DOE and ACEEE analyses; these are very approximate preliminary estimates.

C. Recommendations for strengthening the federal appliance standards program.[4]

We recommend several reforms which we believe would enhance the ability of DOE to establish standards that better meet the law's goal of maximizing cost effective energy savings.

Recommendation* #1. *Authorize DOE to establish limited regional standards for heating and cooling products.

DOE's rulemaking analyses for furnaces and central air conditioners have thoroughly, but not surprisingly, demonstrated that different minimum standards make sense in different regions of the country. But DOE concluded in the current furnace docket that it lacks legal authority to set regional standards. In the recent Notice of Proposed Rulemaking for residential furnace standards, DOE invited cold weather states to apply for waivers from federal preemption. But a state-by-state waiver process is very slow and uncertain for the states and, if successful, would result in precisely the patchwork of standards that manufacturers most dislike. Regional standards established on a federal level would provide larger energy and dollar savings and improved regulatory certainty. Such regional standards have existed for manufactured homes (with respect to energy use, roof strength and wind resistance) since 1978. The manufactured home standards, administered by HUD, rely on manufacturer labeling and state-level enforcement of the federal requirements. States already routinely adopt federal appliance standards into state building codes (they are preempted from adopting any other standards), so the state-based enforcement system is already in place for regional appliance standards. In our view, Congress should permit up to three regional standards, far fewer than might result from a variety of individual state waiver requests.

4 "How should Federal law or policy be changed to establish such standards without delay, either in general or for a particular category of appliance or equipment?"

Such a limited regional approach properly balances the needs of different regions with the manufacturer need to avoid a patchwork of standards across the many states.

Recommendation #2. Authorize DOE to apply multiple efficiency measures to a single product.

DOE should have the authority to use multiple efficiency measures in a single product standard provided multiple efficiency measures are needed to adequately capture a product's energy performance. In the case of the boiler agreement, DOE claims the law tied its hands with respect to setting the flexible standards preferred by stakeholders. We think it important that DOE be permitted to exercise such authority in the future, whether or not a consensus agreement exists. Several other products already are subject to multiple standard requirements set by Congress including commercial clothes washers, ceiling fans and heat pumps. As required by the underlying law, DOE would be obligated take any manufacturer impacts into account.

Recommendation #3. Require DOE to conduct a furnace fan rulemaking.

Congress authorized DOE to consider furnace fan efficiency standards in 2005, but the Department subsequently chose not to schedule a rulemaking. Given the very large potential savings from this technology and the Department's history of delays, we think it imperative that the Congress give DOE a hard deadline for action of no later than December 31, 2012. We estimate that this rulemaking could save up to 13 billion kilowatt hours per year and net consumers more than $4.1 billion cumulatively.

D. The relationship between Federal and State appliance efficiency standard-setting

programs.[5]

Historically, state standards have driven adoption of strong federal standards. Once federal standards are established, state standards are generally preempted. In return, the federal government takes on the obligation to keep those standards up-to-date. However, the law requires zero to two reviews, but preempts states forever. This structure fails to account for further technical advances and it fails to deliver on the Federal government's obligation to actively monitor and update an area where it preempts the states.

Recommendation #4: Require regular reviews of all appliance standards. DOE should be required to review all standards every 5 years to determine if a full rulemaking which could lead to a revised standards is warranted. Because DOE rulemakings take three years to complete, such a review schedule would lead to changes in a standard nor more frequently than every 8 years. DOE should also review all test procedures periodically. In a nutshell, as long as the states are preempted, DOE should be obligated to keep the standards up-to-date.

Recommendation #5: Sunset preemption if DOE misses deadlines. If DOE misses future deadlines for final rules, preemption of state standards should expire, only to return when DOE puts a revised final standard into effect. This principal was agreed to by manufacturer groups for some standards included in EPACT 2005 and should now be more broadly applied. The potential for preemption to expire will increase the pressure on DOE and all stakeholders to work diligently to ensure the agency meets such deadlines.

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5 What should the relationship be between Federal and State appliance efficiency standard setting programs?

Recommendation #6: Clarify that preemption only applies when there is a federal standard. Federal law should not preempt state standards in those instances where DOE has failed to or chosen not to exercise its authority. In general, if the federal government has not occupied the field by setting a standard, the authority should remain with the states. In some instances, manufacturers have argued that the *potential* inclusion by DOE of a product in a standard triggers preemption. Congress should make clear that no federal standards = no federal preemption. DOE should not be in a position to shield products from state standards by including products in the federal program, but not setting any standard.

E. Consensus standards (responds to question #5).[6]

Congress has a long history of enacting technical standards based upon consensus recommendations from stakeholders. This practice grew out of delays in the standards program dating from the 1970s and 80s and has been reinforced by the more recent delays. Consensus standards for a variety of products were enacted by Congress in 1986, 1987, 1988, 1992 and 2005. We recommend Congressional adoption of an additional six consensus standards in 2007 affecting the following products:

- Residential clothes washers
- Residential dishwashers
- Dehumidifiers
- Incandescent reflector lamps
- Motors
- Residential boilers

We further recommend that Congress adopt consensus recommendations for firm deadlines for the

6 "Should Congress directly legislate appliance standards that have achieved consensus of stakeholders? If so, which ones?"

next reviews of the residential refrigerator, clothes washers and dishwasher standards. It is also possible that ongoing negotiations may result in one or more major additional consensus recommendations in the near future.

F. Incentives for new consensus standards.[7]

DOE's failures to get standards completed in a timely way have caused many, including my organization, to look to negotiated standards which can be enacted by Congress as an alternative. However, it is a mistake to view negotiated standards as a substitute for a fully working DOE regulatory process for two reasons. First, negotiations only occur when there is a credible possibility that standards will be completed through DOE's normal regulatory process. Absent a functioning process, many stakeholders have no incentive to negotiate. Second, if the DOE process is working well, negotiations should not be necessary: it is DOE's job to set cost effective standards that meet the legal criteria. DOE should not be looking to private stakeholders to sort out its obligations under the statute.

In some cases, negotiated standards can offer more flexibility than DOE's processes. Such flexibility can result in larger energy savings, lower costs for manufacturers and more benefits for consumers. However, we expect that those new standards determined through consensus agreements will be the exception rather than the rule. Rather, most standards should be determined through DOE's processes.

7 "Are appropriate incentives in place to encourage the achievement of new or improved standards by stakeholder consensus."

G. Expedited process.[8]

An expedited process should not be viewed as a panacea. The number of consensus recommendations will be limited and, under the best of circumstances, a shortened process might result in completion of a standard 12 months sooner than could otherwise be accomplished. Nevertheless, we do support providing for an expedited process. This idea was first proposed by DOE. An improved version of DOE's original proposal would provide for consensus proposals to be considered earlier in the rulemaking process while still protecting all stakeholders' access to open and fair government processes and maintaining DOE's obligation to respond to substantive comments on a formal rulemaking record.

8 "Should Congress amend the law to adopt a more expedited procedure or to modify current criteria by which the Department of Energy establishes new or revised appliance efficiency standards by rule? If so, how should the updated procedure differ as a function of whether or not a new standard has achieved stakeholder consensus?"

Mr. BOUCHER. Thank you, Mr. deLaski. Mr. Harak.

STATEMENT OF CHARLES HARAK, NATIONAL CONSUMER LAW CENTER, BOSTON, MA

Mr. HARAK. Thank you very much, Chairman Boucher, Ranking Minority Member Hastert and members of the committee. My name is Charles Harak. I am the senior attorney for the energy project at the National Consumer Law Center. Throughout my 30 years as a lawyer, I have worked on energy issues almost exclusively on behalf of low-income consumers. Over the past 5 years, NCLC has represented low-income consumers in some of the DOE appliance dockets, as well as in two recent lawsuits. In these comments I want to underscore the importance to low-income consumers of adopting strong appliance efficiency standards, particularly for boilers and furnaces. I will also highlight some areas where I think the Department of Energy could do a better job in carrying out the congressional mandate regarding appliance standards.

Households living in poverty spend 25 percent of their total household income to pay for their energy bills. This is an unbearable burden. The unsurprising result is that ever-rising numbers of households are having their gas and electric service terminated. Many others live without heat because they cannot afford their propane or oil bills. For low-income households, applying efficiency standards are much more than a way to save energy and reduce harmful emissions. These standards could help families to stay warm in the winter and cool in the summer and literally keep the lights on by making the energy they need more affordable.

Strong appliance standards are uniquely important for the millions of low-income families who rent their dwellings. Property owners, not renters, generally replace large household appliances, such as furnaces, boilers and water heaters. Yet, these owners will often install less expensive and less efficient appliances because the tenants bear the higher energy costs of operating less efficient appliances. This so-called "split incentive" between property owners and tenants must inform congressional and DOE policy regarding standards for residential appliances.

While it is important to be aware of this problem of split incentives, appliance standards are also important for all consumers. Efficiency standards have had and will continue to have a significant impact on overall energy consumption. Savings resulting from adoption of stronger boiler and furnace standards alone would have a measurable impact on the demand for natural gas, thus moderating expected future increases in the price of natural gas consumed by households, businesses and industry, alike.

Low-income houses, in particular, benefit from any moderation in the price of natural gas because they pay a disproportionate share of their incomes for home energy bills and often face termination of their service due to non-payment. The committee is obviously well aware of DOE's checkered history in implementing the appliance standards program. Here I would note that from the perspective of low-income consumers, the most important improvement that Congress could make in the process is to provide DOE with clear authority, if not an out-and-out mandate to adopt standards for products that vary by climate region.

Numerous parties in the DOE boiler and furnace docket that is pending have urged DOE to adopt a two-tiered standard for gas-fired furnaces. There is a consensus that a 90 percent efficiency standard is economically justified in most States in the country. DOE, however, flatly refuses to consider a two-tiered standard, relying on an unexplained parsing of the definition of "energy conservation standard" in the law. NCLC, along with several other parties, presented DOE with a detailed legal analysis as to why, in fact, it has the authority already to adopt a two-tiered standard for furnaces. We also sent a letter to DOE Secretary Bodman urging him to pay personal attention to the agency's position in the furnace docket, regarding its authority to adopt a two-tiered standard for gas furnaces.

At the moment, however, it appears that DOE DOEs not intend to change its position and will only consider a single weak standard for the entire United States. Congress should carefully consider the adoption of legislation to overcome this unnecessary obstacle to the attainment of cost-effective energy savings. If Congress wishes to clarify that DOE can adopt regional standards for any product where this would best carry out congressional intent, NCLC attaches to this testimony proposed legislative changes, as well.

Congress should also consider mandating that DOE address the issue of regional standards for furnaces promptly, within the next 18 months. DOE is unlikely to adopt a two-tiered standard in the pending rulemaking that will probably end up later this year. The weak nationwide standard proposals will not take effect until 2015, 14 years after it began considering revisions to the existing standards. Unless Congress mandates that DOE immediately revisit furnace standards, DOE may not implement new furnace standards until 2020 or later. In the pending furnace docket, DOE has all of the technical and economic information it would need to promptly adopt a two-tiered furnace standard.

On behalf of the National Consumer Law Center, I thank the committee for allowing me to testify today.

[The prepared statement of Mr. Harak follows:]

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TESTIMONY OF CHARLES HARAK, ESQ.
REGARDING DOE'S APPLIANCE EFFCIENCY 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]

Primary heat fuel is >>>	**Natural gas**	**Propane**	**Heating Oil**	**Electricity**	**All (average)**
Projected 07 cost is >>>	$1,832	$2,311	$2,714	$1,344	$1,751

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

[2] Economic Opportunity Studies, "Forecast FY 2007 Energy Bills and Heating Bills," available at http://www.opportunitystudies.org/repository/File/low-income/Eisenberg%20Oct%20Projections%20_2_.pdf
[3] Dr. Meg Power, "FY 2006 Energy Bills Forecast: The Impact on Low-Income Consumers" (2006), p. 4, Fig. 4 available at http://www.opportunitystudies.org/repository/File/weatherization/outlook-feb-06.pdf.

bills than those which were not weatherized.[4] 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.[5] 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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[4] Dr. Meg Power, "Low-Income Consumers' Energy bills and Energy Savings in 2003 and FY 2004" (2004), available at http://www.opportunitystudies.org/repository/File/weatherization/low-income-cons-energy-bills-2003-and-2004.pdf.

[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;*

[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 . . .*

42 U.S.C. § 6863(b)(5) (emphasis added).

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 ("ACEE") 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

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[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_dcu_SPA_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.

[9] See "Comments of the Natural Resources Defense Council" in DOE furnace/boiler docket EE-RM/STD 01-350, pp. 4 – 11 (comments filed Jan. 15, 2007).

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.[10] 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

[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[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.[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.[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

[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.
[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.
[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 HARAK

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 HARAK

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)

3. Proposed Changes to Energy Policy and Conservation Act to Allow Regional Energy Standards (Apr. 2007)

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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

Bill Prindle
American Council for an Energy Efficient Economy

Andrew deLaski, Executive Director
Appliance Standards Awareness Project

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Global Energy Efficiency Leader
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Massachusetts Division of Energy Resources

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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

Comments of the National Consumer Law Center, 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, Salt Lake Community Action Program, Texas Legal Services Center, Texas Ratepayers' Organization to Save Energy, The Energy Project, The Utility Reform Network, and Virginia Citizens Consumer Council

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

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.

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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%.

[23] See, e.g., Ryan Wiser, Mark Bolinger, & Matt St. Clair, "Easing the Natural Gas Crisis: Reducing Natural Gas Prices Through Increased Deployment of Renewable Energy and Energy Efficiency" (Lawrence Berkeley National Laboratory, LBNL-56756, Jan. 2005).

[24] See, for example, the Nov. 10, 2004 comments of NCLC/CFA/MUPHT, pp. 7-9.

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).

69 Fed. Reg. 45425 (July 29, 2004).

It is difficult to rebut this legal argument that is little more than *ipse dixit*[27] as DOE has

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[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.[28] 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

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[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.

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 ease 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 (2nd 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. s 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 products[30] 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 "proceed[ed] 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 DOE[31] 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 "prescrib[ing] 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.[32] Even at this early date, and well before Congress itself directly established specific numerical standards,[33] 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," *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"),[34] 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, *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[35] and the potential Balkanization of efficiency standards as states sought waivers of federal preemption,[36] 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[37] only leads to the very

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[32] 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).

[33] *See* Pub. L. No. 100-12, § 5 (setting standards for a range of products).

[34] 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, *reprinted in* 1978 U.S.C.C.A.N. 8158-8159.

[35] *See NRDC v. Herrington*, 768 F. 2d 1355 (D.C. Cir. 1985).

[36] S. Rep. No. 100-6, pp. 3-4, reprinted in 1987 U.S.C.C.A.N. 54-55.

[37] 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.[38] 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/NEPCA/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

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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.

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.*

71 Fed. Reg. 59209 (emphasis added).

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[39], 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

[39] See 71 Fed. Reg. 59210.

PROPOSED AMENDMENTS TO ENERGY POLICY AND CONSERVATION ACT TO ALLOW FOR REGIONAL STANDARDS[1]
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[2]: 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."

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[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 withe 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.

Mr. BOUCHER. Well, thank you very much, Mr. Harak. You got the award for timing. You were within 3 seconds of 5 minutes.

Mr. HARAK. I timed it before I got here, Mr. Boucher.

Mr. BOUCHER. Very well done. And I want to say thank you to all of the witnesses for their well-prepared and delivered testimony here this morning.

Mr. Karsner, let me begin my questions with you. You have mentioned, in your testimony, that certain new items of legislation would be helpful in addressing problems that you perceive with the existing statute and also giving you some helpful new regulatory flexibility. Could you be more specific in what you are recommending to us?

Mr. KARSNER. Yes, sir, Mr. Chairman. Specifically, and it has been mentioned by several people up here in their testimony, movement towards a consensus rule. Effectively, anything that we would request for new legislation that would give the Department additional flexibility to compress the timetable. As has been said, it is one thing to establish a critical path and bring some order to chaos; it is another thing to be able to analyze that critical path and determine whether or not you can compress it in some logical way that still has equitable fairness. We think moving to a consensus rule, when all of the manufacturers, advocates, stakeholders and all the relative parties are in agreement, expediting the process, is quite important, so we have sent legislation to the Hill to that end.

Mr. BOUCHER. I understand that. What else?

Mr. KARSNER. Well, a lot that was mentioned here today are things that are new. They would be either amendments to the existing EPCA or new in statute, but specifically, the potential for considering different regions of the country and different climate zones, giving DOE a greater latitude to look at design features in addition to performance features. These are all things that we would avail our technical expertise to the committee and be happy to collaborate on.

Mr. BOUCHER. OK. Well, thank you very much. Let me suggest that you send us a list of specific statutory changes that you think would be appropriate for us to make. We are in the process now of considering what changes to make and we are on a fairly short timeframe in terms of reporting legislation for consideration by the full House that will be on the floor in July of this year. So if you could submit to us, within the coming 2 to 3 weeks, a list of proposals for legislation, that would be extremely helpful.

Let me ask a question for all of the witnesses. For the consensus standards that have been developed specifically for clothes washers and for dishwashers, I think Mr. McGuire described that new set of consensus standards in his testimony, would everyone here agree that we should codify those consensus standards by a statute and do so in the near term? Any comment on that? Anyone opposed to us doing that? Let us put it that way. I don't see any hands. Well, there is Dr. Rosenfeld.

Mr. ROSENFELD. I think the advocates have done a good job and I reluctantly support it, but I do want to say California didn't sign on because the standards for water factor in clothes washers were not up to what we need in the State of California.

Mr. BOUCHER. OK, thank you. Mr. deLaski.

Mr. DELASKI. We are participating in those negotiations and strongly support the recommendations that Mr. McGuire outlined today. These, I think, the industry represents. We have had numerous negotiated agreements over the years. This latest, I think, is the most global in terms of addressing multiple products and addressing both new standards for several products require new rulemakings, as he mentioned, for clothes washers and refrigerators, tax credits for promoting the most efficient products.

Mr. BOUCHER. The precise question is should we incorporate these consensus agreements in the statute?

Mr. DELASKI. Yes.

Mr. BOUCHER. Thank you, Mr. deLaski. Mr. Harak. Well, if you disagree with that, tell me. If you don't, let us pass on to another question. We will assume that is the consensus view of the panel. OK. The next question would be this. There has been an endorsement from at least Mr. Harak, Mr. Rosenfeld and Mr. deLaski that we have regional standards with respect to heating and cooling products and I would like to ask the entire panel if they would agree that these regional standards should be limited just to heating and cooling products or would it be appropriate to have regional or other variable standards for other kinds of products, as well? And if for other kinds of products, what other products? Who would like to answer that? Dr. Rosenfeld.

Mr. ROSENFELD. Do I sound like the broken record? I just want to remind you that water is very expensive in the West, which is a region.

Mr. BOUCHER. Thank you. Yes, Mr. Harak.

Mr. HARAK. I would say at the moment those are the most important products and I think in the pending docket on boilers and furnaces, it is extremely important to move forward on heating and cooling products.

Mr. BOUCHER. So you would say limit it to heating and cooling, at least for the time being?

Mr. HARAK. At the moment I am comfortable with that, yes.

Mr. BOUCHER. Would everyone agree we should limit that to heating and cooling and not provide DOE with greater latitude in order to set regional standards or other variable standards for other kinds of products?

Mr. HARAK. If I could amend, it is hard to know when there might be other products and if you were going to fix the law, if you changed it in the way you suggest, you have made it even clearer that maybe they don't have authority on other products. I read the current law that they have regional authority, but if you are going the direction you are suggesting, you would need a further amendment of Congress if there were another product where its efficiency and utility varies by region, the economic benefits vary by region. I would be a little cautious.

Mr. BOUCHER. All right. Yes, Mr. McGuire.

Mr. MCGUIRE. Mr. Chairman, we would oppose extending it to other products and we certainly do not support it covering heating and cooling products, although those are not my products, I think it is the gentleman next to me, but we think the national standard, which takes into account national energy savings and the features and functionality of the products is a tested and true process and

I think we need to leave it to the innovation of the product manufacturers to work within a performance standard to deliver the energy efficiency and performance that they can do.

Mr. BOUCHER. Mr. Myers.

Mr. MYERS. Mr. Chairman, I guess I would support the national structure, even though we specifically are talking about heating and cooling products here. I guess I would point out that consumers are making choices, even within regions. More than two-thirds of the furnaces now sold in the Northeast are at levels above inefficiency, above the minimum standards, so we are making economic sense. The consumers are choosing to do so.

Mr. BOUCHER. Well, let me just ask both of you this question. If we were to have, I think, perhaps, it was Dr. Rosenfeld who suggested two regions, a North region, a South region. He nods and says it was him. How much added burden to you would that be? You are manufacturing to two standards instead of one. Surely, that would not be an enormous additional burden, wouldn't it?

Mr. MYERS. I think, from a manufacturing perspective, perhaps not, but I think the effectiveness of the standard in those two regions would result in minimal benefit in the overall cost structure. I think when you talk about the ability to enforce it, the compliance, it moves it from centralized product certification and management within the OEMs and imported products to the field. Do they have the resources to enforce it? Can they verify each installation? Is operating within the conditions set for that particular region?

I think you have the practical side of legislation. We are very ineffective from the standpoint of timing and the processes we have described here with the DOE. Now we are going to do it with two separate activities that might have complete processes individually done by region that only burdens it further. And I think we have demonstrated where national standards have been passed, they are very effective and we are achieving the standards. I guess the last point I would make is——

Mr. BOUCHER. Well, my time has long expired, but let me just say that an argument has been presented that I think deserves our consideration, that with regard to heating and cooling in particular, where we do have different functionalities that perhaps should apply in different climates, that a different standard, perhaps, would be sensible within that very limited context and I think what we have heard from our witnesses is that the limit for that context would, in fact, be heating and cooling and not anything broader. And as much as I would like to call on you, Dr. Rosenfeld, I simply don't have the time to do it. He is going to say water, anyway. No, no. He is not. Well, in that case, with the indulgence of my colleague from Illinois, let me ask you, then, Dr. Rosenfeld, what you do have in mind?

Mr. ROSENFELD. I just want to point out, with respect to the problem of heating and cooling that in California we have 16 climate zones, compared to just one for the country, is a little pathetic. And we require better windows in some climate zones than in others and there isn't any problem with administering this. We have Low-E windows required in some climate zones and not in others and it all works fine.

Mr. BOUCHER. All right. Thank you, Dr. Rosenfeld. The gentleman from Illinois, Mr. Hastert, is recognized for 5 minutes.

Mr. HASTERT. I thank the chairman. First of all, I would entertain a UC request.

Mr. BOUCHER. Oh, yes. I ask unanimous consent to include in the record of today's proceedings the statement of the chairman of the full committee, Mr. Dingell.

Mr. HASTERT. Without objection.

Mr. BOUCHER. So ordered.

[The prepared statement of Mr. Dingell follows:]

PREPARED STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. Chairman, thank you for calling this hearing on the Federal program that establishes energy efficiency standards for appliances. As one who participated in enacting the Energy Policy and Conservation Act of 1975 that originally created this important program, I am perhaps more conscious than most of the degree to which we have wasted the opportunity to save energy from increased appliance efficiency in the 32 years since then.

Thirty percent of our electricity demand is attributable to residential electric appliances, which makes them indirectly responsible for about 15 percent of our national carbon dioxide emissions. We have improved their energy efficiency significantly without loss of performance, indeed with better performance. But we could have done so much better if we had adopted timely standards that met the statutory test of requiring the energy efficiency that was "technologically feasible" and "economically justified."

In March, we released the Government Accountability Office report on this topic that Chairman Boucher, Chairman Markey, and I had requested, as Chairman Boucher has already noted. The track record of this program has been a long series of derailments or trains that never left the station. I can think of no other critical energy program that has such a long history of failure to meet its objectives.

Now, however, we are seeing the early signs of new and effective leadership from Assistant Secretary Karsner, who is here to testify this morning. He has told us that he can and will meet the current deadlines for new standards. We will help him keep his promise.

But setting standards is only half the necessary commitment. They must also be the right standards. They must strike a demanding balance between first cost, cost of operation, and technical features to minimize energy consumption. In this way, our household appliances can help make a major contribution to meeting our climate challenge.

I appreciate the fact that the efficiency advocates and the appliance manufacturers have many times been able to find consensus on new standards, saving the time and uncertainties of waiting out the Department of Energy's rulemaking process. This is one way to get there, and we need to encourage more such consensus agreements.

We also need to review where changes in DOE's rulemaking process will lead to more effective implementation. I for one am ready to move quickly on legislative recommendations that emerge from this review. It has been 32 years since this program started; I would like to see DOE implementation fully up-to-date for all covered appliances.

For all of these purposes, this is a timely and important hearing, and I thank Chairman Boucher and the subcommittee for undertaking it.

Mr. HASTERT. Thank you, Mr. Chairman. I came into this hearing and I am kind of jumping into this stuff from another world in the last 6 months, but I thought this was kind of an esoteric hearing, in a sense, and talking about standards and as I listen and go through this, it is somewhat of a conundrum because I have a base philosophy that economics drives behavior, especially what people buy. For instance, I am involved with building a house in southern Wisconsin. My brother sells heating and air conditioning equipment in northern Illinois, yet the products that he rec-

ommends in northern Illinois are completely different from southern Wisconsin, only 100 miles apart, but the weather is different.

And so the products that that market demands are completely different or not completely, but there is a variation from the products that people in northern Illinois need and what is economically viable. And I understand if you move to northern Wisconsin or into Minnesota, those again, products are different. We are building a house to an R28 level. You don't have to build houses in other places to R28. But the variation of wind and temperature and other things demand or show that economically, that is a viable thing to do.

So here we are saying how DOEs the DOE set more rules and more regulations in an effective way? And of course, I have been in the rule and regulation business now, I am sorry to say, for almost a quarter of a century, more than that. And sometimes rules and regulations work, but I found mostly that government lags behind what the industry can offer. And so if the government regulation becomes a ceiling instead of a floor of what can be offered, I see we enter ourselves into a conundrum. We are saying we are limiting what our efficiency could be because we are just meeting the standards.

Now, I understand that if we get in a situation and I think that is a very good point that Mr. Harak brings out, that if landlords are buying the equipment, they have a different economic view of this than consumers do and he rightly supports the consumers. My question is how do you make it economically feasible for a landlord or the base consumer of the product to buy the most efficient product to build his house or his apartment building in the most efficient way or to remodel to make those efficiencies apparent? And this is the bottom line. How do we change behavior?

And I just have to come back, if it is economically feasible, if it pays, if it make economic sense, that is what is going to drive this issue, so all you folks that represent industries, you have these regulations that you are going to have to deal with, I don't know if anybody here represents a company, per se, except for maybe Johnson Controls, that you know, you are there representing the consensus of a lot of ideas from a lot of people. But the fact is, what is the best way to make and to deliver something that is really effective and really cost-efficient in two things?

We want to lower our energy demand and of course, a lot of this energy comes from off-shore. If the generation is generated like it is in the northeast, by fuel, or it is more effective and more efficient to lower energy demand, period, because we are putting less CO^2 into the air and other things that are important today. Mr. Harak, what you recommend?

Mr. HARAK. Mr. Hastert, you raise a lot of very interesting points and I made a few notes. I want to go through them briefly. First is to the ceiling and floor issue. I think it would be very fair to say that DOE is setting a floor, not an irrationally low floor, but there is this ceiling or this range way above it through the Energy Star program. Whenever DOE sets a standard for a product, there are still many products on the market that are more efficient and then there are incentive programs that layer on top of the DOE mini-

mum standard. So I don't think we are setting a ceiling that stifles technology.

And the counter-example I can think of to what the market can do on its own, compact fluorescent bulbs use 75 percent less energy than the incandescents, but they don't penetrate the market very much in the United States, at least. Penetrate the market much more significantly in all the other industrialized economies, so there are things that don't work in the market very well and consumers knowing enough to make choices.

Mr. HASTERT. But let me counter that. I have a company in my district that has a terrible time trying to penetrate the market. You know why? Because traditional light bulb companies want to be able to change the lights every year. They don't want to put a light into the socket that is going to be there 10 or 15 years. It is not economically viable for them. So how do you turn that thing around?

Mr. HARAK. Well, the problem is that is inefficient for our economy that is spending dollars on energy in our economy that could go to other productive uses are a drag on our economy and I think Dr. Rosenfeld gave us some great examples of the magnitude of that, so we don't want to be dragging our economy with inefficient expenditures. The landlord/tenant example, it is a tough one to wrestle with. I would say, as someone who represents low-income tenants, if the landlord had to and could calculate to the penny how much the rent or the sale price of that unit goes up, it pays back so quickly that the tenants are better off and we need to drive those decisions.

Mr. HASTERT. Simple answer is make the landlords pay the utilities and take it out of that, but anyway.

Mr. HARAK. Well, that is another hearing we can do someday.

Mr. HASTERT. Mr. Rosenfeld, very quickly. Comment.

Mr. ROSENFELD. I support your general support of regional standards. And I believe that with respect to the landlord/tenant problem, our belief in California is make the landlord install an efficient appliance. He knows that there will be a short payback time. It makes his property more attractive.

Mr. HASTERT. Thank you, thank you. I yield back, sir.

Mr. BOUCHER. Thank you very much, Mr. Hastert. The gentleman from Utah, Mr. Matheson, is recognized for 8 minutes.

Mr. MATHESON. Thank you, Mr. Chairman. Dr. Rosenfeld, as someone who represents the second most arid State in the country, I appreciate your reference to water efficiency and I want to start with a question for you. In your testimony you advocated for the regional standards and you have heard some of the—in fact, you have also said that States may be able to develop their own standards in case DOE misses deadlines. How do you reconcile this with the issues raised by the manufacturing sector about how they deal with the cost issue of multiple jurisdictions and multiple sets of rules?

Mr. ROSENFELD. I think that the manufacturers have really already dealt with this. We already heard Mr. Boucher say and corroborated that the efficiency of furnaces sold in cold States way outweighs the standards. The standards are left in the dust. And these are huge markets. We are talking, even if we break the coun-

try into three air conditioning regions, we are talking about 80 million customers in each of these regions. I don't see any problem with the manufacturers going for individual markets for 80 million people.

Mr. MATHESON. Mr. deLaski, you made a number of very interesting recommendations in your testimony. I noticed in the table in your testimony where you looked at potential savings from DOE rulemakings, you raised the issue of furnace fans and at least on percentage, it is your highest one on your list and yet, you also pointed out, in your testimony, that we don't seem to have progress on furnace fan rulemaking with the DOE. Could you tell us why that hasn't been happening?

Mr. DELASKI. A furnace, obviously, uses natural gas or oil to create heat, but then you have got to get that heat to where people need it, through both a fan and a motor to blow it into the home. That fan system is one of the largest single electricity uses in most homes. It is an aspect of energy consumption that currently has no standard whatsoever. DOE has determined that it will only set a standard that addresses the efficiency with which the furnace turns the oil into heat, the heating aspect of it. And Congress, in 2005, gave DOE authority, in the Energy Policy Act, to address furnace fans. DOE said subsequently, we are not going to do it, we got the voluntary, so we are not going to do it until we don't know when. So we think that Congress should set a deadline to address that.

Mr. MATHESON. Mr. Karsner, is that DOE's position, that it is not—or is there confusion at DOE about whether or not you are able to set more than one performance standard for a particular appliance?

Mr. KARSNER. I wouldn't say there is confusion. I think the Office of General Counsel has taken the position, from interpreting the statute, that DOE DOEs not presently have that authority to set multiple standards at the same time in that way.

Mr. MATHESON. OK. Mr. Chairman, it looks like that is an issue we get to look at, then, if that is the case, because it seems like there is some low-hanging fruit here that we are avoiding on the furnace fan issue, to say the least.

Next question I would like to ask is, Mr. Karsner, we have talked about the delays and we have talked about the challenges that face DOE, my question for you is when DOE develops internally its technical expertise that is necessary for evaluating these efficiency standards, is all that work done in-house or do you work with other Federal agencies, such as NIST, in terms of finding technical expertise to deal with these issues?

Mr. KARSNER. Let me revert back to the record to the extent that we cooperate with NIST and the other agencies. My impression is that we do, but it is not all in-house in the sense it is largely driven by outside contractors predominantly through our national laboratories. NIST, EPA and other agencies use DOE's national laboratory system, so I am not sure to what degree we credit where the collaboration lies.

Mr. MATHESON. Right.

Mr. KARSNER. But generally speaking, there is inter-agency collaboration and a great deal is done out of the house, predominantly through the national laboratory system.

Mr. MATHESON. Do you think that we ought to be looking at ways to encourage a more fluid and efficient inter-agency process to help expedite your process? I am on the Science Committee, too. I think, just for example, NIST is a very solid organization. Are there things Congress needs to do to make that inter-agency process work better, do you think?

Mr. KARSNER. Yes, I do think that there are things that could be helpful that Congress could do.

Mr. MATHESON. I know our chairman asked you for some suggestions on legislation and I might throw that on the list, as well. I am not trying to gum up the works, if there is a more efficient way to create that cooperation, I think there is a real talent pool in some of these agencies that might be able to really help the process and eliminate some of the backlog.

Mr. KARSNER. I think that is worth examining.

Mr. MATHESON. Next question I wanted to ask has to do with—a very general question for Mr. Karsner. We have again heard about the problems with delays. Do you have the staff and budgetary resources now to make up the backlogs and also take on the new requirements of EPAct 2005? What is your sense right now of your resource capability and is there something Congress needs to do to adjust that?

Mr. KARSNER. Well, in fact, we have substantially increased our budget in these areas, about 66 percent over the last 2 years, so it is an enormous bump in budgets, so now we are going to allocate as we increase and mobilize resources and staff, so it begins with additional contractors, probably additional Federal employees, so there is a little bit of a lag time in terms of what the effect is from the increased budget but yes, the answer is we are allocating substantially more resources that will translate into human resources, as well.

Mr. MATHESON. I just submit that I think there is general consensus we want you to be able to do this in a timely way and if you think that there are different resource requirements, I think communicating that to us would be really helpful, as well.

Mr. KARSNER. If I could follow on your last question. NIST is, in fact, a primary developer of some of our test procedures and we fund that.

Mr. MATHESON. That is good to know. Last question. On the GAO report, it listed a conclusion that there are some program management practices that perhaps are lacking at DOE to ensure the program is kept up to date and it also lacks, as well, DOE lacks the data to analyze root causes of its own administrative problems. Do you agree with that GAO conclusion and if you do, what steps are being taken now to address that deficiency?

Mr. KARSNER. I agree with that conclusion for the period that was covered under the GAO report, which DOEs not take account of any of what we have done in the past year and so it is a little bit like your stockbroker. Past performance is not a reliable indicator of future results. And so we take that report very seriously. We have taken those recommendations and fundamentally put in a

great deal more of time management tools and tracking procedures and high priority correspondence and management attention.

And so all of these things combined, which we would be happy to provide in greater detail, but all of these things combined have meant we have had a very different record in the past year than we have in the past 30 years, namely that we have met all of our scheduled deadlines. So we think, empirically, the new reforms we put in place are working, are having effect. It is not to say they are perfect yet. I think they will take years to perfect, but we think we are on the right track.

Mr. MATHESON. I want to thank the whole panel. I thought the testimonies have been really excellent today and Mr. Chairman, I yield back.

Mr. BOUCHER. Thank you very much, Mr. Matheson. The gentleman from Texas, Mr. Barton, the ranking member of the full committee, is recognized for 5 minutes.

Mr. BARTON. Thank you, Mr. Chairman. It is a measure of our affection for you that we are here on a day that we don't have votes until three o'clock.

Mr. BOUCHER. I am very grateful.

Mr. BARTON. My first question is to you, Mr. Karsner. Is there any relative of mine in the Department that is giving you a problem meeting these deadlines?

Mr. KARSNER. Not as yet, sir, but I will be happy to report back in the event that that changes.

Mr. BARTON. If you have any problems, let me know.

Mr. KARSNER. Yes, sir.

Mr. BARTON. I was a White House fellow in the Department of Energy in 1981 and 1982. This was in the first year of the Reagan administration. In the Carter administration there were a number of energy efficiency statutes passed, some of which required setting standards for appliances. In the Reagan administration, in the early years, set a no-standards standard. They decided to let the market set the standard, so they officially set a standard of having no standard. That was ultimately overturned and result is what we see here.

Before we get too excited, though, about some of these standards, and I am supportive of where it makes sense setting standards, certainly setting regional standards. I think it needs to be said, Mr. Chairman, that if you look down the list that is in our memo, hearing memo, where the right-hand column says consensus pending, out of approximately 20 appliances, I only see five yeses. I see a lot of no's. Now, I don't think you blame the Department of Energy if there is no consensus.

So my first question is going to be to Mr. Gaddis. Why do we not have a consensus on clothes dryers, for example?

Mr. GADDIS. Well, sir, let me redirect that. I don't handle clothes dryers. That is Mr. McGuire.

Mr. BARTON. OK. Mr. McGuire.

Mr. MCGUIRE. Thank you.

Mr. BARTON. Maybe that is why we don't have consensus.

Mr. MCGUIRE. Mr. Barton, thank you for your question. I think the question you ask is very important because it illuminates the conflict we have with the priority setting of DOE and some of the

statutory deadlines. In other words, the process improvement rule, which used to be used brought all the stakeholders together to get consensus on priorities for standards rulemakings which the DOE would then review and adopt, high, medium and low. In low, what is an area where no resources would be expended? Everybody involved, advocates, industry, States, agree with this process and priority setting, yet if something was in the low world, it could kick in a statutory deadline problem.

When we had an agreement in 2000 for new clothes washer standards that the advocates and States supported, energy efficiency standards for clothes washers, the modified energy factor was so stringent that clothes going into the dryer were much drier, that everyone agreed that there was no need to upgrade the dryer standard that was in effect, even though there was a statutory deadline requiring it. There was no appreciable energy savings. And so DOE did not act, because they had other priorities, so I think, in terms of the Congress dealing with the problems here, one of the issues is the priority setting and the statutory deadlines sometimes conflict.

Mr. BARTON. Well, I don't want to overdo it, but there is a reason that it has been difficult to set these standards on consensus and that is because we have got a very diverse economy and we have diverse climate in our country. An air conditioner standard DOEsn't need to be the same in Maine as it is in Texas and when you set a high standard, you are going to almost always, not always, but almost always set a higher cost which makes it much more difficult for low-income constituents to purchase that particular appliance. Now, some of these pool heaters—I don't give a damn what the standard is on pool heaters. If you got the money to buy a swimming pool, you ought to be able to have the money to spend whatever it takes to heat the pool.

Certainly, our former Vice President, Al Gore, can spend the money at his pool down in Tennessee, no problem. But refrigerators, washing machines, there are a lot of these appliances that really impact everyday Americans and we do need to get those right, so Mr. Chairman, I will be very supportive of wading into this and where a statutory deadline or a regional standard makes some sense, I am more than willing to be supportive of your efforts to try to simplify the process, but I don't want to shortchange the consumers of America and I want to reiterate what Speaker Hastert said, doing something on a regional basis, although I know that it is more difficult on the manufacturer because you have got to manufacture to more than one standard, would seem to me, in some of the more high ticket items, to make some sense. And with that I would thank our panel and yield back.

Mr. BOUCHER. Thank you very much, Mr. Barton, and we look forward to working with you and all the members of the subcommittee as we address these issues. The gentle lady from Wisconsin, Ms. Baldwin, is recognized for 5 minutes.

Ms. BALDWIN. Thank you, Mr. Chairman, and I thank the witnesses today. I am interested in the issue of standby power and I understand standby power to be defined as the electricity consumed by end use electrical equipment when it is switched off or not performing its main function. I can do a little survey of my own

home in Madison, Wisconsin and see all sorts of examples of that; microwave that has the time on even if you are not actively using it; the oven, the coffeemaker; certainly, in the family room, the TV, the receiver, CD player, et cetera. And I understand that by some estimates, as much as 10 percent of household power consumption comes through standby power.

I am interested that it has been regulated only in one State and that the regulation imposed by the California Energy Commission is an example we can look to. And so I would start with Dr. Rosenfeld. If you could please discuss how the standard came about and do you have any data or figures yet for how much energy has been saved due to this particular regulation? And also, have you had any documentation of consumer complaints about a difference in functionality of any product by virtue of the standby regulations that California has imposed?

Mr. ROSENFELD. Thank you. I have two different remarks. First of all, just quantitatively, what California has done is to reduce the power of external power supplies, that is the little vampires that plug into your wall and have two teeth and suck electricity all the time, from typically 2 or 3 watts to under half a watt at which stage they are still giving you all those services. Your coffeepot can work fine, your microwave clock can work fine. What we discovered is that these power supplies, which typically cost under a dollar at 3 watts cost maybe an additional 3 to 5 cents if you take them down to half a watt.

We used to think that the payback time was measured in months. In fact, my senior advisor, John Wilson, spent some time in Taiwan and China, where most of these are made, and the manufacturer said they weren't going to raise the price at all, it was insignificant. So I think we have done a good job. I think it should be taken over by DOE. We only did it because DOE was asleep at the switch.

Second, however, I think modern thinking says that we could improve the way we address standby. Right now the external power supply business is taken care of. Now there remains the standby power of individual items; TVs, set top boxes, Dust Busters, whatever. We are beginning to think that what we want is a horizontal approach in which all products shall have a standby power of less than half a watt, unless they are a covered product which has been worked out by DOE or by California. Or unless there are obvious exemptions. If a set top box just can't do it, let it apply for why they can't do it. But in general, keep standby power under half a watt and you will get the services. You asked about reduction in services. I don't know of any reduction in services.

Ms. BALDWIN. Thank you. For Mr. Karsner, I would like to inquire about the Department of Energy's involvement in this area. Have you performed any studies to determine how large of a problem standby power is and if you want to comment, I know that provisions in EPAct has served to involve you in battery chargers and external power supplies in terms of studying and making recommendations, but I am also interested in your involvement in studying the standby power consumed by other products.

Mr. KARSNER. Yes, ma'am. In fact, I think most of the basis of the work that Art is referring to in California comes out of DOE's

national laboratories, in particular, Lawrence Berkeley National Laboratory and we do have what you would call, for lack of a better name, a center of excellence study of the issue and for the most part, today, we include standby power as an integrated part of the whole appliance and it is not broken apart, as opposed to where you might have a laptop computer with an external battery charger that you could rate separately and independently, so in fact, the technology DOEs exist.

That was the basis for California moving forward on it and we have an obligation to study and make a determination whether it is worthy to make a separate standard nationally for standby power, as many of the advocates are claiming they would like. I think the manufacturers also need to weigh in and determine what will be the net cost impact of separating that out. It is important, also, to note that regulation is one of the tools that the Department has.

We also are very active, when it comes to efficiency, in terms of regulation, market transformation, demand pool activities like Energy Star, and one of those demand pool activities would be our Federal energy management programs, so that when President Bush was made aware of this vampire electricity or the standby power problem 5 years ago, one of the biggest leaps, rather, that occurred in the sector was the President including it in an Executive order that made the Federal Government purchase only low power, standby power appliances and that, in fact, was the greatest movement for manufacturing of new low standby power.

Ms. BALDWIN. I see that I have run out of time, so I will yield back.

Mr. BOUCHER. Well, thank you very much for those very thoughtful questions. The gentleman from Oregon, Mr. Walden, is recognized for 8 minutes.

Mr. WALDEN. Thank you, Mr. Chairman. Mr. Karsner, let me follow up on that last comment you made about President Bush ordering Federal agencies to use the low power transformers. Then where DOEs the Department of Energy go from there? Did you all move to try and set standards nationally, then, for those vampire power supplies?

Mr. KARSNER. As mentioned, there are almost, there are two separate categories, really. There are those that are external to the appliance and those that are built in and integrated.

Mr. WALDEN. Right.

Mr. KARSNER. We are not presently moving on those that are external and integrated because we rate it in the overall efficiency of the appliance, the net efficiency of the appliance, so whatever that standby power consumption is, 3 watts, 10 watts, 1 watt, it comes out in the whole of the appliance.

Mr. WALDEN. Then why did it matter for an Executive order to do it Government-wide, then? Wouldn't the same appliance be regulated the same way?

Mr. KARSNER. I believe that the Government order was just for the external power, but I can revert on that for the record.

Mr. WALDEN. OK, but I guess what I am trying to get at is there a Federal regulation regulating the vampire supplies?

Mr. KARSNER. There is not.

Mr. WALDEN. Do you have legislative authority to promulgate one?

Mr. KARSNER. I believe that we do and that we have a scheduled determination and analysis in August of next year.

Mr. WALDEN. Why DOEs it take that long?

Mr. KARSNER. Well, I mean, they all take approximately the same time. It is just that we have so many of them that we have a specific schedule that we intend to stay on.

Mr. WALDEN. I guess the point I am trying to make is if the President thought it was important enough, and I concur with him, to issue an Executive order saying Federal Government-wide, this is something we can do right now and that there is a standard or at least these are in the market, wouldn't that be a pretty easy one to move forward on?

Mr. KARSNER. Well, I mean, it goes to the whole question of the latitude of an Executive order. The President has ordered that 75 percent of all our fleet operate on flex fuel and we meet and comply with that in the Federal Government. I am not sure that that is tantamount to making a national regulation for the same thing, but it is up to Congress to consider that. With the authorities that we have, FEMP, Federal Energy Management Program, advising the Executive orders for implementation and moving the market is one tool we have, it has been quite effective. National regulations and that process that takes 36 to 56 months is something very separate.

Mr. WALDEN. I guess that is the next question I would like to get to and perhaps Dr. Rosenfeld can address this. How was California able to move so rapidly to make these decisions and the Federal Government—and I am not picking on the people, I deal with these issues on a lot of different realms. How fast DOEs it take you to make a decision like that in California?

Mr. ROSENFELD. Since 2005, as I mentioned in my testimony, we have adopted and passed 44 standards during the time when completed standards, the DOE has done none.

Mr. WALDEN. So Mr. Karsner, why DOEs it take DOE so long? What is different?

Mr. KARSNER. DOE operates under statutes promulgated by Congress.

Mr. WALDEN. I am sorry.

Mr. KARSNER. And the State of California——

Mr. WALDEN. How can we fix that?

Mr. KARSNER. Well, as I suggested to the chairman, we would be happy to, as we have on the Senate side, offer technical drafting assistance as you move forward with your legislative proposals in the coming weeks. There is an enormous amount of things that could be done creatively. Some of them have been talked about today. But in general, anything that compresses our timetable, shaves time, offers more flexibility to the Department, greater latitude of interpretation, all of those things will be consideration of the different——

Mr. WALDEN. Have you thought of just subcontracting to California?

Mr. KARSNER. Typically, when people have trouble in California, they sue the Federal Government and so California has all the up side, very little to the down side and it is a very special place.

Mr. WALDEN. Remember I am just from north of there. We are very aware of that.

Mr. ROSENFELD. Can I actually support Andy Karsner? DOE is simply humbled with an awful lot of very time consuming constraints.

Mr. WALDEN. That is what I am trying to get to.

Mr. ROSENFELD. One of the things I didn't say exclusively that is in my testimony, is there is a process in which you issue an advance NOPR, Notice of Proposed Rulemaking.

Mr. WALDEN. Right.

Mr. ROSENFELD. And there is a certain delay in the comment period and then you have an NOPR. I don't see, it is you folks, Congress, who passed all that, but I think you could streamline the process a lot.

Mr. WALDEN. And still allow for public involvement.

Mr. ROSENFELD. Oh, yes. I mean, I think, in California we work ourselves to death on public workshops and almost always these people who are here on the panel have been in the CEC building defending their point of view. I think we do that part of it very well, but there are just an awful lot of administrative things that Andy has to take care of. He sends things off to OMB and has to wait for I don't know how many months to get concurrence.

Mr. WALDEN. He can't tell us. He can't talk badly about OMB.

Mr. JOHNSON. If I could jump in here?

Mr. WALDEN. Yes, Mr. Johnson.

Mr. JOHNSON. We spend a lot of time in Sacramento, as well as Washington working with DOE, as well as the California Energy Commission. The Consumer Electronics Association would support an expedited treatment of external power supplies. There is a rulemaking that has been started as a result of the legislation of 2005 on external power supplies and battery chargers. However, the timeline, as it would progress, could go to 2013. That is too long. We need a solution now for external power supplies. Seven States have acted in this area. We are ready to achieve it with all relevant stakeholders and we would look forward to it, as we have said in our testimony.

Mr. WALDEN. Would you support that same sort of expedited process across all these issues involving energy efficiency, give the Department the ability to move more rapidly while still allowing for public input?

Mr. JOHNSON. I think a number of parties here have perspectives on that, but we certainly, for external power supplies, support, whether it is through legislation or changing the rules of DOE and expedited treatment of rulemaking for external power supplies.

Mr. WALDEN. All right, so only for external power supplies.

Mr. JOHNSON. There is a great opportunity there.

Mr. WALDEN. Yes, right. All right, Mr. McGuire.

Mr. MCGUIRE. If I could just add, we would support an expedited process and one of the ways to do that, I think, is to revisit this process improvement rule where the stakeholders were involved in prioritization and when those priorities bump up against the statu-

tory deadlines, even though the people with knowledge know what the priorities are to be, then maybe that is an area for the committee to look at, whether the statutory deadlines are impeding progress.

I think another thing that is important to keep in mind at the Federal level versus the State level, is the quality of analysis that NIST, in developing the test procedures in the Federal labs and in doing analysis can do with the resources they are given and I think the States, even California, DOEsn't have the ability to conduct as thorough an analysis and sometimes has to resort to stakeholders doing the analysis, which I don't think is right.

Mr. WALDEN. So is NIST the holdup?

Mr. MCGUIRE. No, I don't think NIST is the holdup and I don't think the Federal labs are the holdup. I think the holdup involves more DOE process in some of the funding, in some of the statutory deadlines which really probably don't make sense compared to some of the prioritization, like for example, clothes dryers. They missed statutory deadlines. Nobody in the advocacy community or industry felt the standards needed to be upgraded because the clothes washers are spinning out the clothes dry.

Mr. WALDEN. DOEs anybody ever come back to us and say you don't need that statutory deadline on this?

Mr. MCGUIRE. I would like to say so today, at least.

Mr. WALDEN. Well, yes. When was that deadline, 2005 did you say? What was the statutory deadline for clothes dryers?

Mr. MCGUIRE. Clothes dryers, I don't know offhand. It was previous to 2005. But in 2000, I think the deadline was in the late 1990's and 2000.

Mr. WALDEN. What I am hearing in the GAO report is these deadlines we put in law are ignored anyway, right? Isn't that what the GAO report found? Mr. Karsner, am I missing something?

Mr. KARSNER. I don't know that it found that they were ignored. I think it found that they were underperformed.

Mr. WALDEN. All right. So then we are at fault. All right.

So I am doing 75 in a 55, I was just over-performing, right? All right, my time is up. Thank you.

Mr. KARSNER. I think what Mr. McGuire is referring to is the 1996 process rule, when he talks about prioritizing these things according to what their energy demand or consumption was and that was an annualized process that I would characterize by all measures as having failed in the sense that it may have been the right idea at the time. It was certainly supported by most of the people at this table. But in the end, the net result was we met no deadlines and we enacted almost nothing in terms of the regulations. So now, actually what we are going to is time management and determining a schedule for when we will knock these things down methodically on a critical path. And it may be that some of them are out of order or out of favor with different parts of the industry or stakeholder at given times, but we, as a nation, have an obligation to take care of all of them, because they are in law and we are going to pursue that systematically.

Mr. WALDEN. And I appreciate that and maybe we all need to spend more time together more often, as pleasurable as that is for all us, I am sure, but I really think that needs to happen in this

country if we are going to achieve these goals, which as a consumer, I want to achieve. When we are looking at the carbon emissions and all the environmental things, we don't need to be building more power plants if we don't need them and the extent to which we conserve, we won't need as much power out there and if we have got problems in the statute, for heaven's sakes, work with us and I am sure the chairman and others on this committee would be willing to work with you all to fix the problems.

Mr. BOUCHER. Thank you very much, Mr. Walden. And Mr. Karsner, let me underscore again our collective frustration is not with you, it is with those at DOE who preceded you. Mr. Shimkus from Illinois is recognized for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman. I want to start with first of all, thank you for coming. I do think this has been a good hearing. I am sorry. I was able to fly out this morning, so I missed some of the opening statements. But Mr. Rosenfeld, you mentioned 44 standards since 2005. When was the California energy crisis? In what year?

Mr. ROSENFELD. Sorry. It was really bad at the end of—early 2001.

Mr. SHIMKUS. Right. So the only reason why I say that is because that probably provided the constituency of California to understand, because there was—I mean, I sat on this committee. We had a lot of debates and hearings on that and there was movement from the State government to say you have to get energy efficient, folks. So I would say that there was also a crisis in California based upon a lot of things.

I would say that that was probably an impetus to the State of California to really move aggressively in these energy debates on efficiency, don't you agree?

Mr. ROSENFELD. I 50 percent agree, sir.

Mr. SHIMKUS. I would like you to get to 65, that is passing.

Mr. ROSENFELD. I 65 percent agree, sir.

Mr. SHIMKUS. OK, good.

Mr. ROSENFELD. Actually, interest in California in energy efficiency is way up and in fact, you are right. In non-standards activities, we have increased our budget for energy efficiency programs to beat the standards from $250 million a year, which is 1 percent of electric revenues, to $750 million a year, which is nearly 3 percent of electric revenues. With respect to the standards, however, we adopted our first appliance standard in 1975, effective in 1977. That was for refrigerators. We have updated appliance standards every 3 years since 1975, so we have been pretty consistent.

Mr. SHIMKUS. Yes, I would agree, but I would say 44 standards since 2005 DOEs show a ramp-up.

Mr. ROSENFELD. You are 65 percent right.

Mr. SHIMKUS. Thank you. I will take it. I am in the minority now; passing is OK. The other question I wanted to ask was, in following up, and this is from the committee, the Republican prep, it talks about these—we deal with some voluntary aspects where, even through the committee where we do the prescription drug user fee, industry puts more money in to try and encourage the Federal Government to respond quicker and it has been very successful.

My question is, there is two-fold. One is if we formulated a process by which working across the interest groups here, where we try to expedite that process, is that something that could translate into this debate? Because efficiency standards will be part—I have heard the chairman's opening statements and I think efficiency standards will be part of an energy security bill or whatever we are going to call—so the question is how do we get it done right and for the consumer folks here, it was my understanding that there was a concern in the EPAct Bill 2005 that moving in this process might violate the due process rights of persons who are not part of the consensus process. So this is really a two-fold question and I will just open it up for anyone who wants to answer.

One, is there a way that we can empower making good rulemaking on an expedited process based upon maybe a fee setup, kind of like PDUFA? Second, is there a credible due process rights for persons who are not part of the consensus approach? And if those of you who understand that question, if you want to answer it, just raise and go for it.

Mr. DELASKI. I will answer the second part of your question.

Mr. SHIMKUS. OK. Why not the first?

Mr. DELASKI. I don't have an answer for you.

Mr. SHIMKUS. OK.

Mr. DELASKI. I will do the one that I can.

Mr. SHIMKUS. OK.

Mr. DELASKI. On the expedited process, we do think that it DOEs make sense for DOE to have the authority for an expedited process where a consensus exists. It is not going to catch up, with 10 years overdue. It is not going to solve that problem, but if we can cut 3 months or 6 months off the process, so be it. That is a good thing. It is not revolutionary, but it is a small improvement. That said, we did see the language the Department proposed—in 2005. It did have problems in terms of not creating an adequate opportunity for stakeholders to raise objections, who weren't part of the in group. We think some alternative language could achieve the same objective without that kind of constraint.

Mr. SHIMKUS. And I would encourage you to work with the committee staff. That is probably something that we could probably help fix in this process, I would think, Mr. Chairman. Anyone else like to add to that? Mr. Karsner.

Mr. KARSNER. Yes, sir, Congressman. I would say that we began meeting with—well, we always meet with stakeholders and the folks at this table, but with regard to this specific issue, we began a dialog on this last week. There is really two key components and it is how you define what a consensus is, that is building a consensus on the word consensus and then having the opportunity for significant objection, whether that significance is qualified quantitatively, et cetera, and so we are working with them to try and integrate those concerns because our goal would be to go well beyond 3 months' savings or 6 months' savings, but to push the envelope to compress the timetable as much as possible and go to a final rule once a consensus is made. As the GAO report suggests, energy savings delayed or energy savings denied and so the more time we can make when we agree that we are in consensus, that

would be our objective and we hope we can work with the committee on that.

Mr. SHIMKUS. And my time has expired. I will just end with saying I hope that when we address efficiency standards that it DOEsn't negatively affect smart metering, smart appliances and the like, Mr. Chairman, and that is just my little commentary. Thank you.

Mr. BOUCHER. Thank you very much, Mr. Shimkus, and I wholeheartedly endorse your reservation with regard to that. The gentleman from Texas, Mr. Burgess, is recognized for 5 minutes.

Mr. BURGESS. Thank you, Mr. Chairman. Actually, Mr. Karsner, let us just pick up on that last point that Mr. Shimkus just made with the smart grid technologies. We are actually going to have a hearing about that later this week, I believe, but those technologies sometimes require advanced appliances that can interact and communicate with the grid. Is there a danger, as we push forward with setting appliance standards, do we have a concern that we are going to somehow interfere with that process, with the setting of efficiency standard?

Mr. KARSNER. I suppose there is always a danger of unintended consequences when you push the envelope on new technology development, but in general, it is integral to the Department's mission that we want to proliferate those sorts of technologies and so between voluntary standards, tax incentives and then regulatory standards, we need to find that equilibrium, but it is a new horizon. You would almost be better off asking Mr. Gaddis, McGuire and others.

Mr. BURGESS. Dr. Rosenfeld.

Mr. ROSENFELD. We are very much into this in California. We are installing 12 million smart meters and with new buildings we will require that thermostats have the capability of communicating, being communicated with directly from the utility source to know when there is a high price or a congestion of power. We haven't seen any conflicts with energy efficiency problems that we are aware of.

Mr. BURGESS. Keep the microphone there. In my house I am not allowed to touch the thermostat and I doubt very seriously that my wife will let the power company touch it either, but I wasn't here when you did your testimony. I wonder if we could go to the slide that you showed on the annual peak in California in 2003, the annual peak savings from efficiency programs and standards, the graph that you showed. Just so I am clear on this, can you explain to me what the utility efficiency programs, the yellow block in that graph, what is represented there?

Mr. ROSENFELD. With great pleasure. We have a pretty well-rounded system in California with what are called public goods charges, during these 30 years of which, on the average, 1 percent of your utility bill has been directed back to be spent by the utilities to do anything they can do to beat standards. That includes rebates for white goods. Almost any time the Energy Star logo appears on any appliance, your local utility will give you a rebate to buy the payback time down to a couple of years. This money goes to design assistance for new homes or retrofits. One of the most

dramatic things it DOEs, now that we are getting a lot of interest in compact fluorescent lamps.

I will give you an example. I got a compact fluorescent lamp from a store this weekend for 25 cents. Now, how did that happen? Well, your electricity bill goes into what is called an upstream buy down whereby the California utilities have told manufacturers anywhere in the world—most of these compact fluorescents are made in Taiwan or in China and they cost about $3 wholesale. The manufacturer gets two bucks off of that and reduces the wholesale price to $1 and then by the time it works its way back to the retailers, to the retail chain in California, it is like $2 or $3. So a retail compact fluorescent in California is cheaper than a wholesale compact fluorescent in Taiwan. That is sort of the way we use our ingenuity to get efficient products into the market.

Mr. BURGESS. And would this apply to things like skylights? I noticed Wal-Mart, in Texas, when they build new stores now they are making much greater use of skylights in their buildings that they are putting up.

Mr. ROSENFELD. That is right. The California utilities offer rebates on more efficient windows than necessary on skylights, on what is called daylight harvesting, which is controls turning the lights out near the outside of the buildings. They help us with our standards. They have a program called CASE, Codes and Standards Enhancement, in which they do the analysis of the standards. They do anything they can to reduce electric use.

Mr. BURGESS. I don't want to interrupt, but just, from your graph here, that sort of looks like you got the most bang for the buck or more bang for the buck out of that than appliance standards. Do you expect that by pushing the appliance standards envelope a little bit that you are going to make the purple part of that graph jump up in the years to come?

Mr. ROSENFELD. What happens is that the yellow part of the graph, which is expensive, but still costs us only 2½ cents to avoid a kilowatt hour with that. It is a very good deal. But it is expensive. What it DOEs is to increase the commercialization of better products and then once they are robust, I will give you one more example in a second. Once they are robust, then we can put them into standards. But remember, we can't put something into new building standards, for example, unless it is trusted enough in the marketplace and unless there are 200,000 units a year available. Let me give you a tiny example.

Mr. BURGESS. Well, let me just ask you a question. What about tankless hot water heaters? They are gas, they are not electricity, they are gas fired, but having recently built a house, I have been impressed that that has delivered a lot of bang for the buck as far as energy savings.

Mr. ROSENFELD. I believe, but I am not sure that there are rebates for them in California, but I am not positive.

Mr. BURGESS. Would you give me a rebate in Texas for the one I bought if I send it?

Mr. ROSENFELD. That might be a problem.

Mr. BURGESS. Let me just ask you one last question and it DOEsn't have to do with appliances so much, but we were in Denmark this summer with the chairman on a trip and the district

heating that they have developed there, and I don't know whether that is applicable to any area of the United States, but I guess they take industrial and primarily from electrical generation, the heat thrown off from that process. They have these elaborate colored vents or tubes or water conduits that go all over the city and an article in the Washington Post a few weeks ago suggested that that has resulted in a big savings for them; a lot of headache when it was first being developed and I think their political leaders took a lot of grief for that, but ultimately, it has delivered a low-cost heating alternative and of course, for those who are concerned about greenhouse gases, it is another way of reducing those emissions. Is that the type of strategy that you might employ with the yellow part of the graph?

Mr. ROSENFELD. No, sir. This is entirely consumer oriented programs. District heating, as you mentioned, it is a great idea for dense cities and every major European city from Berlin through Copenhagen through Paris through London has district heating. But that is a planning issue which could be handled on public goods money, but it is not part of this consumer oriented yellow band.

Mr. BURGESS. Thank you, Mr. Chairman.

Mr. BOUCHER. Thank you very much, Mr. Burgess. Mr. Matheson, do you have additional questions you would like to—I think we probably have exhausted our range of questions for what is now the afternoon. And I want to say thank you very much to our panel of witnesses for joining us here today. Mr. Inslee, you have just barely made it under the wire here and Mr. Inslee, we will recognize you for a period of 5 minutes to ask your questions.

Mr. INSLEE. I appreciate it, Mr. Chairman, but I am going to break my rule and since I have nothing intelligent to add, I will just be quiet here. I will waive, thank you.

Mr. BOUCHER. All right, Mr. Inslee waives his questions. Well, let me say thank you very much to our panel of witnesses for joining us today. You have been very informative on what is a truly timely topic for us. We will be considering your recommendations in the near term and producing legislation for consideration on the House floor in July, which will contain a number of statutory changes, many of which will be in conformance with what you have discussed with us here today. So again, with thanks to our witnesses, this hearing stands adjourned.

[Whereupon, at 12:18 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

HENRY A. WAXMAN, CALIFORNIA
EDWARD J. MARKEY, MASSACHUSETTS
RICK BOUCHER, VIRGINIA
EDOLPHUS TOWNS, NEW YORK
FRANK PALLONE, JR., NEW JERSEY
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ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives
Committee on Energy and Commerce
Washington, DC 20515–6115

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July 6, 2007

Mr. Andrew deLaski
Executive Director
Appliance Standards Awareness Project
20 Belgrade Avenue
Boston, MA 02131

Dear Mr. deLaski:

Thank you for appearing before the Subcommittee on Energy and Environment on Tuesday, May 1, 2007, at the hearing entitled "Achieving—At Long Last—Appliance Efficiency Standards." We appreciate the time and effort you gave as a witness before the subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from certain Members of the Committee. In preparing your answers to these questions, please address your response to the Member who has submitted the questions and include the text of the Member's question along with your response.

To facilitate the printing of the hearing record, your responses to these questions should be received no later than the close of business on **Friday, July 20, 2007**. Your written responses should be delivered to **2125 Rayburn House Office Building** and faxed to **(202) 225-2899** to the attention of Rachel Bleshman. An electronic version of your response should also be sent by e-mail to Ms. Bleshman, at **rachel.bleshman@mail.house.gov**. Please send your response in a single Word formatted document.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Rachel Bleshman at (202) 225-2927.

Sincerely,

JOHN D. DINGELL
CHAIRMAN

Attachment

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey, Member
Subcommittee on Energy and Air Quality

Appliance Standards Awareness Project

July 24, 2007

Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515-6115

Honorable Edward J. Markey
Member
Subcommittee on Energy and Air Quality
U.S. House of Representatives
Washington, DC 20515-6115

Dear Chairman Dingell and Representative Markey:

Thank you for your follow up questions to the May 1 Subcommittee Hearing, "Achieving – At Long Last – Appliance Efficiency Standards." I appreciated the opportunity to testify and welcome the opportunity to address your further questions.

Thank you for your close attention to appliance and equipment efficiency standards and strong commitment to achieving the energy, economic and environmental benefits achievable from appropriately strong national standards.

In this letter, I first address the questions from Chairman Dingell and next address those of Representative Markey. I have reproduced each question in italics text.

Questions posed by Honorable John D. Dingell with responses:

"1. You propose that regional natural gas furnace standards should vary as a function of climate zone. The manufacturers argue, among other things, that requiring high efficiency condensing furnaces in northern climate zones may, by eliminating the necessity of a flue, lead to the installation of less-efficient electric water heaters because a flue would not be present that would allow installation of a gas-fired water heater.

a. *Is this a risk? If so, what should be done to avoid it?*

b. *Have you done or seen any analysis indicating whether or not this is a serious problem?*

Answer:
I'll answer the second part first. The Department of Energy (DOE) investigated this issue in the analysis completed for the proposed rule issued last fall. DOE concluded, "Estimates of [electric water heater installation cost + electrical service installation + five year energy extra cost] costs indicate that the total is higher than the cost of relining, as shown in Table C.2.2, so this possibility has been discounted; contractor discussions are in agreement that gas to electric conversions occur very rarely (bracketed portion in the original; p. C-12 of Appendix C, "Installation Model" to the DOE Technical Support Document)." DOE estimated that the cost to switch to electric water heating would be $768. This cost is more than double the costs a consumer would incur if they modified their venting to continue using a gas water heater. DOE's analysis shows that even if the gas water heater is nearing the end of its useful life or in the case of new construction, it is still cheaper for a consumer to choose a new gas water heater (DOE estimates $695 to $710 cost) than to switch to electric water heating (DOE estimates $768 cost). Given that switching to electric water heating would be more costly that staying with gas water heating, we agree with the Department's conclusion that conversion to electric water heating is not a risk.

In addition, we support the granting of DOE *authority* for regional standards, not a *requirement* for regional standards. Manufacturers and others who oppose regional standards will have ample opportunity to express their concerns about any particular proposed regional standard during the rulemaking process. DOE must determine economic justification for any standards proposal. The agency's analyses have historically taken into account energy impacts on other appliances not subject to the rule at hand. If regional standards are not economically justified, they cannot be established under DOE's legal authority.

"2. You generally favor allowing more flexibility to States to set their own standards. The industry witnesses uniformly favor tight preemption of the States for all covered appliances and equipment in the law, even where Department of Energy (DOE) determines not to set a standard. Both groups seem to acknowledge that the threat of State standards is a major reason that industry is willing to negotiate consensus standards.

a. *Is the potential for establishment of separate State standards primarily a means of leverage to bring industry to the table, or would you actually prefer that States be free to act, even if many do not act at all?"*

Answer: My first preference is that DOE meet Congressional deadlines for updating standards and set such standards at levels meeting statutory criteria. If DOE fails to keep standards up to date according to statutory deadlines (as they have for every deadline set in the 1987, 1988 and 1992 appliance standards laws), some sort of mechanism to allow needed updates to occur is needed. One such mechanism is to return authority to the states. Another is court sanction and oversight of DOE. I view state action as a

mechanism for some states to achieve needed energy savings which DOE has failed to deliver. I am aware that state action or the threat of state action may also spur manufacturers to help DOE meet their deadlines, but view the primary reason for state action to be state energy savings.

b. *"Do you believe that reaching a national consensus standard is preferable to having a situation where a few States have their own standards and many have none at all?"*

Answer: Strong, up-to-date national standards (including regional standards for heating and cooling products set by DOE), are preferable to state-by-state standards. But, state action is preferable to federal inaction, as has been witnessed for many products in the national appliance standards program. I'd also like to note that "consensus" standards for federally-regulated products have only emerged with the threat of DOE issuing standards through a non-consensus regulatory process. When the DOE process is not working, new consensus agreements are not reached. Finally, it's important to note that the vast majority of the consensus standards included in the Energy Policy Act of 2005 are for products not previously covered by federal standards. Those consensus agreements resulted as advocates and manufacturers agreed to jointly support various state standards for federal enactment.

c. *"Do you think the manufacturing groups are being disingenuous or exaggerating when they claim that individual State standards would be wholly unworkable for them"*

Answer: I think "wholly unworkable" is an exaggeration since it implies that manufacturers would have to exit a state market rather than comply. The exaggeration may be based upon a worst case scenario that is extraordinarily unlikely (e.g. a different standard in each of the fifty states.) In general, state standards adopted by various states have been very similar to one another or even identical, in part to reduce state implementation costs, improve compliance, and to reduce costs for manufacturers. States implemented standards for a variety of products beginning in the mid-1970s extending into the early 1990s (when they were supplanted by equivalent or stronger federal standards). To my knowledge, compliance with these standards was good and, as far as I know, no manufacturer chose to exit a state market as a result of a state standard. California, Connecticut, Maryland and Rhode Island have each implemented one or more state appliance standards within the past few years and there have been no reports of poor compliance or manufacturers exiting these markets.

d. *"Have you performed or seen any credible analysis of the incremental cost to manufacturers of meeting separate State standards and managing their deliveries and sales in accordance with them"*

Answer: No, I have not. I am aware that the California Energy Commission has requested such data from manufacturers and not received any response.

"3. Is it truly realistic to allow state standards to suddenly become effective for any appliance where DOE has missed any deadline in its process of adopting Federal standards?"

Answer: Yes. In general, states provide lead time of a year or more from the publication of a new standard until its implementation. To allow manufacturers time to gear up to comply with a new state standards, some minimum lead time makes sense, which could take the form of a delay in the lifting of preemption by some number of months.

In general, we have supported sunsetting preemption as a mechanism to allow states to capture needed and justified energy savings when DOE fails to do so according to schedules set by Congress. For example, several standards included in the Energy Policy Act of 2005 include preemption sunsets if DOE misses rulemaking deadlines. We've also been supportive of legal action taken to compel DOE to issue updated standards such as NRDC v. Bodman. With respect to the pending energy bill, we've reached an agreement with manufacturer groups which stipulates (a) their support for periodic DOE reviews of all appliance standards (section 109 of the Committee-approved bill); (b) support for the revised energy conservation standard definition which allows for multiple performance standards applied to a given product (Sec. 221 of H.R. 6 as passed by the Senate and section 108 of the bill approved by the Energy and Commerce Committee), and (c) their support of a lawsuit against DOE over any missed deadline pursuant to Section 109. In exchange, we've stipulated that we will oppose sunsetting of preemption if the new deadlines established in Section 109 are not met. We believe the agreed upon mechanisms will be effective in ensuring that DOE meets the new deadlines established under Section 109 and, with enactment of Section 108 as approved by full committee, will clarify authority to set more comprehensive standards.

"4. Wouldn't this potentially result not only in a large number of standards for a given appliance, but standards coming and going into and out of effect over short periods of time as a function of whether State standards had been adopted and Federal standard setting was meeting all deadlines?"

Answer: In general states have tended to adopt identical or very similar standards when they choose to cover a product, so I expect that there would be one standard going into effect in multiple states rather than many different standards for a single product. In general, we have supported the concept that once a state has set a standard, it should not be preempted again until a new federal standard takes effect. Thus, any state action in response to DOE missing a deadline would fill a gap of at least three years (i.e. the shortest allowable span between a DOE final rule and implementation date), but probably much longer. For example, if states had been permitted to fill the gap in coverage when DOE missed the furnace deadline in 1994, they could have filled a gap of 21 years since the DOE took until 2006 to propose the rule due in 1994 (a final rule is due in September 2007) and it will not be effective until 2015.

"5. You also seek to have the DOE program improved in speed and rigor so that it can

set standards that may be better than those that emerge from the consensus process. Would such effective DOE standards also be preferable to you than allowing the States to set separate standards?"

Answer: As noted above, strong, up-to-date national standards (which does not preclude regional standards set by DOE), whether adopted pursuant to a consensus recommendation or a contested DOE rulemaking, are preferable to state-by-state standards. But when DOE fails to do its job, there must be an alternate way to achieve at least part of the needed and justified savings. One approach we've supported is to allow states to take action.

"6. Do you agree with Mr. Rosenfeld that the consensus process is less effective in achieving appliance efficiency than a quicker and more effective rulemaking process?"

Answer: In my experience, consensus only emerges for new standards for products covered by the federal standards program when DOE has entered a formal rulemaking process. It is only the credible threat of a non-consensus outcome that motivates stakeholders to reach agreement. For example, for six out of seven consensus standards for federally-regulated products recommended by stakeholders since 1999, DOE had initiated the process of setting a new rule. For the seventh, California had initiated the process of setting a state standard. When the rulemaking process is drawn out or halted, consensus is much less likely to emerge. I agree that a "quicker and more effective rulemaking process" will result in greater compliance with Congressional deadlines, via consensus recommendations or via non-consensus final rules.

Questions posed by Honorable Edward J. Markey with responses:

"1. Two years ago, this Committee approved my amendment to sunset the federal preemption of state energy efficiency standards whenever DOE was more than 3 years late in issuing a new or revised efficiency standard. My amendment was later dropped from the final version of the bill due to opposition from the industry and the Administration. In light of the problems the GAO and others have identified with DOE's persistent failures to issue appliance standards in a timely manner, should Congress now enact such an amendment so that the states aren't preempted from adopting efficiency standards when DOE fails to act in a timely fashion?"

Answer: In general, we have supported sunsetting preemption as a mechanism to allow states to capture needed and justified energy savings when DOE fails to do so according to schedules set by Congress. For example, several standards included in the Energy Policy Act of 2005 include preemption sunsets if DOE misses rulemaking deadlines. We've also been supportive of legal action taken to compel DOE to issue updated standards such as NRDC v. Bodman. With respect to the pending energy bill, we've reached an agreement with manufacturer groups which stipulates (a) their support for periodic DOE reviews of all appliance standards (section 109 of the Committee-approved bill); (b) support for the revised energy conservation standard definition which allows for multiple performance standards applied to a given product (Sec. 221 of H.R. 6 as passed by the Senate), and (c) their support of a lawsuit against DOE over any missed deadline pursuant to Section 109. In exchange, we've stipulated that we will oppose sunsetting of preemption if the new deadlines established in Section 109 are not met. We believe the agreed upon mechanisms will be effective in ensuring that DOE meets the new deadlines established under Section 109 and, with enactment of Section 221 of the Senate bill, will have clarified authority to set more comprehensive standards.

"2. Should DOE be required to regularly review all existing appliance standards to determine whether technology improvements warrant adoption of stronger efficiency standards, and if so, to adopt rules mandating stronger standards?"

Answer: Yes. Such a requirement is needed to ensure that standards keep up with technological progress and changing energy markets. It's important to recognize that DOE may determine after review and input from stakeholders that no change to a given standard is warranted.

"3. Should this Subcommittee approve legislation providing DOE with clear authority, or even a mandate, to adopt standards for appliances that vary by region or zone when the cost-effectiveness of a higher standard also varies by region --so that DOE could adjust standards for central air conditioners, boilers, or furnaces to take into account regional climates?"

Answer: Yes. This authority is most needed for furnaces and central air conditioners where the regional differences in energy use are most acute. Because DOE is about to complete a furnace standard that will not include regional standards, Congress may want

to direct DOE to consider regional furnace standards relatively soon (e.g. within 18 months or 2 years) to take advantage of the years of analysis just completed. Analysis by the American Council for an Energy-Efficient Economy shows that a regional standards for furnaces set for the northern half of the country could save $8 billion for consumers over 20 years and save enough natural gas on an annual basis to heat 3 million homes.

"4. Should Congress eliminate the current requirement for an Advanced Notice of Proposed Rulemaking, which lengthens the rulemaking process, and instead allow DOE to go directly into a Notice of Proposed Rulemaking and solicit public comment whenever it wants to consider a new appliance standard?"

Answer: Yes. DOE can still conduct the analyses typically carried out at the ANOPR phase and hold workshops if needed, without the formal step of the ANOPR, which can slow the process.

"5. Should DOE be directed to repeal its so-called "Process Rule" --which caused so much of the "paralysis by analysis" that has led DOE to be unable to meet its statutory deadlines for issuing rules on appliance efficiency?"

Answer: DOE's process rule is "guidance." I have not looked at the process rule recently to determine if DOE's current processes are consistent with the 1996 process rule. It may make sense for DOE to update the process rule to reflect any changes to its process and with a view to further improvements which could shorten the time needed to complete new standards.

"6. Should Congress make it crystal clear in the statute that DOE has the authority to adopt more than one appliance efficiency standard for an appliance?"

Answer: Yes. As described in my response to question 1, manufacturer groups have stipulated their support for section 221 of H.R. 6 as passed by the Senate, which will allow DOE to establish more than one performance standard for a single product.

"7. Should the legal standard for approval of state requests for a waiver of federal preemption be changed to allow DOE to approve such waivers unless the burden on interstate commerce clearly exceeds the local benefits?"

Answer: The current criteria for granting a waiver from federal preemption are unclear at best and onerous for states at worst. The only waiver application every filed was denied by DOE last winter and has now resulted in litigation, in part, because DOE decision criteria were not clear. A clearer process that better balances state and manufacturer interests makes sense.

"8. Should a state be permitted to adopt performance-based building codes on heating, cooling, and water heating appliances that exceed the federal minimum standards, if the state found that the resulting energy savings were technologically feasible, cost-effective, and would not unduly burden interstate commerce?"

Answer: Yes. States should be able to assume efficiencies in their performance based

building codes in excess of federal minimums. Such a change is consistent with federal preemption because it would not mandate use of higher than federal minimums in a given state. For example, if a states building codes assumed air conditioner efficiency higher than federal minimums, the home builder would still have the choice of using a federal minimum efficiency air conditioner, but would need to install additional measures, such as additional insulation, to achieve the cost-effective energy savings that the building code assumes should come from the better air conditioner.

"9. If DOE chooses to regulate only one aspect of an appliance's energy or water usage and fails to others, should the states be clearly permitted to regulate these other aspects of energy or water usage that are not covered by rules so that we don't fall into a regulatory black hole of having no federal standard and no state standard?"

Answer: Yes. We think federal preemption should only extend to the energy or water use of a product covered by federal standards. Federal preemption without federal standards is a recipe for very little or even zero energy and water savings. This issue has arisen several times in recent years with respect to furnace electricity use and with respect to clothes washer water use and we expect it will come up in the future.

"10. Should Congress direct DOE to step up enforcement of the appliance standards law by requiring periodic independent testing to verify manufacturer's performance claims?"

Answer: I have not investigated this question. In general, inclusion of many additional products by the Energy Policy Act of 2005 means that many manufacturers not previously subject to standards must now comply. Some investigation of compliance rates would make sense. Compliance problems might include the marketing of products which are obviously non-compliant (due to visible technology or due to performance labeling showing non-compliance) as well as misrepresentation of product performance.

"11. Should Congress adopt expedited procedures for consideration of rules that grow out of a stakeholder consensus process involving manufacturers, the states, and energy efficiency advocates?"

Answer: Yes. We support Section 106 of the bill passed by the Energy and Commerce Committee.

"12. Do you think DOE should be directed to issue efficiency standards for digital TV sets?"

Answer: Energy use of TV sets is growing and, according to recent testing data, there is a large spread of data among comparable sets. However, because swift action is needed to ensure reasonable efficiency performance in advance of the 2009 digital transition, we prefer an updated Energy Star specification and, possibly, state standards action as the best way to foster improved efficiency in digital TV sets. Given DOE's current load, and relatively long lead times for completing and then implementing a standard, we are skeptical that DOE can act quickly enough to affect this market.

"13. In Dr. Rosenfeld's written testimony, he notes that central air conditioners can be rated in terms of both an energy efficiency ratio (or "EER") that depends on the actual outdoor temperature, and a season energy efficiency ration (or "SEER") that is measure[d] at a single season average temperature. I have been told that there are some central air conditioning units that have a very high SEER rating, but also a very low EER ratio particularly during hot days. One such unit has a SEER 19 rating, and has an EER of 17 at moderate temperature conditions, but then falls to an EER on hot days when a second stage engages. This would appear to actually increase power consumption by a substantial amount at times when the power grid may be most stressed and expensive (and often polluting) peaking units may have to be turned on to meet demand. In light of this, does DOE need to be able to set appliance standards that prevent such a situation?"

Answer: Yes. In the 2001 rule establishing a SEER 13 standard, DOE analysis found that, up through SEER 13, SEER and EER are correlated. Therefore, DOE determined, at that time, that an EER standard was not needed. DOE's analysis found that above SEER 13, the positive relationship between average and peak performance breaks down – one could have a very good SEER (yielding lower energy bills for the air conditioner owner), but a poor EER (yielding higher costs for the electric system and therefore consumers as a group). Future DOE standards for central air conditioners must take into account both average energy use and peak energy use: it may be absolutely necessary to set standards for both SEER and EER to do so.

Thank you once again for your leadership on appliance energy efficiency.

Yours sincerely,

//s//
Andrew deLaski
Executive Director

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EDWARD J. MARKEY, MASSACHUSETTS
RICK BOUCHER, VIRGINIA
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July 6, 2007

Mr. Evan Gaddis
President and CEO
National Electrical Manufacturers Association
1300 North 17th Street
Rosslyn, VA 22209

Dear Mr. Gaddis:

Thank you for appearing before the Subcommittee on Energy and Environment on Tuesday, May 1, 2007, at the hearing entitled "Achieving—At Long Last—Appliance Efficiency Standards." We appreciate the time and effort you gave as a witness before the subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from certain Members of the Committee. In preparing your answers to these questions, please address your response to the Member who has submitted the questions and include the text of the Member's question along with your response.

To facilitate the printing of the hearing record, your responses to these questions should be received no later than the close of business on **Friday, July 20, 2007**. Your written responses should be delivered to **2125 Rayburn House Office Building** and faxed to **(202) 225-2899** to the attention of Rachel Bleshman. An electronic version of your response should also be sent by e-mail to Ms. Bleshman, at **rachel.bleshman@mail.house.gov**. Please send your response in a single Word formatted document.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Rachel Bleshman at (202) 225-2927.

Sincerely,

JOHN D. DINGELL
CHAIRMAN

Attachment

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey, Member
Subcommittee on Energy and Air Quality

NEMA
Setting Standards for Excellence

July 20, 2007

The Honorable John R. Dingell
Chairman
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Chairman Dingell:

Attached are NEMA's replies to your questions of July 6, 2007. We very much appreciate the opportunity to respond to your thoughtful questions on energy efficiency provisions under consideration in the House of Representatives and our opportunity to testify on these important matters.

NEMA is the leading trade association in the U.S. advancing the interests of 430 electrical manufacturers of a wide array of electroindustry products, including energy efficient lighting systems and motors.

We look forward to continued close cooperation with House energy staff. If you have any additional questions, please do not hesitate to contact us.

Sincerely yours,

Evan Gaddis
President and CEO

cc: The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher
Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert
Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey
Member
Subcommittee on Energy and Air Quality

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NEMA Answers to Chairman Dingell's questions

1. **There are a number of proposals before the Subcommittee to reduce the sale of incandescent lighting and increase the sale of more efficient lighting.**

   a. **Is there a strategy other than actually dictating what bulbs can be sold to drive consumer behavior to use more efficient lighting where there is such a drastic difference in these factors?**

   b. **How do you believe that the appliance efficiency standards process should be applied in the area of electric lighting, given three technologies – the classic incandescent bulb, available compact fluorescent bulbs, and emerging solid-state lighting – with very different first costs, energy consumption, life cycles, and availability in the market?**

1a and 1b
NEMA and energy efficiency advocate groups are collaborating on a single technology neutral strategy to phase out inefficient 'light bulbs'. There is one strategy, not several. The results of ongoing technology developments, such as the Next Generation Lighting Initiative, which is focused on white LEDs will be included, as they become available.

"Dictating what bulbs can be sold" is unnecessary. There may be hidden societal costs that are not accounted for in the market price today where the first cost of the least efficient incandescent lamps does not reflect either their additional cost of operation to the consumer, or the environmental costs (chiefly additional power plant emissions) of using these lamps. The first of these concerns could be addressed by informative labeling on the additional costs that are reflected in a consumer's electricity bill. The second concern is much more significant an issue, and the real reason why federal energy efficiency standards in the form of energy saving standards are needed. The NEMA Lamp Section is on record as favoring an energy saving policy that: (1) provides for an orderly market transition (i.e., no sudden shortage of substitute lamps); (2) is based on performance and not "product bans"; (3) is technology neutral; and (4) cannot be easily "gamed." We note that there may be more than the three technologies you mention in your question, including a super incandescent lamp that can perform at substantially higher efficiencies. The goal is not to ban incandescent lamps as a technology, but to phase out today's less inefficient incandescent lamps. Combining maximum energy use (for a given light output level) with creative labeling and compelling consumer education is, we believe, the best way to apply the appliance efficiency (energy saving) standards. For example, an energy saving lamp providing the same light level as today's 60-watt bulbs could be rated at 53 watts.

2. **In the April 30, 2007 Washington Post, there was an article discussing the relative willingness of husbands and wives to adapt to compact fluorescent bulbs, primarily based on physical appearance and light quality.**

   a. **What is the difference between light quality offered by incandescent bulb technology and compact fluorescent technology, and is this difference likely to continue to narrow?**

   b. **Dimming compact-fluorescent bulbs with a rheostat is currently a problem. Should incandescents continue to be available for such applications?**

   c. **What other applications may require continued access to incandescent technology?**

2a. Some differences between incandescent lamps and compact fluorescent lamps (CFLs) are:

1. the "whiteness" appearance of the lit lamp

CFLs can appear very similar to incandescent lamps in the "whiteness" appearance, but different CFLs can have a range of "whitenesses", and this can be an important difference if the consumer cannot tell from the package what "whiteness" he/she is getting. When there is a difference, the incandescent lamps tend to be more yellowish than the CFLs. With clearer labeling this difference can perhaps be managed (though this improved labeling is not trivial). The appliance standards we favor would allow technologies other than CFLs, and these technologies yield lamps that do not have this whiteness matching problem with incandescent lamps. We would be happy to demonstrate these differences with actual CFLs to illustrate these fine points.

2. the color rendering of the two lamp types

A particular object might appear to be differently colored under the two lamp types. This color rendering is usually referenced to incandescent lamps as the ideal, so of course CFLs are less than this ideal. In practice, CFLs are pretty good, though incandescent lamps tend to be really excellent in reds and not so good in blues. This difference is likely to remain because to increase the CFLs' ability to render reds like an incandescent lamp would give them efficiency that doesn't meet the EPACAT 2005 performance standards for CFLs. The appliance standards we favor would allow technologies other than CFLs, and these technologies render colors much more like incandescent lamps.

2b. The question appears to refer to the operation of incandescent lamps on standard dimmers (which are not rheostats). In our judgment, the use of dimmers is so widespread that to allow incandescent lamps to be available for such applications would cut the heart out of the energy savings potential of the appliance standard. Certain CFLs are currently available for dimming applications, and work well. However, it is not generally known (without reading the packaging carefully) that the most common CFLs are not meant for dimming applications. This

is a public education issue. The appliance standards we favor would allow technologies other than CFLs that are fully compatible with standard dimmers.

2c. Two applications that we think require continued access to incandescent technology are 3-way lamps and vibration-resistant (rough service) lamps. While 3-way CFLs exist, they tend to be much larger than incandescent 3-way lamps and would most probably be met with stiff consumer resistance. The other technologies we know of for meeting the most commonly discussed appliance standard do not lend themselves to 3-way designs. Vibration-resistant lamps (or rough service lamps, which are similar but even more rugged) are meant to withstand vibrating environments that would cause standard incandescent lamps to fail quickly. In principle, CFL lamps could be used for this purpose, but it is hard to redirect the light from the larger CFLs, which is often desired in such specialty applications. Likewise, it is not clear that the other technologies we envision for complying with an appliance efficiency standard could be made in vibration-resistant designs.

NEMA answers to Congressman Markey's questions.
The Honorable Edward J. Markey

1. **Two years ago, this Committee approved my amendment to sunset the federal preemption of state energy efficiency standards whenever DOE was more than 3 years late in issuing a new or revised efficiency standard. My amendment was later dropped from the final version of the bill due to opposition from the industry and the Administration. In light of the problems the GAO and others have identified with DOE's persistent failures to issue appliance standards in a timely manner, should Congress now enact such an amendment so that the states aren't preempted from adopting efficiency standards when DOE fails to Act in a timely fashion?**

1. No. Federal preemption should not lapse if DOE fails to act. NEMA addressed this issue in our May 1, 2007 testimony as follows:

Some have proposed that federal pre-emption for a federally-covered product should lapse if the Department of Energy, as the administrator of the national program, misses a rulemaking deadline for that product. To us, this "stick" misses the point. Manufacturing should not be penalized because of a lapse of an Executive Branch agency. Nor should Congress allow devolution of its express intent to occupy the whole field in an area of regulation of commerce among the several states it deems important as a national matter merely as a result of the inaction or error of omission of an Executive Branch agency. If deadlines are missed, the agency must be called to task by Congress (as it did in Section 141 of EPACT 2005). Moreover, agency resources and budgets need to be adequate to perform the tasks and workload assigned by Congress and statute, efficiencies need to be internally evaluated, and document review and clearance processes must be streamlined within the agency.

Importantly, EPCA currently provides meaningful remedies where DOE misses statutory deadlines by permitting any aggrieved person to commence a civil action against DOE where there is an alleged failure by DOE to perform any non-discretionary act or duty under EPCA. 42 USC §6305(a). EPCA further requires the courts to expedite the disposition of such civil actions. Persons also have the right to petition DOE to commence a rulemaking to enact or amend a rule. As such, when technologies improve, or circumstances change for a product in the energy efficiency realm, EPCA provides multiple avenues to ameliorate lags in energy efficiency standards as a result of DOE inaction without compromising the linchpin of every generation of energy efficiency legislation preemption a potential patchwork of inconsistent state regulations impeding interstate commerce.

2. **Should DOE be required to regularly review all existing appliance standards to determine whether technology improvements warrant adoption of stronger efficiency standards, and if so, to adopt rules mandating stronger standards?**

2. No. The need for new standards is based on technology development, not the calendar. NEMA member companies constantly strive to develop new technologies that will differentiate and advance them in the marketplace. When improved efficiency technologies have been developed,

NEMA has developed timely proposed standards working with energy efficiency advocacy groups in numerous cases and advocated these with Congress and DOE and will continue to do so.

3. **Should this Subcommittee approve legislation providing DOE with clear authority, or even a mandate, to adopt standards for appliances that vary by region or zone when the cost-effectiveness of a higher standard also varies by region -- so that DOE could adjust standards for central air conditioners, boilers, or furnaces to take into account regional climates?**

3. The NEMA product scope does not include these appliances.

4. **Should Congress eliminate the current requirement for an Advanced Notice of Proposed Rulemaking, which lengthens the rulemaking process, and instead allow DOE to go directly into a Notice of Proposed Rulemaking and solicit public comment whenever it wants to consider a new appliance standard?**

4. No. Congress should not eliminate the ANOPR phase. This phase facilitates significant stakeholder dialog, which is somewhat procedurally limited once the NOPR is issued. This free dialog is essential to reaching consensus. Once consensus is reached the stakeholder proposed standards could proceed directly to a proposed final rule and possibly shorten the overall process time (see our reply to Congressman Markey question 11).

5. **Should DOE be directed to repeal its so-called "Process Rule" -- which caused so much of the "paralysis by analysis" that has led DOE to be unable to meet its statutory deadlines for issuing rules on appliance efficiency?**

5. No. The 'Process Rule' should not be repealed. It may be convenient to blame schedule delays on this rule. However, we believe this 'due process' is essential. For example, in the energy efficiency rulemaking now underway on distribution transformers, the manufacturers impact analysis shows that serious impacts to small manufacturers would result from adoption of the highest efficiency standards under consideration. This would, among other things, reduce the number of suppliers in an already constrained marketplace substantially increasing costs for electricity consumers nationwide without commensurate efficiency benefits.

6. **Should Congress make it crystal clear in the statute that DOE has the authority to adopt more than one appliance efficiency standard for an appliance?**

6. No. Legislative solutions are not required. DOE already has broad authority and the requisite expertise to develop product standards beyond those in existing legislation.

7. Should the legal standard for approval of state requests for a waiver of federal preemption be changed to allow DOE to approve such waivers unless the burden on interstate commerce clearly exceeds the local benefits?

7. No. Strong preemption has always been a hallmark of energy efficiency legislation and regulation to avoid a convoluted patchwork of varying standards that would add substantial costs to manufacturers, distributors, warehouse operators, retailers, and contractors, all of which would be borne by the consumers. Such a test to shift the burden of proof to disfavor a national approach to energy efficiency standards, as proposed, flies in the face of this fundamental underpinning of every generation of national energy efficiency legislation (see NEMA response to Rep. Markey Question 1). Overcoming such burden shift to the product manufacturers or DOE would be extremely difficult to demonstrate, especially if many states choose to have differing requirements. It would result in a de facto devolution of energy efficiency regulatory power to the states in direct contravention of a crucial underpinning at the very heart of national energy efficiency standards. Many of the differences that have been proposed in the past are subtle ones, for example, in cases with the same efficiency standard it may become effective on different dates, be based on date of sale or manufacture, require different labeling and so on. This was the situation before EPAct 2005 was passed, when a number of states nominally adopted California standards, but preserved the right to adopt (and adopted) varying implementation details, such as those above. Each entity in the value chain would need to understand all the differences and manage dealing with them, adding time, expense, extensive legal analysis, and potential to exposure to frivolous lawsuits that would ultimately be passed on in the form of higher costs to consumers without commensurate benefits. One federal scheme is still the best for all the reasons it was originally chosen by Congress.

8. Should a state be permitted to adopt performance-based building codes on heating, cooling, and water heating appliances that exceed the federal minimum standards, if the state found that the resulting energy savings were technologically feasible, cost-effective, and would not unduly burden interstate commerce?

8. No. A difficulty with this approach, (having a state make determinations that are now DOE responsibilities) besides all the reasons for uniform national standards discussed in more detail in responses 1,2, 5, and 7, above, is that the state may be making these determinations without adequately tested or technically reviewed or challengeable criteria or procedures. What nationally recognized criteria would be used to ensure consistent and equitable application? Would they vary by state? In at least one state there is a list of criteria without any substantive analysis to answer the questions. Procedural requirements that may hold up in a state court may be referenced, but have not been subjected to rigorous technological review, substantial evidence justification, and stakeholder comment necessary for a federal process to withstand scrutiny. In practice this approach would effectively eliminate preemption.

If Congress relaxed federal preemption, differing product standards would arise around the nation. This would result in additional costs throughout the value chain. For consumer products these cost increases would appear in manufacturing, distribution, warehousing, and retailing. These costs would be passed on to the consumer, and could fall disproportionally on low-income citizens, as the baseline level products would cost more. In addition, such standards wouldn't

work in many cases as more affluent consumers could merely cross state lines to find lower cost products if their state regulations result in higher prices. As such, national standards are more effective, as well as more equitable, making available a wider array of goods to a broader spectrum of consumers.

In the case of commercial and industrial products, added impacts would include the necessity of having to design facilities customized for different products in different states, increasing design costs, spare equipment costs, and reducing productivity. The impact of these costs would be reduced world competitiveness of US manufacturers, thus hurting domestic manufacturing jobs.

9. If DOE chooses to regulate only one aspect of an appliance's energy or water usage and fails to others, should the states be clearly permitted to regulate these other aspects of energy or water usage that are not covered by DOE's rules so that we don't fall into a regulatory black hole of having no federal standard and no state standard?

9. No. An appliance is an optimized system where the designer balances many factors, some of which conflict. If one parameter is substantially altered, then the overall system characteristics could be changed, conceivably in such a way that the already existing energy standard would be violated. Please see our CFL example in our reply to Chairman Dingell's question 2, where increasing the CFLs' ability to render reds like an incandescent lamp would give them efficiency that doesn't meet the EPAct 2005 performance standards for CFLs. Situations could arise where state rules reducing water or gas use would require increased electricity use in the form of more complex controls, differing duty cycles on motors, or other impacts that on top of everything else could vary around the country, with all the adverse impacts discussed in other NEMA responses.

10. Should Congress direct DOE to step up enforcement of the appliance standards law by requiring periodic independent testing to verify manufacturer's performance claims?

10. No. NEMA supports a strong enforcement program with a certification process based on in-house manufacturer testing and certification. This process often includes a third party witness to the testing. There are severe penalties for selling non-compliant products. If a problem exists with DOE enforcement, it would be in the congressional funding and agency management priority assigned to enforcement, not the regulations.

For cases where non-compliance is alleged, DOE may require third-party testing under current law. For example, 10 CFR Part 430 Subpart F—Certification and Enforcement, among other things, delineates a number of Prohibited Acts, which include failure of a manufacturer to supply, at his expense, a reasonable number of covered products to a test laboratory designated by the Secretary of Energy Current remedies are adequate.

11. Should Congress adopt expedited procedures for consideration of rules that grow out of a stakeholder consensus process involving manufacturers, the states, and energy efficiency advocates?

Yes. As stated in NEMA's May 1, 2007 Energy and Air Quality Subcommittee testimony:

We believe, based on our experience with consensus standards negotiations and agreements, that the Energy Policy and Conservation Act should be amended to include procedure thereby such consensus agreements can be quickly acted upon by the Department of Energy. To date, our consensus agreements have been enacted through legislative action. While this has had the desired effect of setting minimum efficiency levels and advancing the energy savings to be realized, it is not practical to expect that Congress should have to legislate each time a consensus agreement is reached. That is why we support changes to EPCA to permit stakeholders to submit through a petition process their consensus agreement, and for the Department of Energy to expeditiously consider and act upon it.

We believe the benefits of accelerating adoption of consensus proposals benefit the Nation when more efficient, competitive products enter the marketplace at an earlier date than would otherwise be the case if handled in the regular DOE rulemaking proceedings. In addition, manufacturers benefit by improvement in their planning processes occasioned by the increased certainty of earlier finalization of consensus standards. Finally, federal regulators and all stakeholders would benefit from reduced
burdens of paperwork, unnecessary rounds of otherwise mandated process and procedures, and legal costs.

NEMA supports an "expedited rulemaking" authority and recommends the Committee include such a procedure as a meaningful modification to the EPCA statute.

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EDWARD J. MARKEY, MASSACHUSETTS
RICK BOUCHER, VIRGINIA
EDOLPHUS TOWNS, NEW YORK
FRANK PALLONE, JR., NEW JERSEY
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DENNIS B. FITZGIBBONS, CHIEF OF STAFF
GREGG A. ROTHSCHILD, CHIEF COUNSEL

ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives
Committee on Energy and Commerce
Washington, DC 20515–6115

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July 6, 2007

Charles Harak, Esq.
National Consumer Law Center
77 Summer Street
Boston, MA 02110-1006

Dear Mr. Harak:

Thank you for appearing before the Subcommittee on Energy and Environment on Tuesday, May 1, 2007, at the hearing entitled "Achieving—At Long Last—Appliance Efficiency Standards." We appreciate the time and effort you gave as a witness before the Subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from certain Members of the Committee. In preparing your answers to these questions, please address your response to the Member who has submitted the questions and include the text of the Member's question along with your response.

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Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Rachel Bleshman at (202) 225-2927.

Sincerely,

JOHN D. DINGELL
CHAIRMAN

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Subcommittee on Energy and Air Quality

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Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey, Member
Subcommittee on Energy and Air Quality

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July 20, 2007

The Honorable John D. Dingell, Chairman
House Committee on Energy and Commerce
Washington, D.C. 20515-6115

The Honorable Edward J. Markey
House of Representatives
Washington, D.C. 20515

RE: "Achieving -- At Long Last – Appliance Efficiency Standards" Committee's Follow-up questions

Dear Chairman Dingell and Congressman Markey:

By letter dated July 6, 2007, you sent the National Consumer Law Center ("NCLC") questioning following up on the testimony I delivered on behalf of NCLc azt the May 1, 2007 Committee Hearing, "Achieving – At Long Last – Appliance Efficiency Standards." NCLC appreciates the Committee's ongoing interest in improving the appliance efficiency standards program administered by the Department of Energy.

Our answers to the questions appear on the following pages. Please feel free to contact us if there are any further questions.

Sincerely,

Charles Harak
Staff Attorney

Delivered by e-mail to Rachel.blesman@mail.house.gov
Delivered by fax to 202 225-2899

Answers to the questions of the Honorable John D. Dingell

Question #1:

You generally favor allowing more flexibility to States to set their own standards. The industry witnesses uniformly favor tight preemption of the States for all covered appliances and equipment in the law, even where Department of Energy (DOE) determines not to set a standard. Both groups seem to acknowledge that the threat of State standards is a major reason that industry is willing to negotiate consensus standards.

a. Is the potential for establishment of separate State standards primarily a means of leverage to bring industry to the table, or would you actually prefer that States be free to act, even if many do not act at all?

Ans. 1 a.:

The National Consumer Law Center (NCLC) does not generally advocate that states should have more flexibility to adopt their own standards for products covered by federal standards. We only urge that states be allowed greater flexibility in two limited circumstances, described below.

The stated Congressional purpose underlying the appliance standards program is "to conserve energy supplies through energy conservation programs," 42 U.S.C. § 6201 (4). The appliance standards program allows consumers to obtain the comfort or services they seek (in refrigerating their food, lighting and heating their homes, etc.) without making needless expenditures on wasteful use of energy. Individual consumers thus see a direct, monetary benefit from economically justified appliance standards. In addition, appliance standards reduce air pollution and the emission of greenhouse gasses, benefiting our environment and our society overall. Lastly, appliance standards can have a significant effect on reducing aggregate demand for energy, thereby reducing wholesale energy prices.

These important benefits are best obtained by strong but economically justified standards adopted by the DOE, not by a patchwork of standards adopted by individual states. Thus, there are only two limited circumstances where NCLC urges Congress to provide states with more flexibility to adopt their own standards: first, if DOE refuses to adopt regional standards for a product for which regional standards are economically justified (such as furnaces) and, second, if DOE fails to adopt an initial or revised standard for a covered product according to statutory schedules set by Congress.

In the testimony NCLC submitted at the May 1, 2007 hearing, our primary recommendation to Congress was that Congress "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."[1] NCLC strongly supports strong national

[1] "Testimony of Charles Harak, Esq." (May 1, 2007), p. 7

standards (and which vary by region, where necessary to maximize cost-effective energy savings) over individual, state-by-state standards.

However, to the extent that DOE cannot or will not adopt regional standards when distinct regional standards are economically justified, NCLC does believe that states should have flexibility to enforce standards that they adopt on their own. More specifically, DOE should administer the waiver process in a manner that does not place unreasonable obstacles in the way of states that choose to act when DOE itself does not adopt regional standards that are in fact economically justified. On January 12, 2007, NCLC submitted detailed comments to DOE regarding the importance of adhering to guidelines that would make it clearer to states how to prepare waiver requests that would meet with DOE's approval. DOE has in fact provided states with useful guidance on how to seek waivers from the proposed boiler and furnace rules.

In addition, NCLC believes that states should have the authority to adopt and enforce their own appliance standards as to covered products for which DOE fails to promulgate an efficiency standard. This is clearly a second-best result, compared to DOE acting promptly to adopt a standard for a particular product. However, the history of the appliance standards program has shown that DOE can be extremely tardy in adopting standards.

Thus, NCLC does not ask that states be given greater flexibility as part of any strategy to bring industry to the negotiating table. Instead, we see greater state flexibility as a second-best solution, in the event that DOE fails to adopt economically justified regional standards, or when DOE fails to adopt an initial or revised standard for a covered product for an extended period of time.

b. Do you believe that reaching a national consensus standard is preferable to having a situation where a few States have their own standards and many have none at all?

Ans. 1 b.:

As noted in the prior answer, NCLC believes that the American public benefits most from strong but economically justified standards adopted by the DOE. While NCLC is not opposed to such standards being reached through a consensus process, DOE should see it as an absolute mandate that it adopt the maximum standard that is technologically feasible and economically justified for a particular product, whether or not there is a consensus. Reaching consensus should not be seen as a goal, but as a useful alternate path to a contested rulemaking, one which can produce a good result more expeditiously than a contested proceeding .

However, in those situations where DOE does not act --- for example, when DOE delays for several years in adopting an initial standard or revising an out-of-date standard --- it is preferable that states be allowed to adopt their own standards, even if this means that some states will choose to act and others will not. But this is unquestionably a second-best result, in comparison to DOE acting in a timely manner to adopt appropriate standards.

c. Do you think the manufacturing groups are being disingenuous or exaggerating when they claim that individual State standards would be wholly unworkable for them?

Ans. 1 c.:

As noted in the answers to 1 a. and 1 b., above, NCLC prefers that strong standards be set by DOE and does not see individual state standards as a preferred option. It certainly is not in the interest of either the public or manufacturers that there be, for example, 10 or 20 different state standards for a particular product. But in practice, when states have adopted standards (for example, for products that are not regulated by the federal government and where state are free to adopt their own standards), they have generally copied one another's standards. As a result, there is no reason to expect that allowing states more flexibility to adopt standards, in limited circumstances, would lead to an unworkable situation for manufacturers.

NCLC is not aware of any party suggesting that there be more than two (possibly three) standards that would apply to any one product. Many of the parties, such as NCLC, that advocate regional standards propose there could be two regional standards for heating appliances (one standard for northern/colder states, one for southern/warmer states), and two (or possibly three) regions for cooling appliances. NCLC believes allowing two (or three) regional standards for heating or cooling appliances is workable. To the extent any manufacturing group has stated that allowing states more flexibility would result in more than three different state standards and that the standards would thus be unworkable, NCLC would agree that this could be the result of exaggeration.

d. Have you performed or seen any credible analysis of the incremental cost to manufacturers of meeting separate State standards and managing their deliveries and sales in accordance with them?

Ans. 1 d.:

NCLC is not aware of any such analysis, by industry or anyone else.

Question #2

Is it truly realistic to allow state standards to suddenly become effective for any appliance where DOE has missed any deadline in its process of adopting Federal standards?

Ans. 2:

NCLC does not propose that state standards should suddenly become effective for any appliance where DOE has missed any deadline in its process of adopting Federal standards. However, NCLC does urge Congress to consider a second-best solution in the event that DOE unduly delays promulgating an initial or revised standard for a covered product. For some products,

DOE has been as much as 13 years behind in meeting deadlines for adopting standards.[2] To avoid a situation where Congressional intent is effectively nullified by DOE's failure to act, Congress should allow state standards to go into effect when DOE has unreasonably failed to act for some period of time. Congress could limit the ability of states to act, for example, by lifting the federal preemption that would otherwise apply, if DOE has missed the deadline for a particular product by a Congressionally-specified number of months or years.

Question #3

Wouldn't this potentially result not only in a large number of standards for a given appliance, but standards coming and going into and out of effect over short periods of time as a function of whether State standards had been adopted and Federal standard setting was meeting all deadlines?

Ans. 3:

NCLC again notes that it is only recommending that states be given flexibility to adopt their own standards when DOE has unreasonably failed to act for an extended period of time (see answer #2). In this circumstance where DOE fails to adopt an initial or revised standard, Congress can either continue to allow federal law to preempt any state action --- allowing DOE to effectively eviscerating the appliance standards program as to the product in question --- or it can allow states to act on their own. While in theory this could result in a large number of standards for any particular product, it is extremely unlikely that states would act completely independently and not coordinate with each other. As recent experience in Massachusetts, Vermont and Rhode Island and other states regarding the adoption of state standards for various products has shown, states tend to work closely with each and to adopt standards that are literally or virtually identical. Moreover, NCLC also anticipates that any subsequently-adopted federal standards would, for many products, be substantially the same as, if not identical to, any state standards that had been adopted in the interim so that having state rules supplanted by federal rules would not create any major problems. But, again, NCLC emphasizes that its preferred solution is that DOE properly and promptly carry out Congressional intent to set standads, which would obviate the possibility of states being allowed to adopt standards on their own.

Question #4

You also seek to have the DOE program improved in speed and rigor so that it can set standards that may be better than those that emerge from the consensus process. Would such effective DOE standards also be preferable to you than allowing the States to set separate standards?

Ans. 4:

As has been noted above, NCLC sees the setting by DOE of strong standards as the best approach, far better than allowing states to set their own standards. The problem that Congress should carefully consider is that DOE has often failed to meet deadlines for setting standards,

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[2] See Natural Resources Defense Council v. Bodman, Civ. No. 05-CV-7808, S.D.N.Y., Complaint ¶ 2 (Sept. 7, 2005).

sometimes missing those deadlines by a decade or more. In addition, DOE abjures its authority to set regional standards, even where, as with gas-fired furnace standards, its own analysis shows that regional standards are economically justified. Given these problems with DOE's implementation of the appliance standards program, Congress should consider allowing states to set their own standards in the limited circumstances described in NCLC's answer to question 1 a., above.

Question #5:

Do you agree with Mr. Rosenfeld that the consensus process is less effective in achieving appliance efficiency than a quicker and more effective rulemaking process?

Ans. 5:

NCLC agrees with Mr. Rosenfeld. A quicker and more effective rulemaking process should produce the best overall results in terms of the actual standards adopted. Consensus rulemaking should be seen as a tool that in some circumstances produces a good result, but not as a goal that DOE should promote in every appliance rulemaking docket.

Question #6

You point out that low-income consumers tend to be more likely to be renters than owners of their residences, and therefore likely to have appliances purchased by their landlords that may be lower in first cost and less energy efficient. Why wouldn't it be likely that landlords would simply increase rents to recover the costs to the extent they were required to put high-efficiency appliances into their rental properties?

Ans. 6:

NCLC does not believe that landlords can or will pass through to tenants the full, incremental costs (if any) of higher-efficiency appliances, for two very different reasons.

DOE raised such an argument in the most recent rulemaking on central air conditioning standards, in response to the argument of NCLC and other parties that DOE should consider the so-called "split incentives" which lead the landlord to buy the lowest-cost appliances because the tenant (not the landlord) reaps the energy savings that would accrue to the tenant's utility bills. To rebut DOE's assertions, NCLC presented the expert testimony of Emily Achtenberg, who has been involved in the funding and development of low-income housing for decades. Ms. Achtenberg made two essential points. First, the price for rental housing is established primarily by market factors such as the supply of available housing in a particular region and the purchasing power that local homebuyers have – typical supply and demand factors. Second, any incremental costs of more efficient appliances -- rarely more than a few hundred dollars for even major appliances that have a useful life of 10 or 15 years -- are too small to cause the landlord to raise the rent. For example, if a landlord purchases a higher efficient appliance that costs $100 more than the less efficient unit and that appliance has a useful life of 10 years, the landlord's amortized, incremental cost is in the range of $1 to $2 per month over the life of the appliance.

Even if the landlord does increase the rent commensurate with the actual incremental cost of the more efficient appliance, tenants will likely still be better off. Under the law, DOE should only be approving a higher standard where the energy savings outweigh any incremental purchase costs. Thus, the energy savings that tenants see on their utility bills would outweigh any minuscule increase in rent (that is, the $1 to $2 per month just described).

Question #7:

You focus particularly on the proposal that DOE set regional heating and cooling standards, and indicate you believe the law already allows DOE to do so. In light of DOE's own data you cite showing significant savings, do you have any evidence to suggest that DOE has other reasons than its interpretation of the law that leads DOE NOT to propose regional standards for equipment?

Ans. 7:

As NCLC noted in our May 1, 2007 testimony to the Committee (pp. 7 – 8) and in a letter we sent to DOE Sec. Bodman, DOE's legal conclusion that it does not have the authority to adopt regional standards has never been explained by DOE. It is also in NCLC's mind inexplicable. We therefore do not and cannot suggest that there may be other, undisclosed reasons for DOE not adopting regional furnace standards. Rather, NCLC believes that DOE has simply drawn the incorrect legal conclusion that it does not have the legal authority to adopt regional standards. Whether or not DOE's interpretation of the existing law is correct, Congress should make it perfectly clear, by amending the existing law or otherwise providing guidance to DOE, that DOE can --- or must --- adopt regional standards when those are economically justified. In the case of natural gas-fired furnaces, DOE's own analysis shows that regional furnace standards are justified, yet DOE believes it cannot adopt regional furnace standards. Instead, it has provided guidance to states that may wish to seek waivers from the proposed 80% AFUE standard for furnaces. The waiver route, however, is still fraught with uncertainty, which only highlights the importance of Congress giving DOE clear authority to act.

Answers to the question of The Honorable Edward J. Markey

Question #1:

Two years ago, this Committee approved my amendment to sunset the federal preemption of state energy efficiency standards whenever DOE was more than 3 years late in issuing a new or revised efficiency standard. My amendment was later dropped from the final version of the bill due to opposition the industry and the Administration. In light of the problems the GAO and others have identified with persistent to issue appliance standards in a timely manner, should Congress now enact such an amendment so that the states aren't preempted from adopting efficiency standards when DOE fails to act in a timely fashion?

Ans. 1:

NCLC supports the adopting of an amendment that would sunset federal preemption of state energy efficiency standards, in the event that DOE is late in adopting an initial or revised deadline, for the reasons discussed in our answers to questions 1 a. and 2 from Chairman Dingell (above). In absence of such an amendment, DOE's delay in adopting or revising a standard can effectively eviscerate the appliance standards program, at least as for those products which fall into this limbo status.

Question #2:

Should DOE be required to regularly review all existing appliance standards to determine whether technology improvements warrant adoption of stronger efficiency standards, and if so, to adopt rules mandating stronger standards?

Ans. 2:

Yes. One of the key premises of the appliance standards program is that there are technologically feasible and economically justified solutions for consumers' energy needs, but which have not sufficiently penetrated the market due to market imperfections, lack of information on the part of consumers, and other reasons. As the underlying appliance technologies change, so too should DOE's appliance standards change.

Question #3:

Should this Subcommittee approve legislation providing DOE with clear authority, or even a mandate, to adopt standards for appliances that vary by region or zone when the cost-effectiveness of a higher standard also varies by region --so that DOE could adjust standards for central air conditioners, boilers, or furnaces to take into account regional climates?

Ans. 3:

Yes. NCLC's primary recommendation to the Energy and Air Quality Subcommittee was for Congress 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."[3]

Question #4:

Should Congress eliminate the current requirement for an Advanced Notice of Proposed Rulemaking, which lengthens the rulemaking process, and instead allow DOE to go directly into a Notice of Proposed Rulemaking and solicit public comment whenever it wants to consider a new appliance standard?

Ans. 4:

Yes, Congress should eliminate the requirement of 42 USC § 6295(p)(1) that DOE must always publish an Advance Notice of Proposed Rulemaking (ANOPR) in each appliance standards docket. The ANOPR phase unquestionably adds significant time to the rulemaking process. Were Congress to eliminate this requirement, DOE could still choose, in its discretion, to go through the ANOPR phase, as many other federal agencies do, when doing so adds real value to the rulemaking process. However, requiring DOE to go through the ANOPR phase in each and every instance delays rulemakings without necessarily adding any value, especially in rulemakings that are less controversial.

Question #5:

Should DOE be directed to repeal its so-called "Process Rule" --which caused so much of the "paralysis by analysis" that has led DOE to be unable to meet its statutory deadlines for issuing rules on appliance efficiency?

Ans. 5:

NCLC does not consider itself expert in all of the details of the Process Rule published at 61 Fed. Reg. 36974 (July 15, 1994). However, the Process Rule, like 42 USC § 6295(p)(1), does require an ANOPR phase as well as other procedural steps and very extensive technical analyses. Similar to our answer to Congressman Markey's question #4, we note that were the Process Rule repealed, DOE would still have the discretion to engage in the ANOPR phase and conduct whatever technical analyses it thought necessary in particular appliance efficiency dockets. However, with the Process Rule remaining on the books, DOE may feel compelled to go through all of those time-consuming steps, even in standards dockets where it could proceed more swiftly without sacrificing the quality of the resulting rule.

Question #6:

Should Congress make it crystal clear in the statute that DOE has the authority to adopt more than one appliance efficiency standard for an appliance?

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[3] "Testimony of Charles Harak, Esq." (May 1, 2007), p. 7

Ans. 6:

Yes. Using the example of warm-air furnaces, DOE used to take the position that it could not regulate both the fuel utilization efficiency of those furnaces and the efficiency of auxiliary furnace fans[4] precisely because DOE believes it cannot adopt more than one standard for an appliance. Because there are other products besides furnaces where this issue arises, Congress should make it clear that DOE generally has the authority to adopt more than one standard for a particular product, not just in connection with furnaces and furnace fans

Question #7:

Should the legal standard for approval of state requests for a waiver of federal preemption be changed to allow DOE to approve such waivers unless the burden on interstate commerce clearly exceeds the local benefits?

Ans. 7:

NCLC believes that the current standards for the granting of state waiver requests are too complex and burdensome. In the only instance in which a state sought a waiver, DOE denied the request of California when it sought a waiver to implement its own standard for residential clothes washers. 71 Fed. Reg. 78157 (Dec. 28, 2006). Current law (42 USC § 6297(d)) requires a state to show that allowing a waiver for the state regulation is "needed to meet unusual and compelling State or local energy or water interests." In addition, DOE is required to consider a long list of manufacturing and industry interests before it can approve a waiver, including whether allowing the state waiver would "significantly burden manufacturing, marketing, distribution, sale or servicing of the covered product" and the extent to which "the state regulation will increase manufacturing or distribution costs of manufacturers, distributors, and others" or "cause a burden to manufacturers."

While NCLC believes the current waiver requirements are far too onerous for states to overcome, even when allowing a waiver would be in the public interest, NCLC believes that the formulation stated in the question (" . . . unless the burden on interstate commerce clearly exceeds the local benefits") might prove difficult to apply in practice. NCLC is willing to work with the Committee in drafting new waiver language to replace the existing language of 42 USC § 6297(d).

Question #8:

Should a state be permitted to adopt performance-based building codes on heating, cooling, and water heating appliances that exceed the federal minimum standards, if the state found that the resulting energy savings were technologically feasible, cost-effective, and would not unduly burden interstate commerce?

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[4] In the Energy Policy Act of 2005, Congress has since given DOE explicit authority to regulate furnace fans. See 42 USC § 6295(f)(3)(D), added by Pub. L. 109-58, § 135(c).

Ans. 8:

Yes. Performance-based building codes do not directly establish standards for individual appliances, and thus should not be preempted if a state finds that its performance-based codes are technologically feasible, cost effective, and do not unduly burden interstate commerce. Because one-third or more of total U.S. energy consumption occurs in residential and commercial buildings, allowing states to adopt performance-based building codes is an important component of any strategy to conserve energy.

Question #9:

If DOE chooses to regulate only one aspect of an appliance's energy or water usage and fails to others, should the states be clearly permitted to regulate these other aspects of energy or water usage that are not covered by rules so that we don't fall into a regulatory black hole of having no federal standard and no state standard?

Ans. 9:

Yes. This answer is a corollary to our answer to Congressman Markey's question #6, above. Congress should make it clear to DOE that it has the authority to regulate more than one aspect of a particular appliance (for example, the fuel efficiency of furnaces and the electric efficiency of any auxiliary fans) precisely because DOE has taken the position that it does not have the general authority to regulate more than one aspect of a particular appliance.[5] In the event, however, that DOE regulates only one aspect of an appliance and there are other aspects of the appliance that could logically be regulated, states should then be free to proceed without facing federal preemption.

Question #10:

Should Congress direct DOE to step up enforcement of the appliance standards law by requiring periodic independent testing to verify manufacturer's performance claims?

Ans. 10:

NCLC has not investigated whether there is any reason to question manufacturers' performance claims, and we therefore take no position in response to this question.

Question #11:

Should Congress adopt expedited procedures for consideration of rules that grow out of a stakeholder consensus process involving manufacturers, the states, and energy efficiency advocates?

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[5] While 42 USC § 6295(f)(3)(D) clarifies DOE's authority to regulate furnaces and auxiliary furnace fans, NCLC understands that DOE still maintains that it cannot regulate more than one aspect of any product other than furnaces.

Ans. 11:

Yes. While NCLC does not believe that building a consensus should be a goal of each appliance rulemaking (see our answers to Chairman Dingell's questions 1 b. and 5, above), in those instances where interested stakeholders can reach a consensus DOE should be given the authority to move on a more expedited basis than current law generally allows. We caution, however, that any rules that would allow for expedited procedures should not trample on the rights of parties who were not part of the consensus. All members of the public should always have a reasonable and fair opportunity to comment on appliance standards proposed by DOE, whether or not the proposed rules arose out a stakeholder consensus process.

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Committee on Energy and Commerce
Washington, DC 20515–6115

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July 6, 2007

The Honorable Alexander A. Karsner
Assistant Secretary
Energy Efficiency and Renewable Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Assistant Secretary Karsner:

Thank you for appearing before the Subcommittee on Energy and Environment on Tuesday, May 1, 2007, at the hearing entitled "Achieving—At Long Last—Appliance Efficiency Standards." We appreciate the time and effort you gave as a witness before the subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from certain Members of the Committee. In preparing your answers to these questions, please address your response to the Member who has submitted the questions and include the text of the Member's question along with your response.

To facilitate the printing of the hearing record, your responses to these questions should be received no later than the close of business on **Friday, July 20, 2007**. Your written responses should be delivered to **2125 Rayburn House Office Building** and faxed to **(202) 225-2899** to the attention of Rachel Bleshman. An electronic version of your response should also be sent by e-mail to Ms. Bleshman, at **rachel.bleshman@mail.house.gov**. Please send your response in a single Word formatted document.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Rachel Bleshman at (202) 225-2927.

Sincerely,

JOHN D. DINGELL
CHAIRMAN

Attachment

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey, Member
Subcommittee on Energy and Air Quality

Department of Energy
Washington, DC 20585

September 18, 2007

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

On May 1, 2007, Alexander Karsner, Assistant Secretary, Office of Energy Efficiency and Renewable Energy, testified regarding, "Achieving – At Long Last – Appliance Efficiency Standards."

Enclosed are the answers to 19 questions that were submitted by you and Representative Markey to complete the hearing record.

If we can be of further assistance, please have your staff contact our Congressional Hearing Coordinator, Lillian Owen, at (202) 586-2031.

Sincerely,

Lisa E. Epifani
for Assistant Secretary
Congressional and Intergovernmental Affairs

Enclosures

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey, Member
Subcommittee on Energy and Air Quality

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QUESTION FROM CHAIRMAN DINGELL

Q1. Do you have the resources in staff and budget that are required to meet the current schedule to bring this program fully up to date?

A1. On January 31, 2006, the Department submitted a comprehensive report to Congress, documenting the requirements of the Appliance Standards Program and an aggressive plan to meet them. That plan commits to a rulemaking schedule that is six times the historical rulemaking rate for this program. The President's request for fiscal year 2008 is sufficient to continue our commitment to that schedule. In addition, the Program has streamlined and accelerated our internal processes, leading to efficiency gains. Changes in our processes include implementing product bundling within a single rulemaking and organizing staff into seven technology teams.

In February 2007, Secretary Bodman sent legislation to Congress requesting authorization to streamline the standards process and bring more efficient products to market sooner. This fast-track legislative proposal would allow the Department to move directly to a Final Rule for certain products when a clear consensus for a standard exists among manufacturers, efficiency advocates, and other stakeholders. In some cases, directly issuing a Final Rule could shorten the time to a completed standard by nearly a third and shave months off the rulemaking process.

QUESTION FROM CHAIRMAN DINGELL

Q2(a). California Energy Commissioner Rosenfeld has recommended that you eliminate the part of your efficiency standard process involving issuing an Advanced (sic) Notice of Proposed Rulemaking (ANOPR)? Do you agree or disagree?

A2(a). As indicated in the testimony before the Committee on May 24, DOE would welcome the flexibility to eliminate the requirement to publish an advance notice of proposed rulemaking which could help shorten the rulemaking process for some standards. However, the Department would use this flexibility sparingly because it believes that the early stakeholder involvement in the standards development process enabled by advance notices can be beneficial to the standards setting process and sometimes lead to faster rulemakings. For example, elimination of the advanced notice may make the most sense in cases of consensus proposals.

Q2(b). If you agree, is this a change you can make directly without statutory amendment?

A2(b). No. Legislative action would be needed to address this issue.

Q2(c). If you disagree, why is it not sufficient to involve the stakeholders directly through a Notice of Proposed Rulemaking?

A2(c). The analysis and decision making required to complete an efficiency standards rulemaking, as required by existing law, is often extremely complex. The ANOPR stage gives stakeholders an opportunity to review and comment on most of analytical work underlying the standards decision making process before DOE has selected the standard level(s) it will propose to establish. Stakeholders often begin a consensus process when the Department publishes an ANOPR. The

ANOPR allows parties to discuss issues and possible consensus standards with a good understanding of the likely output of DOE's analysis. Eliminating the ANOPR and going directly to the NOPR could, in some cases, cause DOE to have to issue supplemental notices prior to a final rulemaking and could also reduce the likelihood of stakeholders reaching a consensus. However, in cases where benefits and costs of likely efficiency improvements are already well understood, proceeding directly to the NOPR could expedite the rulemaking process. Thus, the Department prefers to have maximum flexibility at the ANOPR stage of rulemaking.

QUESTION FROM CHAIRMAN DINGELL

Q3(a). Commissioner Rosenfeld has also recommended that any OMB review be subjected to strict short-term deadlines. Do you agree or disagree?

A3(a). As part of the development of the schedules now governing the efficiency standards rulemakings, OMB agreed to shorten the normal period allotted under Executive Order 12866 for interagency review. Other participants in the process have also agreed to expedite their reviews. We do not support the imposition of any further restrictions on interagency reviews.

Q3(b). Is this a change you can make directly without statutory amendment?

A3(b). Yes. The time required for the interagency review process can be modified by the President.

Q3(c). What substantive difference in the necessary analysis of an efficiency standard does OMB bring that goes beyond your own processes?

A3(c). The interagency review process enables experts from across the government to review the methods and conclusions reached by the Department. These reviews ensure compliance with a broad range of rulemaking directives, such as requirements to fully consider potential environmental impacts, and have sometimes resulted in substantive improvements in DOE's analysis.

QUESTION FROM CHAIRMAN DINGELL

Q4(a). Commissioner Rosenfeld asserts that DOE has no program and no budget to enforce its standards, confirming that appliances on the market in fact meet the federal standards, and that the law prevents the States from providing this enforcement. Do you believe that standards enforcement is adequate and effective?

A4(a). Yes. The Department takes enforcement seriously and works closely with stakeholders to ensure adequate and effective enforcement. Enforcement has not been a significant issue since, in most cases, manufacturers have complied with standards and the industries have policed themselves. The Department continues to evaluate and enhance enforcement as needed. For example we are developing an amendment to enhance our enforcement policies and procedures in order to limit circumvention of the test procedures and standards.

Q4(b). What testing has been done of appliances to confirm they meet current standards, and what enforcement actions have been taken?

A4(b). With DOE guidance, manufacturer trade associations have established certification programs based on independent third-party testing. The results of the testing program are published in a trade association directory of certified products. This independent testing is a key component of the DOE enforcement effort and has increased the efficiency of the standards program.

In instances where DOE has found a potential compliance issue, DOE has been able to resolve the issue through direct communication with the manufacturers. DOE has only found it necessary to levy fines on one occasion.

Q4(c). Do you need any additional authority or resources to undertake proper follow-up enforcement of the standards your office establishes? If not your office, who should do this?

A4(c). No, DOE does not need any additional authority; EPCA gives DOE the authority it needs.

QUESTION FROM CHAIRMAN DINGELL

Q5. Mr. Harak testifies that DOE believes it is legally precluded by the definition of "energy conservation standard" as presented in the law from adopting regional standards for heating and air-conditioning equipment. He cites DOE data indicating that significant energy savings would result from higher regional standards. If the law were clarified to clarify that you had the authority to set up to three regional standards for climate-sensitive equipment, do you believe there are good reasons NOT to do so?

A5. There are certain products for which the energy savings potential could justify regional standards. However, the Department's existing authorities and practical capabilities are not sufficient to enable the Department to enforce such standards. The Department's enforcement is generally focused on the product as manufactured. This enforcement authority generally does not extend to the point-of-sale or installation (i.e. to the retailer or contractor). States, typically through building code offices, are better positioned to enforce point of sale or installation requirements at the state or local level; the Department does not. To facilitate the establishment of regional standards, it may be possible to craft provisions that would require active state support and enforcement of more stringent standards, while minimizing the burdens and uncertainties associated with the current waiver process.

QUESTION FROM CHAIRMAN DINGELL

Q6. The GAO report suggested that your office does not collect the data that would be required even to know whether or not you are keeping up with the current schedule for new standards rulemakings. You reviewed this report in January. What steps have you taken since then to respond to this observation?

A6. The Department does collect the data necessary to know whether it is keeping up with the current schedule. Not only are all major rulemaking milestones public information, but DOE has established more detailed schedules for virtually every step in the rulemaking process and continually monitors progress relative to these schedules. The Department has met all major milestones since publication of the report to Congress in January, 2006. In order to further strengthen its capability to track and manage this process, the Department is implementing additional systems that will be designed to automatically provide version control, workflow routing, due-date management and concurrence tracking and recording.

QUESTION FROM CHAIRMAN DINGELL

Q7(a). Andrew DeLaski cites data suggesting that efficiency standards for furnace fans would be a means of obtaining great energy savings. Do you agree?

A7(a). Yes, DOE analysis has indicated that more efficient furnace fans have the potential for significant energy savings. However, since the Department has not yet undertaken an analysis of the potential impacts of furnace fan efficiency standards, it does know for certain whether the benefits of such standards would outweigh their costs.

Q7(b). Have you begun a rulemaking to set such a standard?

A7(b). No, DOE has not begun a rulemaking to set efficiency standards for furnace fans.

Q7(c). If you believe there is any legal obstacle to commencing such a rulemaking, what is it, and what is your proposal for removing it?

A7(c). There is no legal obstacle to commencing such a rulemaking. The Department intends to schedule the rulemaking for furnace fans after the residential furnace and boilers rulemaking and other rulemakings in the backlog have been completed.

QUESTION FROM REPRESENTATIVE MARKEY

Q1. Two years ago, this Committee approved my amendment to sunset the federal preemption of state energy efficiency standards whenever DOE was more than 3 years late in issuing a new or revised efficiency standard. My amendment was later dropped from the final version of the bill due to opposition from the industry and the Administration. In light of the problems the GAO and others have identified with DOE's persistent failures to issue appliance standards in a timely manner, should Congress now enact such an amendment so that the states aren't preempted from adopting efficiency standards when DOE fails to Act [sic] in a timely fashion?

A1. DOE believes that national standards, as envisioned by EPCA, are most likely to minimize the burden on manufacturers and suppliers. We believe state standards should meet the requirements of section 327 of EPCA, which requires states to petition the Department for an exemption from preemption. The state petition must demonstrate a compelling need for the state standard. (42U.S.C.6297).

QUESTION FROM REPRESENTATIVE MARKEY

Q2. Should DOE be required to regularly review all existing appliance standards to determine whether technology improvements warrant adoption of stronger efficiency standards, and if so, to adopt rules mandating stronger standards?

A2. The Department does not object to such a requirement, as long as the schedule for review and updating does not conflict with existing requirements, provides adequate time to schedule the resources necessary to complete the reviews within the timeframe allotted and provides sufficient flexibility to enable DOE to give priority to those activities that are likely to maximize efficiency gains.

QUESTION FROM REPRESENTATIVE MARKEY

Q3. Should this Subcommittee approve legislation providing DOE with clear authority, or even a mandate to adopt standards for appliances that vary by region or zone when the cost-effectiveness of a higher standard also varies by region – so that DOE could adjust standards for central air conditioners, boilers, or furnaces to take into account regional climates?

A3. There are certain products for which the energy savings potential could justify regional standards. However, the Department's existing authorities and practical capabilities are not sufficient to enable the Department to enforce such standards. The Department's enforcement is generally focused on the product as manufactured. This enforcement authority generally does not extend to the point-of-sale or installation (i.e. to the retailer or contractor). States, typically through building code offices, are better positioned to enforce point of sale or installation requirements at the state or local level; the Department does not. To facilitate the establishment of regional standards, it may be possible to craft provisions that would require active state support and enforcement of more stringent standards, while minimizing the burdens and uncertainties associated with the current waiver process.

QUESTION FROM REPRESENTATIVE MARKEY

Q4. Should Congress eliminate the current requirement for an Advanced (sic) Notice of Proposed Rulemaking, which lengthens the rulemaking process, and instead allow DOE to go directly into a Notice of Proposed Rulemaking and solicit public comment whenever it wants to consider a new appliance standard?

A4. As indicated in the testimony before the Committee on May 24, DOE would welcome the flexibility of eliminating the requirement to publish an advance notice of proposed rulemaking which could help shorten the rulemaking process for some standards. However, the Committee should understand that we would use this flexibility sparingly because we believe that the early stakeholder involvement in the standards development process ensured by advance notices can be very beneficial to the standards setting process and lead to better -- and sometimes even faster -- rulemakings. Elimination of the advanced notice makes the most sense in the context of adoption of consensus proposals.

On January 31, 2006, the Department submitted a comprehensive report to Congress, documenting the requirements of the Appliance Standards Program and an aggressive plan to meet them. That plan commits to a rulemaking schedule that is six times the historical rulemaking rate for this program, but continues to provide the time necessary for Advance Notices of Proposed Rulemaking. The President's request for fiscal year 2008 is sufficient to continue our commitment to that schedule. In addition, the Program has streamlined and accelerated our internal processes, leading to efficiency gains. Changes in our processes include implementing product bundling within a single rulemaking and organizing staff into seven technology teams.

In February 2007, Secretary Bodman sent legislation to Congress requesting authorization to streamline the standards process and bring more efficient products to market sooner. This fast-track legislative proposal would allow the Department to move directly to a Final Rule for certain products when a clear consensus for a standard exists among manufacturers, efficiency advocates, and other stakeholders. In some cases, directly issuing a final rule could shorten the time to a completed standard by nearly a third and shave months off the rulemaking process.

QUESTION FROM REPRESENTATIVE MARKEY

Q5. Should DOE be directed to repeal its so-called "Process Rule" – which caused so much of the "paralysis by analysis" that has led DOE to be unable to meet its statutory deadlines for issuing rules on appliance efficiency?

A5. Certain aspects of the Process Rule, including the annual review of rulemaking priorities to focus on efficiency standards likely to produce the greatest energy savings and other benefits, have been superseded by DOE's commitment to complete all mandated rulemakings regardless of their likely energy savings. However, other aspects of the Process Rule remain a valuable guide to both DOE and affected stakeholders. Since the Process Rule is not binding on the Department, merely a guide, it isn't necessary to conduct a rulemaking to modify or repeal it.

QUESTION FROM REPRESENTATIVE MARKEY

Q6. Should Congress make it crystal clear in the statute that DOE has the authority to adopt more than one appliance efficiency standard for an appliance?

A6. While the Department favors performance based standards, DOE would welcome additional flexibility in establishing standards to permit it to establish multiple standards when necessary to achieve the maximum energy savings within the statutory framework.

QUESTION FROM REPRESENTATIVE MARKEY

Q7. Should the legal standard for approval of state requests for a waiver of federal preemption be changed to allow DOE to approve such waivers unless the burden on interstate commerce clearly exceeds the local benefits?

A7. No, DOE's believes that the existing legal standard provides adequate flexibility, allowing the Department to evaluate state needs, as well as manufacturer, consumer, and other impacts.

QUESTION FROM REPRESENTATIVE MARKEY

Q8. Should a state be permitted to adopt performance-based building codes on heating, cooling, and water heating appliances that exceed the federal minimum standards, if the state found that the resulting energy savings were technologically feasible, cost-effective, and would not unduly burden interstate commerce?

A8. Section 327 (f)(3) of EPCA allows states to adopt energy conservation equipment standards as part of a state or local building code as long as the standards meet the requirements laid out by EPCA. Generally speaking, the approach set forth in section 327(f)(3) of EPCA provides builders/designers with the flexibility to design and construct technologically feasible and cost effective designs. Therefore, no changes to this existing authority are necessary.

QUESTION FROM REPRESENTATIVE MARKEY

Q9. If DOE chooses to regulate only one aspect of an appliance's energy or water usage and fails to others, should the states be clearly permitted to regulate these other aspects of energy or water usage that are not covered by DOE's rules so that we don't fall into a regulatory black hole of having no federal standard and no state standard?

A9. No. For most products, such as clothes washers and dishwashers, where DOE only regulates energy use, energy and water use are so closely linked that the Department effectively regulates water use by regulating energy use. In such cases, a state water use standard is likely to conflict with DOE's energy use standard.

QUESTION FROM REPRESENTATIVE MARKEY

Q10. Should Congress direct DOE to step up enforcement of the appliance standards law by requiring periodic independent testing to verify manufacturer's performance claims?

A10. With DOE guidance, manufacturer trade associations have established certification programs based on independent third-party testing. The results of the testing program are published in a trade association directory of certified products. This independent testing is a key component of the DOE enforcement effort and has increased the efficiency of the standards program.

In instances where DOE has found a potential compliance issue, DOE has been able to resolve the issue through direct communication with the manufacturers. DOE has only found it necessary to levy fines on one occasion.

QUESTION FROM REPRESENTATIVE MARKEY

Q11. Should Congress adopt expedited procedures for consideration of rules that grow out of a stakeholder consensus process involving manufacturers, the states, and energy efficiency advocates?

A11. In February, Secretary Bodman sent legislation to Congress requesting authorization to streamline the standards process and bring more efficient products to market sooner. This fast-track legislative proposal would allow the Department to move directly to a Final Rule for certain products when a clear consensus for a standard exists among manufacturers, efficiency advocates, and other stakeholders. By using this process, we would be able to promulgate an energy efficiency standard directly when all relevant interests jointly have negotiated and submitted an agreed proposed standard that meets all statutory criteria. In some cases, directly issuing a Final Rule would shorten the time to a completed standard by nearly a third and shave months off the rulemaking process. To be clear, if the Department determines that a consensus does not exist, this proposal would not preclude rulemaking; it would simply require the Department to use the traditional three-stage process.

QUESTION FROM REPRESENTATIVE MARKEY

Q12. Do you think DOE should be directed to issue efficiency standards for digital TV sets?

A12. Under existing legislation, the Department has the authority to set standards for TVs. During the 1990's, DOE chose not to set standards for TV's because of the rapid changes in TV technologies affecting energy use and efficiency. TV technology continues to change rapidly, in ways that affect both performance and energy use. Such standards are not currently included the Department's schedule of future rulemakings established in the Consent Decree, and sufficient time and resources would be needed to undertake additional rulemakings.

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GREGG A. ROTHSCHILD, CHIEF COUNSEL

ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives
Committee on Energy and Commerce
Washington, DC 20515–6115

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July 6, 2007

Mr. Joseph M. McGuire
President
Association of Home Appliance Manufacturers
1111 19th Street, N.W.
Washington, D.C. 20036

Dear Mr. McGuire:

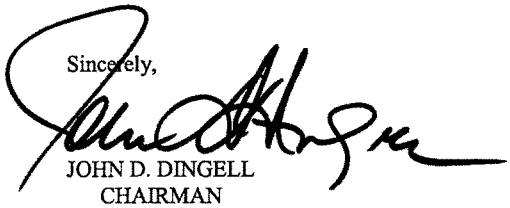
Thank you for appearing before the Subcommittee on Energy and Environment on Tuesday, May 1, 2007, at the hearing entitled "Achieving—At Long Last—Appliance Efficiency Standards." We appreciate the time and effort you gave as a witness before the Subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from certain Members of the Committee. In preparing your answers to these questions, please address your response to the Member who has submitted the questions and include the text of the Member's question along with your response.

To facilitate the printing of the hearing record, your responses to these questions should be received no later than the close of business on **Friday, July 20, 2007**. Your written responses should be delivered to **2125 Rayburn House Office Building** and faxed to **(202) 225-2899** to the attention of Rachel Bleshman. An electronic version of your response should also be sent by e-mail to Ms. Bleshman, at **rachel.bleshman@mail.house.gov**. Please send your response in a single Word formatted document.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Rachel Bleshman at (202) 225-2927.

Sincerely,



JOHN D. DINGELL
CHAIRMAN

Attachment

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey, Member
Subcommittee on Energy and Air Quality

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July 20, 2007

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Attached please find the response of the Association of Home Appliance Manufacturers (AHAM) to your July 6, 2007 letter which poses follow-up questions to the May 1, 2007 hearing entitled "Achieving – At Long Last – Appliance Efficiency Standards." The answers to your and Rep. Markey's questions are attached.

We appreciate the opportunity to provide these comments to the Committee and would welcome any additional questions that you might have.

Sincerely,

Joseph M. McGuire
President

Attachment

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey, Member
Subcommittee on Energy and Air Quality

RESPONSES TO QUESTIONS
FROM THE
HONORABLE JOHN D. DINGELL

(1) You testified against regional Federal standards and against separate State standards.

(a) Do you agree that there are climate zones in the United States - for example between the northern tier of States and the southernmost states - that present dramatically different requirements for space heating?

(b) Do such climate zones also lead to differing requirements for cooling?

(c) Do you agree that the results from evaluating a furnace or an air conditioner for maximum energy efficiency that is technologically feasible and economically justifiable might differ as a function of the climate zone it is tested for?

(d) Do you disagree with the analysis that has been done showing significant energy savings if regional heating and air conditioning standards were adopted?

AHAM does not represent the manufacturers of central heating and cooling equipment and is therefore unable to speak to any analysis that was performed regarding the effects of differing climates on efficiency requirements for these products. AHAM opposes regional standards because such a regulatory landscape would chip away at a national market for covered products, denying consumers and manufacturers, distributors and retailers the economies of scale associated with the national market, and creating serious enforcement issues as well. Clearly, there are different climates within the United States which were recognized by DOE in the development of the appliance efficiency standards program. The system of national appliance standards creates a floor for energy efficiency that is uniform throughout the country and recognizes that voluntary programs will, in concert with the national standards, enable utilities and consumers to tailor efforts within separate climates to encourage purchase of products more efficient than required by the minimum efficiency standards.

(2) Since you oppose both regional Federal standards and separate State standards, do you have another recommended means of ensuring that we obtain the energy savings from installing higher efficiency heating and cooling equipment where it makes the best sense?

We were unable to speak to this at the hearing, but the combination of minimum efficiency standards, the Energy Star program and other energy awareness and incentive programs, and the manufacturers' tax credit for super efficient appliances, have helped transform the market for efficient appliances. This combination of regulatory and market forces should be maximized instead of heaping multiple regulatory hurdles on DOE and sending mixed signals to states on the need for state and regional standards. Through such programs as Energy Star and the FTC's EnergyGuide labeling program, consumers

are both educated, and sometimes encouraged, to purchase efficient products regardless of which region or climate they reside. States often further promote the purchase of these products by offering rebates, tax exemptions and tax credits to consumers.

(3) Recognizing you oppose them both, if you had to choose between allowing exemptions for States to set furnace and air conditioner standards suitable for their climates, or having DOE set regional standards based on climate zones, which would you choose?

This is a choice of alternative policy approaches that are both inferior to the federal system of efficiency standards and incentive/awareness programs mentioned in the previous answer. I would only add that states do not have the necessary resources to undertake thorough technical and economic analyses required for a determination of the need for an appliance efficiency standard and the decision on the standard level. Any weakening of federal preemption or deferral to the states would surely result in a number of different standards across the country for manufacturers to meet. A patchwork of state standards would lead to a production and distribution bottleneck that would negatively affect consumers and manufacturers alike. It is important to note that it is because of these concerns that the Congress wisely adopted the National Appliance Energy Conservation Act (NAECA). The presence of this law has resulted in tremendous energy savings over the last 20 years.

(4) You have announced at this hearing the completion of a major new consensus seeking process with standards that you ask us to adopt into law for a number of major appliances. I congratulate you on this agreement, but have some questions about it:

(a) How much time do you believe reaching this consensus saved relative to the time it would have required for DOE to finalize updated standards for the appliances the agreement covers?

There is no question that the industry-advocate consensus agreement assisted the DOE in meeting its rulemaking schedule to examine energy efficiency standards for appliance products. The negotiating process was resolved in approximately four months compared to the three years that it typically takes DOE to conclude a rulemaking and publish a final rule. In the case of residential dishwashers, the negotiated effective date for a new standard is now two years sooner than it would have been if the DOE had continued its regularly-scheduled rulemaking. The negotiations also produced first-ever water efficiency standards for residential clothes washers and dishwashers.

(b) Did DOE officials or analysts participate in negotiations toward this consensus agreement?

(c) Do they ever do so?

(d) Does DOE support the consensus-seeking process with data or analysis from its data bases or computer models if requested by the parties?

DOE provided critical support in the negotiations process. It never became a participant which would have been inappropriate for a regulator which, absent an agreement on a legislated solution, would be required to independently and objectively conduct a full rulemaking or evaluate the sufficiency of a proffered consensus rule. DOE officials encouraged the efforts of industry and the Advocates, and provided analytical input. A DOE contractor developed models that examined the energy savings and other impacts of proposals.

(e) Would it be helpful if DOE were instructed to support parties seeking consensus with data and analysis?

We support DOE continuing its beneficial role in these types of agreements.

(5) Would you agree that the threat of separate State appliance efficiency standards is a major incentive for manufacturers to assure that Federal standards are adopted and effective?

The threat of separate state standards results in a significant diversion of resources on the part of industry, the advocacy community and state governments in anticipation of missed DOE deadlines. If such resources were instead devoted to rulemakings and a regular process of negotiating federal requirements, the federal system would work much better. We have negotiated many energy efficiency standards with no threat of preemption lapse. Congress did the right thing in 1987 in enacting NAECA. Breaking down one of its cornerstones – federal preemption – will only result in a patchwork of state requirements that led to the broad coalition that advocated for NAECA in the first place.

The home appliance industry has been in the forefront in encouraging DOE to act on standards and in engaging the advocacy community. The truth today is that most federal efficiency policy is formulated in a consensus process. This process should continue and will benefit from the new fast track consensus standards provision in Section 106 of the Committee legislation.

(6) Are there any appliances that are currently subject to State standards because Federal standards were not adopted?

Yes, in our product scope wine coolers are regulated in California because DOE determined that they were not refrigerators. It is unfortunate that regulation is at this level and it is unclear that many importers of these products, other than our members, are even aware of this requirement. States also remain free to file a waiver of federal preemption to set their own standards for federally-covered products in the event of an "unusual and compelling" state energy condition.

RESPONSES TO QUESTIONS
FROM THE
HONORABLE EDWARD J. MARKEY

(1) Two years ago, this Committee approved my amendment to sunset the federal preemption of state energy efficiency standards whenever DOE was more than 3 years late in issuing a new or revised efficiency standard. My amendment was later dropped from the final version of the bill due to opposition from the industry and the Administration. In light of the problems the GAO and others have identified with DOE's persistent failures to issue appliance standards in a timely manner, should Congress now enact such an amendment so that the states aren't preempted from adopting efficiency standards when DOE fails to act in a timely fashion?

Mr. Markey, as a leader in the enactment of the National Appliance Conservation Act (NAECA) you are acutely aware of the benefits for consumers and the nation in federal preemption of state standards. You are also aware that NAECA provides for the ability of states to seek waivers from federal preemption for "unusual and compelling" circumstances. Since NAECA's enactment in 1987, only one state waiver was filed which was denied by DOE. The efforts by some advocates today to create an incentive for manufacturers to seek DOE standards in order to avoid the hammer of state standards is neither the incentive it is intended to be, nor is it sound policy.

This proposal will result in a continuation of advocacy groups encouraging states to be ready to promulgate standards when DOE deadlines are missed. This results in all stakeholders spending time in states debating such policy options. The solution is not to force manufacturers to face a situation of a fractured marketplace that will ensure higher consumer costs and less energy savings. The solution is to once again focus on federal standards. The Process Improvement Rule used by DOE ten years ago kept all stakeholders at the table and resulted in a consensus priority list of standards work for DOE. This process needs to be reestablished. All stakeholders, including consumer groups, manufacturers, retailers, advocates, utilities and states can agree on priorities. Agreements to negotiate standards updates will result. DOE can provide resources for performing analyses. The result will be a focus on areas of true energy savings. It will put some of the statutory deadlines that DOE must meet into perspective. Some are critical to energy savings and some are not.

We strongly encourage DOE and the Congress to focus on this approach and not an approach which will result in the patchwork of state standards that we all know will be detrimental for the country as a whole.

While the appliance standards program administered by DOE is far from perfect, it has been very productive, in the case of home appliances, and enormous energy and carbon savings have resulted. In addition, it has become clear in the marketplace that the DOE appliance standards program works very well in partnership with market awareness

programs such as Energy Star and incentive programs such as tax credits to deliver more efficiency.

Federal residential energy efficiency standards that have gone into effect since 1988, or will take effect by the end of this year, will save a cumulative total of 34 Quads of energy by 2020 and 54 Quads by 2030. The cumulative net present value of the consumer benefits of the standards amounts to $93 billion by 2020 and $125 billion by 2030. Over half of the energy savings are attributable to refrigerator/freezers, currently in third generation standards, and about to commence a rulemaking for fourth generation standards next year, and clothes washers, currently in third generation standards and will undergo a rulemaking for fourth generation standards.

In the case of DOE covered products produced by AHAM members, all products have gone through DOE appliance efficiency standards rulemakings, while some, as mentioned above, have gone through multiple regulatory proceedings. The same few full line companies have absorbed much of the cost of multiple rulemakings and standards.

(2) Should DOE be required to regularly review all existing appliance standards to determine whether technology improvements warrant adoption of stronger efficiency standards, and if so, to adopt rules mandating stronger standards?

The Senate-passed energy bill (S. 1321) and the House Energy and Commerce Committee bill establishes a periodic review of current federal energy efficiency standards which we support as part of a consensus agreement with advocacy organizations. Such a mechanism, however, must be based on the appropriate criteria, that is, the rulemaking criteria contained in NAECA (Sec. 325 (o)). Importantly, the language does not result in any lapsing of federal preemption connected to the Department conducting these determinations.

(3) Should this Subcommittee approve legislation providing DOE with clear authority, or even a mandate, to adopt standards for appliances that vary by region or zone when the cost-effectiveness of a higher standard also varies by region -- so that DOE could adjust standards for central air conditioners, boilers, or furnaces to take into account regional climates?

AHAM does not represent the manufacturers of central heating and cooling equipment and is therefore unable to speak to any analysis that was performed regarding the effects of differing climates on efficiency requirements for these products. AHAM opposes regional standards because such a regulatory landscape would chip away at a national market for covered products denying consumers and manufacturers, distributors and retailers the economies of scale associated with the national market, creating serious enforcement issues as well. Clearly there are different climates within the United States which were established by DOE in the development of the appliance efficiency standards program. The system of national appliance standards creates a floor for energy efficiency that is uniform throughout the country and recognizes that other voluntary programs will,

in concert with the national standards, enable utilities and consumers to tailor efforts within separate climates to encourage purchase of products more efficient than required by the minimum efficiency standards.

(4) Should Congress eliminate the current requirement for an Advanced Notice of Proposed Rulemaking, which lengthens the rulemaking process, and instead allows DOE to go directly into a Notice of Proposed Rulemaking and solicit public comment whenever it wants to consider a new appliance standard?

We support the change to the rulemaking process to eliminate the Advanced Notice of Proposed Rulemaking (AoNPR) as a means to improve the pace of rulemakings. We believe, however, that care must be taken as the Department engages in these rulemakings to ensure that it still conducts a thorough, early and transparent analysis based on the appropriate criteria contained in the statute.

(5) Should DOE be directed to repeal its so-called "Process Rule" -- which caused so much of the "paralysis by analysis" that has led DOE to be unable to meet its statutory deadlines for issuing rules on appliance efficiency?

The Process Improvement Rule was supported by all stakeholders and requires a transparent, comprehensive, thoughtful and rational rulemaking process. It is not the source of DOE delays which are mostly caused by poor internal management and organization. To its credit, DOE has reorganized and energized its rulemaking efforts. Objective reading of this guidance indicates that it emphasizes data-driven decisions, encourages consensus and promotes for early issue scoping, all of which are appropriate and beneficial for good rules. Congress should mandate the reinstitution of the advisory committee on appliance standards which regularly reviewed and advised on the conduct of rulemakings and prioritization

(6) Should Congress make it crystal clear in the statute that DOE has the authority to adopt more than one appliance efficiency standard for an appliance?

This concept generally does not apply to AHAM products, except in the cases where a product would require energy and water efficiency components. However, AHAM supports provisions in the Committee bill that allows for the setting of both minimum energy efficiency requirements and maximum water consuming requirements for clothes washers and dishwashers.

(7) Should the legal standard for approval of state requests for a waiver of federal preemption be changed to allow DOE to approve such waivers unless the burden on interstate commerce clearly exceeds the local benefits?

The current standard by which a state can request a waiver of federal preemption is appropriate and provides the proper scope of considerations as a threshold for states to meet. Let us not forget that this provision was fully supported by all advocacy groups and states involved in the development of NAECA. Changing this criteria will only serve to undermine the basis of the system of federal minimum efficiency standards.

The existing standard ensures that states can only be granted waivers if they – first – can demonstrate that they are facing an "unusual and compelling…energy or water" interest and then – second – demonstrate that such a separate standard is the only way to achieve energy savings, and – lastly – that consumers (and manufacturers) would not be significantly disadvantaged. Importantly, the existing federal standards regime is designed to provide for the most energy savings (though national adherence), but also provides manufacturers and consumers with an environment that is conducive to interstate commerce and provides consumers with the ability to purchase the most efficient and cost effective products that they desire, or can afford. The "safe harbor" provision ensures that consumers will not be deprived in the petitioning state of fully functioning, reliable products with all the features and performance they expect. Attempting to address a backlog at DOE by allowing states to create a patchwork of appliance standards would establish a hodgepodge of differing requirements that NAECA was enacted to eliminate 20 years ago. The losers in such a scenario would be consumers who would face higher costs and limited product choice as the benefits of manufacturing to economies of scale would be lost.

(8) Should a state be permitted to adopt performance-based building codes on heating, cooling, and water heating appliances that exceed the federal minimum standards, if the state found that the resulting energy savings were technologically feasible, cost-effective, and would not unduly burden interstate commerce?

The current relationship of state and local building codes to the federal appliance efficiency standards is designed to provide states flexibility in performance-based building codes and to protect the preemptive effects of federal appliance efficiency standards. For example, a state's performance-based code which allows builders to trade off various building envelope and equipment choices to meet or exceed the code must have a baseline requirement that has the federal appliance efficiency standard as the requirement for covered appliances. Builders can trade off higher efficient appliances for less insulation, etc. to meet the code minimum requirements. AHAM opposes efforts to allow states to change the appliance efficiency requirements in state baseline building code packages. There is nothing wrong with states having packages with high appliance efficiency requirements, but the builder must always have the choice of a baseline package with the DOE appliance efficiency requirements as an option. Without this

current baseline package, states are free to ignore the federal appliance efficiency standards for all new construction and major renovation.

(9) If DOE chooses to regulate only one aspect of an appliance's energy or water usage and fails to others, should the states be clearly permitted to regulate these other aspects of energy or water usage that are not covered by DOE's rules so that we don't fall into a regulatory black hole of having no federal standard and no state standard?

Under the Committee's bill, DOE is required to make determinations on appliance efficiency standards for all aspects covered by law, such as energy and water. Additionally, the Committee bill requires DOE to revisit these determinations every five years. If DOE determines that no change in a standard is required, or that no standard is justified, that decision should stand and preempt state standards unless a state waiver from preemption is approved by DOE. Allowing states to regulate where a disagreement with the DOE decision exists flies in the face of the premise of NAECA. It is not a regulatory black hole that would result, but a regulatory jeopardy for consumers and national energy policy.

(10) Should Congress direct DOE to step up enforcement of the appliance standards law by requiring periodic independent testing to verify manufacturer's performance claims?

DOE should use a variety of mechanisms to encourage and monitor compliance, including certification programs, but one-size-fits-all mechanisms are not needed. The program has had a remarkably high level of compliance.

(11) Should Congress adopt expedited procedures for consideration of rules that grow out of a stakeholder consensus process involving manufacturers, the states, and energy efficiency advocates?

Negotiations involve many of the same analyses that DOE conducts in its standards rulemakings. In fact, in the most recent negotiations, DOE's analysis was a critical part of the process which led to far-reaching new standards agreements on several major appliance products. We support the language in Section 106 of the Committee bill which promotes fast track processing by DOE of consensus agreements.

Air-Conditioning and Refrigeration Institute

Improving Life and the Environment

C. David Myers
President, Building Efficiency
Johnson Controls, Inc.
507 E. Michigan St.
Milwaukee, WI 53202

July 24, 2007

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
The U.S. House of Representatives
2328 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman;

Thank you for the opportunity to testify before the U.S. House of Representatives, Subcommittee on Energy and Environment on May 1, 2007, regarding appliance efficiency standards. I also appreciate the opportunity to respond to expand on my testimony through the written response to these questions. I have answered these questions to the best of my ability and I hope this will shed some light on a complicated topic.

If I can be of any further assistance, please do not hesitate to contact me.

Sincerely,

C. David Myers

The U.S. House of Representatives
Committee on Energy and Commerce
Follow up Questions and Answers to the May 1, 2007 hearing, "Achieving – At Long Last – Appliance Efficiency Standards"
Witness: Mr. C. David Myers
President, Building Efficiency
Johnson Controls, Inc.

The Honorable John D. Dingell

1. You argue that regional standards for furnaces and air conditioning would be unenforceable by the Federal Government.

a. **It is correct, is it not, that relatively few furnaces and central air conditioners are purchased at retail by consumers who then install this equipment themselves? The vast majority are installed by licensed heating and air conditioning contractors?**

ANSWER: Furnaces and central air conditioners typically are sold and installed by heating and air conditioning contractors. However, not all states or municipalities license their heating and air conditioning contractors. There are currently several states that do not require any qualifications for technician to install or service heating and air conditioning equipment.

b. Do you believe that licensed heating and air conditioning contractors would deliberately order and install equipment that was below the required efficiency standard for the area in which it was installed?

ANSWER: The majority of contractors are law-abiding members of society, but there are a small number of contractors that will install equipment below required efficiency standards in order to be more competitive and generate greater profits. This will seriously disrupt the market, and those contractors that are complying with the law will be put at a competitive disadvantage while bearing most of the cost of these higher standards.

This also introduces the difficulty of enforcing regional standards. The current enforcement of the single national standard takes place at the manufacturing level. All equipment that is manufactured or imported into the United States must meet the minimum standard. Regional standards could not be enforced in this way since manufacturers do not install equipment. Regional standards would require a national enforcement program monitoring thousands of contractors throughout the country.

c. If the law were amended to offer any customer a free upgrade, at the expense of his contractor, if that customer was sold a furnace or air conditioner rated at efficiency lower than the standard for the area of installation, would installation contractors still be tempted to install sub-standard equipment?

ANSWER: I do not believe that this policy would result in increased compliance. It relies on the idea that the "rouge" contractor, who did not comply with the existing regulatory standard, to remain in the community for an extended period. Then, if prosecuted for an improper instillation, the contractor is expected to comply with an order to replace previously installed equipment. This is a very unlikely scenario.

It also seems that this policy would rely on the consumer's willingness to report installations of sub-standard equipment. I would note that due to the cost increase of higher efficiency equipment the consumer would most likely be aware of the equipment's efficiency level and chose to purchase the non-compliant equipment. Although the vast majority of contractors and consumers are law-abiding members of the community the small percentage of citizens that would circumvent the law will create an imbalanced market, unfair competition and limited compliance. Therefore, the policy you outlined would in no way lead to enhanced compliance.

2. You argue that regional standards would reduce the number of units sold by manufacturers to a number below which maximum economies of scale could be achieved.

a. Please provide, to the best of your knowledge, the number of companies that manufacture furnaces.

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

b. How many companies are only manufacturing furnaces at 80 percent efficiency but less than 90 percent or better?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

c. What is the number of these companies that manufacture only furnaces with efficiency of 90 percent or better?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

d. What is the number of companies making models with both 80 percent efficiency and 90 percent efficiency?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

e. If a company already manufactures both models, how does it defeat economies of scale to require that manufacture to sell one of the two models in a given zone?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

f. Isn't it true that there are many millions of homes requiring furnaces in the northern tier of States where a higher-efficiency furnace would be required? If so, how many of customers does it take to achieve economies of scale for furnace manufacturers?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

3. You assert as well that many consumers are repairing older inefficient equipment rather than purchasing new more efficient equipment citing a parallel 25 percent increase in parts sales and 25 percent decrease in new equipment sales. But since there are currently no regional standards, how does this data support your argument against regional standards?

ANSWER: This is a purely economic argument. Equipment that is more efficient is more expensive. The most recent increase to a 13 SEER caused consumers to choose to repair older less efficient equipment rather than pay higher replacement costs.. Regional standards could result in increased SEER levels in specific regions. This more efficient equipment costs more because it uses more raw material such as copper, steel, and aluminum and more complex technology. Consumers will continue to repair rather than replace equipment due to the higher cost of replacement. Older equipment is significantly less efficient than current 13 SEER models, and potential energy savings is lost when consumers repair old equipment. We view anything that would discourage consumers from upgrading their systems, such as regional standards, contrary to the goal of reducing energy consumption.

4. The Committee has been told that 70 percent of furnaces sold in colder regions are already at the 90 percent efficiency level that efficiency advocates want DOE to adopt as a standard for this country's northern zone. Are you familiar with this information?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

a. If true, would this mean that 30 percent of the furnaces sold in colder areas have lower efficiency standards?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

b. Do you disagree that a 90 percent efficient furnace is both technologically feasible and economically justifiable in colder regions, since 70 percent of the market is already purchasing them?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

5. Given the high heating costs in colder regions, particularly when one includes today's natural gas prices, why would consumers reasonably elect to purchase a lower efficiency furnace?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

6. You note in your testimony that many low-income consumers nonetheless own their own homes. Mr. Harak, with the National Consumer Law Center, however, notes that lower-income residents are more likely to be renters than wealthier consumers. In such situations, landlords often install less expensive and less efficient furnaces to save money, even though it means tenants will be faced with much higher fuel costs.

a. Do you agree that this could be a problem?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

b. Mr. Harak recommends higher regional standards as a solution to this situation, but you oppose regional standards. What is your solution to the split incentives between landlords and tenants?

This question has been referred to the Gas Appliance Manufacture Association (GAMA) because it pertains to furnaces. I have asked them to respond to you directly.

7. You testified against regional Federal standards and against separate State standards.

a. Do you agree that there are climate zones in the United States - for example between the northern tier of States and the southernmost states - that present dramatically different requirements for space heating?

This question been referred to GAMA because it pertains to furnaces, and GAMA will answer you directly.

b. Do such climate zones also lead to differing requirements for cooling?

ANSWER: No, I believe that the current standard is appropriate for the entire United States. The 13 SEER standards that is in place takes into account the varying climates throughout the US by averaging temperature and establishing test procedures for those conditions. It is a national standard and is not based on conditions in one region. This was done to ensure that the most stringent standard could be developed and then applied broadly. This does not mean that the standard is inadequate for the entire United States. Importantly, the current air conditioning standard, by DOE's own analysis, was not economically justified in most of the country. Yet, this overly stringent national standard was adopted to ensure that the few states where the 13 SEER was justifiable would have the most stringent standard possible.

c. Do you agree that the results from evaluating a furnace or an air conditioner for maximum energy efficiency that is technologically feasible and economically justifiable might differ as a function of the climate zone it is tested for?

ANSWER: Air conditioning utilizes the seasonal energy efficiency ratio (SEER) as an energy descriptor. SEER is not a function of climate zones. Rather, it captures the energy usage based on national average temperatures and annual energy usage.

e. Do you disagree with the analysis that has been done showing significant energy savings if regional heating and air conditioning standards were adopted?

ANSWER: With respect to air conditioning equipment, we are not aware of any analysis on energy savings realized through the adoption of regional standards. Further, when contacted the Department of Energy could not conform that any such study existed. If such a study was submitted to the Committee, we would be pleased to review the report and provide our comments.

8. Since you oppose both regional Federal standards and separate State standards, do you have another recommended means of ensuring that we obtain the energy savings from installing higher efficiency heating and cooling equipment where it makes the best sense?

ANSWER: There are several alternative solutions to this problem. Incentives, rebates and other voluntary programs to replace less efficient equipment must be expanded. We would urge support for renewal of tax credits that are currently being debated by the Ways and Means Committee.

Restoring research and development funding for next generation technologies is essential in developing equipment that is more efficient. Unfortunately, over the last decade Congress has virtually eliminated space-conditioning R&D funding within the Department of Energy budget. We would urge the committee to restore this funding

We are promoting education, training and certification for technicians to insure that equipment is installed properly, because properly installed and maintained equipment insures that these products are reaching their maximum efficiency. We would encourage the federal government to adopt a policy that required the all technicians working in federal buildings to become certified.

We are also focused on the issue of the installed base. Our calculations show that 1.2 quads (quadrillion BTus) can be saved by 2020 if equipment that has been in service for five or more years could be replaced with equipment that meets the current minimum standards. We envision a program where consumers could choose to upgrade at the time of a home's sale and roll the cost into the financing. This would reduce the burden on consumers while promoting energy efficiency. We would encourage the Committee to begin to study the feasibility of these programs.

9. Recognizing you oppose them both, if you had to choose between allowing exemptions for States to set furnace and air conditioner standards suitable for their climates, or having DOE set regional standards based on climate zones, which would you choose?

ANSWER: We believe that federal standards programs based on one national standard, sound analysis, periodic review and strong preemption have produced significant energy savings for the nation over the last 30 years. Advocating policy that would do away with one of the few successful energy saving programs managed by the Department of Energy would not be good public policy and therefore we cannot support either of these proposals.

The Honorable Edward J. Markey

1. Two years ago, this Committee approved my amendment to sunset the federal preemption of state energy efficiency standards whenever DOE was more than 3 years late in issuing a new or revised efficiency standard. My amendment was later dropped from the final version of the bill due to opposition from the industry and the Administration. In light of the problems the GAO and others have identified with DOE's persistent failures to issue appliance standards in a timely manner, should Congress now enact such an amendment so that the states aren't preempted from adopting efficiency standards when DOE fails to Act in a timely fashion?

ANSWER: States setting their own standard, if the DOE does not act in a timely manner, is not an incentive for the DOE to act any faster. The real solution to this problem is for the DOE to act in a timely manner. Industry has an excellent record of compliance with regulations promulgated by the Department. In fact, we support timely issuance of rule because it provides certainty and allows us to plan for needed design and manufacturing changes. As you will recall, ARI joined with the several states and special interest

efficiency groups in litigation to force the Department to adhere to its rulemaking schedules.

However, when you say that you want to "sunset preemption" you are not addressing the failure of DOE but punishing manufactures for DOE's failures. We rely on preemption to provide stability and uniformity in the marketplace. Sun setting preemption disrupts our markets, creates uncertainty and prevents cost effective development of new technologies.

2. Should DOE be required to regularly review all existing appliance standards to determine whether technology improvements warrant adoption of stronger efficiency standards, and if so, to adopt rules mandating stronger standards?

ANSWER: There are procedures in place for the DOE to review appliance standards. DOE can and should follow the procedures set out to review, and if need be, to update the standards.

3. Should this Subcommittee approve legislation providing DOE with clear authority, or even a mandate, to adopt standards for appliances that vary by region or zone when the cost-effectiveness of a higher standard also varies by region -- so that DOE could adjust standards for central air conditioners, boilers, or furnaces to take into account regional climates?

ANSWER: The standards that have been set are for the entire United States. These standards take into account higher temperatures in southern regions and lower temperatures in northern regions, as well as, all other variations in climate. Regional standards would undermine the standards that have already been set. The sum total of the individual regional standards would equal or undercut the present standard The additional cost of manufacturing and the additional cost to the customer, as well as, the possible difficulties of enforcement, would have a negative overall effect on energy savings.

4. Should Congress eliminate the current requirement for an Advanced Notice of Proposed Rulemaking, which lengthens the rulemaking process, and instead allow DOE to go directly into a Notice of Proposed Rulemaking and solicit public comment whenever it wants to consider a new appliance standard?

ANSWER: The Advanced Notice of Proposed Rulemaking allows a public forum and specifically asks for "data, views and arguments", which is essential in all rule making. The advanced period helps in garnering information from outside sources, and eliminating it could result in missing out on the perspective of those the rule effects the most. The Advanced Notice of Proposed Rulemaking allows those making the rule to be educated by the people that know the most about the issues and eventually helps to produce the best rule possible.

5. Should DOE be directed to repeal its so-called "Process Rule" -- which caused so much of the "paralysis by analysis" that has led DOE to be unable to meet its

statutory deadlines for issuing rules on appliance efficiency?

ANSWER: The "Process Rule" allows a thorough analysis, which leads to a better accepted rule. This also assures that all opinions and data are taken into consideration. This gives those most effected a voice and it assures that their voices will be heard and compels the rule making process to be a collaborative effort.

6. Should Congress make it crystal clear in the statute that DOE has the authority to adopt more than one appliance efficiency standard for an appliance?

ANSWER: New appliance efficiency standards that have been suggested would not decrease the amount of energy that is being used; the alternative standards simply test the efficiency in a different way. Adding additional standards will drive up the price of equipment that will ultimately be passed on to consumers.

We are opposed to multiple standards which apply to individual components or design requirements for an individual appliance because it limits innovation and engineering flexibility to address energy efficiency of the overall appliance system.

7. Should the legal standard for approval of state requests for a waiver of federal preemption be changed to allow DOE to approve such waivers unless the burden on interstate commerce clearly exceeds the local benefits?

ANSWER: National standards have been set to account for the overall benefit of the United States, which takes into account the local benefits of higher and lower standards and the overall burden on interstate commerce. The balancing act of the burden on interstate commerce and the local benefit has already been accomplished in setting the standard. Altering the standard and allowing exceptions throws off the entire equation. We believe that the current language defining the process and requirements for granting a waiver are appropriate.

8. Should a state be permitted to adopt performance-based building codes on heating, cooling, and water heating appliances that exceed the federal minimum standards, if the state found that the resulting energy savings were technologically feasible, cost effective, and would not unduly burden interstate commerce?

ANSWER: The problem with allowing each individual state to adopt cultivate and develop its own rules regarding performance based building codes on heating, cooling and water-heating appliances is that there could be a plethora of different standards. This would lead to an exorbitant cost for the equipment; the consumer would be less likely to upgrade due to the increased cost. It also leads to difficulty in enforcing because the enforcement would be out of the hands of the DOE and in the hands of the individual states, which would have to absorb the cost of such enforcement. The analysis of unduly burdening interstate commerce has already been done, and exists in the federal standard. An individual state is not equipped to assess the over all effect on interstate commerce. It would be very simple for every state to establish requirements above the standard

because the effect on interstate commerce would be spread out to the entire United States and not heaped upon one state. In the given scenario, that would entice every state to take advantage of the loop hole and force more costs on every other state, which would lead to enormous nation wide costs that no individual state took into account. This is the reason a federal standard has already been set.

9. If DOE chooses to regulate only one aspect of an appliance's energy or water usage and fails to others, should the states be clearly permitted to regulate the other aspects of energy or water usage that are not covered by DOE'S rules so that we don't fall into a regulatory black hole of having no federal standard and no state standard?

ANSWER The States regulating in any area that the DOE does not see fit to regulate would allow for an infinite number of standards that could become completely unmanageable for any industry and confusing for consumers and contractors. The DOE is expected to look at the United States as a whole, taking in account all extremes, and regulate appropriately so as to maintain a balance in the country. The solution is to make sure the DOE regulates properly, which also means preventing overregulation, which can easily be as destructive as under regulation.

10. Should Congress direct DOE to step up enforcement of the appliance standards law by requiring periodic independent testing to verify manufacturer's performance claims?

ANSWER: This is an unnecessary step because manufacturers are already independently tested. The DOE accepts the performance-rating standards and the product performance equipment certification program of ARI. The units are tested by the approved ARI standard at an independent laboratory. In the case that a unit does not meet the manufacturer's published performance ratings the unit must be re-rated or taken off the market. The success of this program has been recognized by the DOE and California Energy Commission. There are several cases where ARI's program has identified equipment that was below the federal minimum, which was reported to the DOE. Based on ARI's test data, the products were removed from the market, including installed products.

11. Should Congress adopt expedited procedures for consideration of rules that grow out of a stakeholder consensus process involving manufacturers, the states, and energy efficiency advocates?

ANSWER: Congress should adopt expedited procedures in the case of a stakeholder consensus. This would allow the DOE to set standards quickly while encouraging the government, manufacturers and energy efficiency advocates to work together. It helps to assure that the best possible rules are established by incentivizing cooperation.

12. In Dr. Rosenfeld's written testimony; he notes that central air conditioners can be rated in terms of both an energy efficiency ratio (or "EER") that depends on the actual outdoor temperature, and a season energy efficiency ratio (or "SEER") that is measured at a single season average temperature. I have been told that there are some central air conditioning unites that have a very high SEER rating, but also a very low EER ratio during particularly hot days. One such unit has a Seer 19 rating, and has an EER of 17 at moderate temperature conditions, but then falls to an EER on hot days when a second stage engages. This would appear to actually increase power consumption by a substantial amount at times when the power grid may be most stressed and expensive (and often polluting) peaking units may have to be turned on to meet demand. In light of this, does DOE need to be able to set appliance standards that prevent such a situation?

ANSWER: The Department of Energy (DOE) looked into the issue during the last rulemaking on central air conditioners and heat pumps[1] and decided against mandating a minimum EER in addition to SEER. After an extensive analysis, DOE concluded that the primary purpose of the appliance standard was to save energy and that an EER standard could be counterproductive by discouraging the use of variable speed and modulating equipment which can save a substantial amount of energy over the entire cooling season while providing consumers with added benefit such as a better indoor air quality environment.

[1] 66 FR 7170, January 22, 2001

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July 6, 2007

Arthur H. Rosenfeld, Ph.D.
Commissioner
California Energy Commission
1516 9th Street
Sacramento, CA 95814

Dear Dr. Rosenfeld:

Thank you for appearing before the Subcommittee on Energy and Environment on Tuesday, May 1, 2007, at the hearing entitled "Achieving—At Long Last—Appliance Efficiency Standards." We appreciate the time and effort you gave as a witness before the Subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from certain Members of the Committee. In preparing your answers to these questions, please address your response to the Member who has submitted the questions and include the text of the Member's question along with your response.

To facilitate the printing of the hearing record, your responses to these questions should be received no later than the close of business on **Friday, July 20, 2007**. Your written responses should be delivered to **2125 Rayburn House Office Building** and faxed to **(202) 225-2899** to the attention of Rachel Bleshman. An electronic version of your response should also be sent by e-mail to Ms. Bleshman, at **rachel.bleshman@mail.house.gov**. Please send your response in a single Word formatted document.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Rachel Bleshman at (202) 225-2927.

Sincerely,

JOHN D. DINGELL
CHAIRMAN

Attachment

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Edward J. Markey, Member
Subcommittee on Energy and Air Quality

ARTHUR H. ROSENFELD

RESPONSES TO QUESTIONS FROM THE HONORABLE JOHN D. DINGELL

1. You generally favor allowing more flexibility to States to set their own standards. The industry witnesses uniformly favor tight preemption of the States for all covered appliances and equipment in the law, even where the Department of Energy (DOE) determines not to set a standard. Both groups seem to acknowledge that the threat of State Standards is a major reason that industry is willing to negotiate consensus standards.

a. Is the potential for establishment of separate State standards primarily a means of leverage to bring industry to the table, or would you actually prefer that States be free to act, even if many do not act at all?

Response: The opportunity for State standards is not primarily to leverage industry, although that is a useful by-product. The National Appliance Energy Conservation Act (NAECA) as originally passed by Congress included criteria for States to receive waivers from Federal preemption because it was expected there would be situations in which States had compelling reasons to have standards different than Federal standards due to local State conditions, such as high energy prices, energy shortages or environmental concerns. As it has played out, inaction by DOE, and DOE standards that are based on "consensus" rather than efficiency levels that are justified by engineering and economic analyses, have created additional opportunities for States to be motivated to set their own standards. If State actions motivate DOE and industry to more closely follow the original intent of NAECA, then that is a desirable outcome.

b. Do you believe that reaching a national consensus standard is preferable to having a situation where a few States have their own standards and many have none at all?

Response: A national standard is preferable only if it has a sound analytic basis and achieves the maximum improvement in energy efficiency that is technologically feasible and economically justified. Anything less shackles the States to a lowest-common-denominator standard that DOEs little to promote true energy efficiency. See section I.A.4., pages 8 through 9, of my May 1, 2007, written testimony (my written testimony).

c. Do you think the manufacturing groups are being disingenuous or exaggerating when they claim that individual State standards would be wholly unworkable for them?

Response: Individual State standards have been, and will continue to be, feasible and workable. California and other States have been setting efficiency standards for a variety of appliances for decades, and manufacturers have been able to conduct business in these States with little or no disruption. In numerous appliance standard rulemakings in California, the California Energy Commission (CEC) has asked manufacturers for data that would support their claim that a State standard is unworkable, and they have failed to do so. You should ask manufacturers for the same data.

d. Have you performed or seen any credible analysis of the incremental cost to manufacturers of meeting separate State standards and managing their deliveries and sales in accordance with them?

Response: The CEC has consistently requested that manufacturers submit data regarding the cost of complying with California efficiency standards, but such data has not been submitted. Without manufacturer cooperation and the submission of requested data, a detailed analysis of such costs is not possible.

2. Is it realistic to allow State standards to suddenly become effective for any appliance where DOE has missed any deadline in its process of adopting Federal standards?

Response: This question incorrectly assumes that State standards will "suddenly become effective." In reality, DOE, the States and manufacturers will know well in advance when DOE must meet a deadline and whether DOE will be able to do so. Also, all parties will know well in advance what a State standard is and when it will become effective. Thus all parties will be afforded ample time to prepare for compliance with a State standard should DOE fail to comply with a deadline. See section I.A.2., page 6, of my written testimony.

3. Would this not potentially result not only in a large number of standards for a given appliance, but also standards coming and going in-and-out

of effect over short periods of time as a function of whether State standards had been adopted and Federal standard setting was meeting all deadlines?

Response: In practice, a small number of States would set generally consistent standards for a given product. Again, as stated in the answer to question 2, there is a lag-time between the adoption and the effective date of a product standard. Thus if DOE did miss a deadline for a product, and then subsequently did adopt a standard for that product, that standard would not be effective, and thus would not preempt the existing State standard, for several years.

You also seek to have the DOE program improved in speed and rigor so that it can set standards that may be better than those that emerge from the consensus process. Would such effective DOE standards also be preferable to you than allowing the States freedom to set separate standards?

Response: If DOE improves its rulemaking in the ways I suggest, see section I.A., pages 5 through 9, of my written testimony, with the preeminent goal of achieving the maximum improvement in energy efficiency that is technologically feasible and economically justified, then a Federal standard is preferred over individual State standards.

5. You were a key advisor on appliance efficiency standard setting during the Clinton administration. Did you make the same recommendations for expediting approval processes at that time?

Response: See response to 5.b.

a. If you did so, what reasons were you given that they were not adopted then?

Response: See response to 5.b.

b. If not, why not?

Response: When I was at DOE I worked mainly on updating air conditioning standards, which were initiated by California in 1977 and taken over by DOE through NAECA, so I considered them Federal problems. Unfortunately I was unaware that other States were impatient. I just tried to hurry them along.

Are these delaying factors recent?

Response: They have been slow since the passage of NAECA, but have grown worse recently. See section I.A.1., pages 5 through 6, of my written testimony.

d. Has this administration added any steps to the rulemaking process, such as the Advanced Notice of Proposed Rulemaking step or Office of Management and Budget review, that have made it slower?

Response: I am unaware of new steps, but repeat that DOE has recently interpreted the waiver rules in an unacceptably strict manner.

6. Manufacturers have what appear to me to be sound reasons why numerous individual State standards for the same appliance would raise their costs and complicate their product distribution and maintenance practices. Producing and appliance to a single national efficiency standard market is obviously easier and cheaper than doing so to multiple State standards. Yet your testimony suggests we should allow individual States to set standards whenever and for whatever product that DOE has failed to do so, had declined to do so, or has been late in doing so. Do you believe it is a valid concern by manufactures that they might face a proliferation of State standards covering a single appliance?

Response: As stated in the response to question 3, it would be a mistake to assume that States will adopt standards for any given product that differ significantly from other States in their respective climate region. This is the only logical conclusion, as there is no reason for a State to adopt efficiency standards that do not correspond with the regional climate of that State. For example, the standard for air conditioners would be generally consistent in California, Arizona, New Mexico, Nevada, Utah and most of Texas, as the climate is hot and dry. Similarly, the standard for air conditioners would be consistent in hot and wet/moist/soggy States such as Florida, Georgia, North and South Carolina, Alabama, Mississippi, Louisiana, Arkansas and Tennessee. What would most likely emerge are de facto regional standards similar to the federally-articulated regional standards that I endorse in my testimony. See section I.A.3.a., page 7, and appendix C of my written testimony. Thus it is unreasonable to assume that manufacturers will be faced with standards that

vary from State to State to State, but rather we will, and should, see standards that vary from one climate region to another.

a. If so, how can California then set its own standards without raising this concern?

Response: A State standard that is based on achieving the maximum improvement of energy efficiency that is technologically feasible and economically justified will be consistent with other States in that region, for the reasons discussed above. The appliance rule-making process in California allows for significant input from manufacturers. It is in this forum that they may present their facts and arguments that a certain State standard is not economically justified.

b. If not, have you analyzed the energy-savings benefits against the potential costs of requiring manufacturers to meet such standards, passed through in higher appliance costs?

Response: As stated in the response to question 1d., the CEC has consistently requested, but has not received, data from manufacturers that would enable the CEC to conduct a comprehensive analysis that would take into account the potential costs to manufacturers of meeting certain California standards.

7. At page 8 of your written testimony, you suggest that DOE can adopt more effective standards than would result from successful negotiations with between manufacturers and efficiency advocates. Are there currently effective standards that have resulted from a consensus process that you believe are significantly weaker than they should be and would have been using an appropriate and effective rulemaking process?

Response: It is difficult to know what DOE should or would have done absent a consensus recommendation. At best, we can only make educated guesses.— The results will be highly subjective since DOE's criteria, in the final analysis, require it to apply judgment. Without doing a complete review of the record of DOE's past decisions, it is safe to say that many of the consensus proposals that were adopted by DOE were at efficiency levels less than what DOE's technical analysis showed was justified. The reason for this is DOE's lack of willingness to follow the direction of NAECA to set standards at levels justified by technical analysis, and the resulting ability of industry to leverage efficiency advocates to accept lower levels of efficiency in order to get any national standard.

8. Referring to page 10 of your testimony, is it your view that allowing a State to set a performance-based standard for a whole building that could most realistically be met by including appliances with higher efficiency standards than required by DOE, but that standard could also be met in other ways such as insulation, would that preclude that State from establishing such a building standard without a DOE waiver under the appliance efficiency law?

Response: It is my view that California is precluded from such a building standard unless a waiver from DOE is obtained. This is why I recommend a change in Federal law that authorizes a State to base the energy budgets in a performance-based building code on appliances with more than the Federal minimum efficiencies if the resulting budget is technically feasible, cost effective and would not unduly burden interstate commerce.

9. In your view, how should the appliance efficiency standards process be applied for electric lighting, given three technologies—the classic incandescent bulb, available compact fluorescent bulbs, and emerging solid-state lighting—have very different first costs, energy consumption, life cycles, and availability in the market?

Response: Representative Jane Harman has introduced an amendment which phases out lowest cost general service incandescents, but permits infrared reflecting technology (or other strategies) which increase lumens per watt by about 50 percent. This is a good first step. We should start phasing out today's inefficient incandescent bulbs, keeping in mind there are efficient halogen incandescent bulbs that are coming into the market, and move toward requiring levels that can be achieved today by compact fluorescents (CFLs) and will be achieved soon by solid-state light sources. This can be done by setting a two-step standard that bans the inefficient bulbs effective in five years, and requires CFL-level efficiency in ten years. These new bulbs will be extremely cost-effective to consumers, save energy, reduce greenhouse gas, and will be profitable to industry.

RESPONSES TO THE QUESTIONS OF THE HONORABLE EDWARD J. MARKEY

1. Two years ago, this committee approved my amendment to sunset the Federal preemption of State energy efficiency standard whenever DOE was more than 3 years late in issuing a new or revised efficiency standard. My amendment was later dropped from the final version of the bill due to opposition from the industry and the Administration. In light of the problems the GAO and other have identified with DOE's persistent failures to issue appliance standards in a timely manner, should Congress now enact such an amendment so that the States aren't preempted from adopting efficiency standards when DOE fails to act in a timely fashion?

Response: Yes. There must be a mechanism in place that helps staunch the loss of energy savings that results when DOE fails to meet an efficiency standard deadline. The best way to accomplish this is to halt Federal preemption of a State standard if DOE misses the deadline for a new or revised standard. See section I.A.2., page 6, of my written testimony.

2. Should DOE be required to regularly review all existing appliance standards to determine whether technology improvements warrant adoption of stronger efficiency standards, and if so, to adopt rules mandating stronger standards?

Response: Yes. DOE should always be vigilant when it comes to efficiency standards, including keeping abreast of new technologies and ensuring that appliances standards reflect the maximum improvement in energy efficiency that is technologically feasible and economically justified.

3. Should this subcommittee approve legislation providing DOE with clear authority, or even a mandate, to adopt standards for appliances that vary by region or zone when the cost-effectiveness of a higher standard also varies by region—so that DOE could adjust standards for central air conditioners, boilers, or furnaces to take into account regional climates?

Response: Yes. I believe that DOE already has the authority to adopt regional standards for heating and cooling appliances, but has simply failed to do so. As such, it is necessary for Congress to make clear to DOE that it DOEs have this authority, and that it should adopt such regional standards where appropriate. See section I.A.3.a., page 7, of my written testimony.

4. Should Congress eliminate the current requirement for an Advanced Notice of Proposed Rulemaking, which lengthens the rulemaking process, and instead allow DOE to go directly into a Notice of Proposed Rulemaking and solicit public comment whenever it wants to consider a new appliance standard?

Response: Yes. The Advanced Notice of Proposed Rulemaking (ANOPR) is an unnecessary, inefficient and time-consuming process. DOE should eliminate the ANOPR and proceed directly to the Notice of Proposed Rulemaking. See section I.A.1., page 5, of my written testimony.

5. Should DOE be directed to repeal its so-called "Process Rule"—which caused so much of the "paralysis by analysis" that has led DOE to be unable to meet its statutory deadlines for issuing rules on appliance efficiency?

Response: Yes, the "Process Rule" should be eliminated or substantially changed. At present, the Process Rule is needlessly complex and hinders effective and efficient analysis. See section I.A.1., pages 5 through 6, of my written testimony.

6. Should Congress make it crystal clear in the statute that DOE has the authority to adopt more than one appliance efficiency standard for an appliance?

Response: Yes. As many appliances have more than one efficiency attribute, Congress should make it clear to DOE that it has the authority to:

- Establish both water and energy efficiency standards for the same appliance;
- Adopt different energy (or water) metrics for the same appliance (e.g., SEER and EER for air conditioners);
- Regulate all energy-or water-using components within a regulated appliance; and
- Require prescriptive components in any appliance. See section I.A.3.b., pages 7 through 8, of my written testimony.

7. Should the legal standard for approval of State requests for a waiver of Federal preemption be changed to allow DOE to approve such waivers unless the burden on interstate commerce clearly exceeds the local benefits?

Response: In considering preemption waivers, DOE should weigh the three criteria for preemption contained in Energy Policy and Conservation Act (EPCA)—the State's interests in the standard, the potential burden on the national appliance industry, and the potential for consumer utility—and grant a waiver if the State's interests predominate. See section I.B.1, page 9, of my written testimony.

8. Should a State be permitted to adopt performance-based building codes on heating, cooling, and water heating appliances that exceed the Federal minimum standards, if the State found that the resulting energy saving were technologically feasible, cost-effective, and would not unduly burden interstate commerce?

Response: Yes. By doing so, the maximum feasible amount of energy and water efficiency can be achieved while providing the builder with the greatest degree of choice and the best deal for the buyer. See section I.B.2., pages 9 through 11 of my written testimony.

9. If DOE chooses to regulate only one aspect of an appliance's energy or water usage and fails to others, should the States be clearly permitted to regulate these other aspects of energy or water usage that are not covered by DOE's rules so that we don't fall into a regulatory black hole of having no Federal standard and no State standard?

Response: Yes. For example, the statute should clarify that if DOE has established an SEER standard for air conditioners, but not an EER standard, then the States are not preempted from setting an EER standard. See section I.B.3., page 11, of my written testimony.

10. Should Congress direct DOE to step up enforcement of the appliances standards law by requiring periodic independent testing to verify manufacturer's performance claims?

Response: Yes. Congress should provide DOE with the funding to verify manufacturers' performance claims via independent testing, and conducting surveys for non-compliant appliances offered at retail outlets. DOE should also be required to regularly report the data and findings derived from these and other enforcement efforts to the appropriate congressional committees. See section I.C.1., page 11, of my written testimony.

11. Should Congress adopt expedited procedures for consideration of rules that grow out of a stakeholder consensus process involving manufacturers, the States, and energy efficiency advocates?

Response: Yes, as long as the consensus achieves the maximum improvement in energy efficiency that is technologically feasible and economically justified.

12. In Dr. Rosenfeld's written testimony; he notes that central air conditioners can be rated in terms of both and energy efficiency ratio (or EER) that depends on the actual outdoor temperature, and a season energy efficiency ratio (or SEER) that is measures at a single season average temperature. I have been told that there are some central air conditioning units that have a very high SEER rating, but also a low EER ratio during particularly hot days. One such unit has a SEER 19 rating, and has an EER of 17 at moderate temperature conditions, but then falls to an EER on hot days when a second stage engages. This would appear to actually increase power consumption by a substantial amount at times when the power grid may be most stressed and expensive (and often polluting) peaking units may have to be turned on to meet demand. In light of this, DOEs DOE need to be able to set appliance standards that prevent such a situation?

Response: There are two different issues here. First, the laws of physics (Carnot efficiency) reduce the efficiency of an air conditioning unit as the outside air temperature rises. But, second, air conditioners should be designed to be most efficient under conditions which are most important; e.g. 95 degrees Fahrenheit and soggy in Atlanta, and 110 degrees Fahrenheit and dry in Phoenix. That is why we must break the United States up into three climate zones for air conditioning, optimized for Atlanta, Phoenix, and Chicago climates. See section I.A.3.a., page 7, of my written testimony.

13. Do you think DOE should be directed to issue efficiency standards for digital TV sets?

Response: Yes.