

WASTED ENERGY: DOE'S INACTION ON EFFICIENCY STANDARDS AND ITS IMPACT ON CONSUMERS AND THE CLIMATE

HEARING
BEFORE THE
SUBCOMMITTEE ON ENERGY
OF THE
COMMITTEE ON ENERGY AND
COMMERCE
HOUSE OF REPRESENTATIVES
ONE HUNDRED SIXTEENTH CONGRESS

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WASTED ENERGY: DOE'S INACTION ON EFFICIENCY STANDARDS AND ITS IMPACT ON CONSUMERS AND THE CLIMATE

THURSDAY, MARCH 7, 2019

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

The subcommittee met, pursuant to call, at 10:02 a.m., in the John D. Dingell Room 2123, Rayburn House Office Building, Hon. Bobby L. Rush (chairman of the subcommittee) presiding.

Members present: Representatives Rush, Peters, McNerney, Tonko, Loeb sack, Butterfield, Welch, Schrader, Kennedy, Veasey, Kuster, Kelly, Barragán, McEachin, O'Halleran, Blunt Rochester, Pallone (ex officio), Upton (subcommittee ranking member), Latta, Rodgers, McKinley, Kinzinger, Griffith, Johnson, Bucshon, Flores, Hudson, Walberg, Duncan, and Walden (ex officio).

Staff present: Adam Fischer, Policy Analyst; Waverly Gordon, Deputy Chief Counsel; Rick Kessler, Staff Director, Energy and Environment; Brendan Larkin, Policy Coordinator; John Marshall, Policy Coordinator; Lisa Olson, FERC Detailee; Teresa Williams, Energy Fellow; Tuley Wright, Energy and Environment Policy Advisor; Mike Bloomquist, Minority Staff Director; Jordan Davis, Minority Senior Advisor; Margaret Tucker Fogarty, Minority Staff Assistant; Peter Kielty, Minority General Counsel; Ryan Long, Minority Deputy Staff Director; Mary Martin, Minority Chief Counsel, Energy, and Environment and Climate Change; Brandon Mooney, Minority Deputy Chief Counsel, Energy; Brannon Rains, Minority Staff Assistant; Peter Spencer, Minority Senior Professional Staff Member, Environment and Climate Change; and Nate Wilkins, Minority Fellow.

Mr. RUSH. The Subcommittee on Energy will now come to order. The Chair recognizes himself for 5 minutes.

OPENING STATEMENT OF HON. BOBBY RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

I want to thank all of our invited guests for being here today to testify at today's hearing entitled, "Wasted Energy: DOE's Inaction on Efficiency Standards and Its Impact on Consumers and the Climate."

As we are all well aware, Federal efficiency standards conserve energy, create jobs, encourage American ingenuity and innovation, all while helping domestic manufacturers stay competitive in a

global economy. The efficiency sector currently employs 2.25 million Americans, more jobs than all fossil fuel sectors combined, and there are currently over 315,000 manufacturing workers employed in this sector now, which is an increase of nearly 10 percent in 2017. Additionally, studies have shown that energy efficiency jobs are the fastest-growing in the entire energy sector with an additional 133,000 new jobs created in the year 2017 alone.

However, under the Trump administration, DOE has not only failed to publish its legally-mandated efficiency standards, but has instead proposed to take the country backwards by recently announcing two proposals that would negatively impact consumers, the public health, employment, and the environment.

Full Committee Chairman Pallone, Oversight Subcommittee Chairwoman DeGette, and I wrote letters to DOE on two occasions, the first being on November 1st of last year and again last month, on February 5th, requesting information on these delayed standards and a timeline for when the agency expects to take action on these standards. Instead of providing us with direct answers to our straightforward requests, the agency has once again shown what I consider to be contempt for the role of Congress by directing us to hyperlinks that could be found on the Google search engine.

Let me be crystal clear. DOE's failure to update the 16 appliance and equipment standards that were adopted and finalized during the Obama administration violates its statutory obligations under the Energy Policy and Conservation Act.

What's more, this failure to publish new standards will disproportionately harm low-income Americans who are more likely to be renters, and therefore, would save money on monthly utility bills when outdated appliances are replaced with more efficient ones.

This failure to follow the law, which was enacted on a bipartisan basis under President George W. Bush, could potentially cost consumers billions of dollars in energy bills, while also creating uncertainty for domestic manufacturers.

Yet, instead of working on its legally-mandated responsibilities, just last month DOE announced a new proposal to narrow the scope of energy efficiency standards for light bulbs, which would set higher efficiency levels for 3 billion sockets in American homes.

DOE's failure to follow its congressional mandate, along with its shortsighted proposals, will slow down progress and compromise the highly successful standards program that has helped save the average family over \$500 annually off their energy bills.

So I look forward to today's hearing. I look forward to hearing from DOE and I look forward to hearing from the rest of our witnesses.

[The prepared statement of Mr. Rush follows:]

PREPARED STATEMENT OF HON. BOBBY L. RUSH

Good morning, I would like to thank all of our invited guests for being here today to testify at today's hearing entitled: "Wasted Energy: DOE's Inaction on Efficiency Standards & Its Impact on Consumers and the Climate"

As we are all aware, Federal efficiency standards conserve energy, create jobs, encourage American ingenuity and innovation, all while helping domestic manufacturers stay competitive in a global market.

The efficiency sector currently employs 2.25 million Americans, more jobs than all fossil fuel sectors combined, and there are currently over 315,000 manufacturing workers employed in this sector, an increase of nearly 10 percent in 2017.

Additionally, studies have shown that energy efficiency jobs are the fastest growing in the entire energy sector, with an additional 133,000 new jobs created in 2017 alone.

However, under the Trump administration, DOE has not only failed to publish its legally-mandated efficiency standards but has instead proposed to take the country backwards by recently announcing two proposals that would negatively impact consumers, the public health, employment, and the environment.

Full Committee Chairman Pallone, Oversight Subcommittee Chairwoman DeGette, and I wrote letters to DOE on two occasions, November 1st of last year and again last month on February 5th, requesting information on these delayed standards and a timeline for when the agency expects to take action on them.

Instead of providing us with direct answers to our straight-forward requests, the agency has once again shown what I consider to be contempt for the role of Congress by directing us to hyperlinks that could be found on Google search.

Let me be crystal clear, DOE's failure to update the 16 appliance and equipment standards that were adopted and finalized during the Obama administration, violates its statutory obligations under Energy Policy and Conservation Act (EPCA).

What's more, this failure to publish new standards will disproportionately harm low-income Americans, who are more likely to be renters, and therefore, would save money on monthly utility bills when outdated appliances are replaced with more efficient ones.

This failure to follow the law, which was enacted on a bipartisan basis under George W. Bush, could potentially cost consumers billions of dollars in higher energy bills, while also creating uncertainty for domestic manufacturers.

Yet instead of working on its legally-mandated responsibilities, just last month, DOE announced a new proposal to narrow the scope of energy efficiency standards for light bulbs, which would set higher efficiency levels for nearly three billion sockets in American homes.

These Obama-era standards were projected to save consumers approximately \$665 billion through 2050.

This reversal makes absolutely no sense when you consider the fact that these efficiency standards are responsible for sparking innovative designs that have decreased costs, created jobs, and helped domestic manufacturers be more competitive in the global market.

In addition to rolling back light bulb standards, the agency also issued a separate proposal to change its "process rule," making it more difficult for DOE to update new energy efficiency standards for any product in the future, including refrigerators, hot water heaters, or air conditioners.

DOE's failure to follow its Congressional mandate, along with its shortsighted proposals, will slow down progress and compromise the highly successful standards program that has helped save the average family over \$500, annually, off their energy bills.

So I look forward to hearing from today's witnesses on these important issues, and now I would like to recognize my good friend and the ranking member from the State of Michigan, Mr. Upton for his opening statement.

MR. RUSH. With that, I want to yield now to my good friend, the ranking member from the great State of Michigan, Mr. Upton, for 5 minutes for the purposes of an opening statement.

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

Mr. UPTON. Thank you, Mr. Chairman, for holding this important hearing to continue our oversight of DOE's successful appliance and equipment standards program. I look forward to hearing from Assistant Secretary Simmons, who leads the Office of Energy Efficiency and Renewable Energy, which carries out this important program.

In addition to energy efficiency standards, EERE has an important responsibility to manage and invest billions of dollars in cutting-edge research and development, to encourage innovation and

to drive the transition to a clean energy economy. While this is not a budget hearing—that is going to take place in May, as I understand—there have been leaked reports about EERE's FY20 budget proposal, which I am not going to comment on. But I do want to state for the record that we expect EERE to carry out the law as Congress intended and utilize the resources that Congress provides.

Since the mid-80s, DOE has established successive rounds of efficiency standards for a wide variety of household and industrial products, such as air conditioners, refrigerators, washing machines, clothes dryers, furnaces, ovens, dishwashers, water heaters, and light bulbs. I believe DOE's efficiency standards have served as one of the nation's most effective policies for reducing energy use. Efficiency standards have also contributed greatly toward reducing our carbon emissions and environmental impacts, strengthening our energy security for sure, and providing consumers with significant cost savings.

If we are going to have a serious solution-oriented discussion about how to address climate change risks, as I believe that we should, then we must acknowledge the historical progress that we have made with DOE's efficiency program. We also must recognize the challenges and opportunities that lay ahead and remove regulatory barriers to new technological innovations and efficiency gains.

The Energy Policy and Conservation Act of '75, known as EPCA, established the first energy efficiency program, consisting of consumer product testing procedures, labeling, and energy efficiency targets. Over the last number of years, Congress amended EPCA and passed new laws setting prescriptive standards for certain products and directing DOE to establish new standards via rule-making for other categories of products.

For home appliances, Congress requires DOE to conduct a six-year look-back where DOE must publish a new standard or publish a determination that one is not necessary. Congress also requires DOE to maintain a multiyear schedule to regularly review and update all standards and test procedures.

It is long past time that Congress—reexamine EPCA to see if there are ways to modernize the 40-year-old statute to improve DOE's appliance standards program. So, while DOE seems to be doing what it can administratively, with the long-awaited update to its Process Rule, for standard settings, it is up to Congress to review the law and make changes when appropriate.

With that, I look forward to the hearing today, and I yield the remaining balance of my time to Mr. Latta.

[The prepared statement of Mr. Upton follows:]

PREPARED STATEMENT OF HON. FRED UPTON

Thank you, Mr. Chairman, for holding this hearing to continue our oversight of the Department of Energy's successful Appliance and Equipment Standards Program. I look forward to hearing from Assistant Secretary Daniel Simmons, who leads the Office of Energy Efficiency and Renewable Energy, which carries out this program.

In addition to energy efficiency standards, EERE has an important responsibility to manage and invest billions of dollars in cutting-edge research and development, to encourage innovation to drive the transition to a clean energy economy. While

this isn't a budget hearing, there have been leaked reports about EERE's FY 20 budget proposal. I am not going to comment on the leak, but I want to state for the record that we expect EERE to carry out the law as Congress intended, and utilize the resources that Congress provides.

Since the mid-1980's DOE has established successive rounds of efficiency standards for a wide variety of household and industrial products, such as air conditioners, refrigerators, washing machines, clothes dryers, furnaces, ovens, dishwashers, water heaters, and lightbulbs.

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The Energy Policy and Conservation Act of 1975, known as EPCA, established the first Federal Energy Efficiency Program, consisting of consumer product testing procedures, labeling, and energy efficiency targets.

Over the years, Congress amended EPCA and passed new laws, setting prescriptive standards for certain products and directing DOE to establish new standards via rulemaking for other categories of products.

For home appliances, Congress requires DOE to conduct a "six-year lookback" where DOE must publish a new standard, or publish a determination that one isn't necessary. Congress also requires DOE to maintain a multi-year schedule to regularly review and update all standards and test procedures.

It's long past time that Congress re-examine EPCA to see if there are ways to modernize the 40-year-old statute to improve DOE's Appliance Standards Program.

While DOE seems to be doing what it can administratively, with the long-awaited update to its "process rule" for standard setting, it is up to Congress to review the law and make changes when appropriate.

With that, I look forward to the hearing today and I yield the remainder of my time to Mr. Latta, who has taken a lead role over the last several years on bi-partisan EPCA modernization.

Mr. LATTI. I thank the gentleman for yielding.

And I also want to thank our witnesses for being with us today.

My district in northwest-west central Ohio has over 60,000 manufacturing jobs where many of the products covered by the program were made. I hear consistently that manufacturers are not against regulations, but they want and need common-sense regulations that provide certainty to help them plan for their businesses.

Last Congress, I worked on draft legislation regarding updating and modernizing EPCA, and I am pleased to see the work the Department of Energy has undertaken with the process improvement rule. And I believe we need to explore these changes and see what needs to be done in statute.

I believe that energy efficiency is a bipartisan issue, and we should be able to work together in this committee to ensure that DOE is able to put its resources toward the products and categories that will lead to the largest energy savings. This is what consumers expect from us. And giving DOE the tools to meet deadlines, provide more certainty to manufacturers, and therefore, increase innovation and competition to benefit consumers should be our goal.

I recently toured a new, state-of-the-art innovation center in my district. Additionally, we have seen produce line expansions in other facilities across my district. These companies have seen that investing in Ohio was a win for their companies and the communities. Certainly, for businesses like this one, I want to encourage

more investment and innovation, and that is why I want to work with my colleagues on this program.

I will look forward to hearing from DOE and our second panel today about what DOE is doing and what Congress needs to do to continue to strengthen energy efficiency programs.

And I yield back to the gentleman. Thank you very much.

Mr. RUSH. The Chair now recognizes Mr. Pallone, who is the chairman of the full committee, for 5 minutes for the purposes of an opening statement.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman.

Today, we are here to find out why the Department of Energy is dragging its feet in implementing energy efficiency standards that will save consumers money and help combat climate change by reducing greenhouse gas emissions.

For years, promoting energy efficiency was a bipartisan issue. During the Obama administration, DOE finalized 50 new product efficiency standards. Many of these new standards stem from energy bills that this committee passed on a bipartisan basis and were then signed into law by President Bush in 2005 and 2007. In fact, our ranking member, Mr. Upton, played a leading role in that 2007 effort, and we are all benefitting as a result of that bipartisan work.

Sadly, the progress on this important program came to a grinding halt when President Trump was inaugurated. Since then, DOE has made a conscious choice to ignore the law by refusing to finalize or update efficiency standards for 16 products, including refrigerators, washing machines, and room air conditioners. Even more egregious, the Trump administration refuses to publish in The Federal Register four efficiency standards finalized in December 2016. These standards were complete and awaiting official publication, but DOE refused to follow the law and follow through.

And then, last month, DOE announced that it was completely discarding a significant update to light bulb efficiency standards finalized in January 2017. Those standards expanded existing light bulb efficiency guidelines to include a broader range of light bulb sizes such as candelabra and cone-shaped bulbs. Trashing this significant standard will allow inefficient products to remain on the market and increase consumers' electricity bills.

DOE also released a revised process rule which guides how DOE sets appliance efficiency standards. The new rule makes it harder to update efficiency standards. It does this by cooking the economic analysis for new standards so that costs are taken into greater account while narrowing the scope of benefits that DOE will consider. It also allows manufacturers to use their own test procedures to verify a product's energy usage. That is a terrible idea. We should have learned something from the Volkswagen emission test cheating scandal.

Even worse, it is clear from publicly-available documents that political staff at the Office of Management and Budget intervened to make it nearly impossible for DOE to deviate from this new proc-

ess, even when sticking to the process would conflict with legal mandates. But most egregious is the fact that this administration spent the last two years writing proposals that weaken efficiency standards while completely disregarding the law's mandate to update or finalize efficiency standards for 16 products.

While I may have issues with this new process rule, I don't have a problem with trying to make the process more efficient. But when the law says you need to take a specific action, the Department's job is to carry out the law, and not go off and do whatever it wants. And I hope that is something all the members of this committee can agree on.

Today, all of us who care about the issue of climate change have a chance to condemn DOE's delays. National energy efficiency standards for appliances are one of the most cost-effective ways to reduce greenhouse gas emissions, and the program has resulted in 3 billion tons of avoided emissions since its inception.

Every day the administration delays updating efficiency standards for these common household products, consumers' electricity bills remain higher than necessary and more electricity is unnecessarily generated to power these less efficient appliances. And these delays must come to an end.

So Mr. Chairman, I just want to say I know that a lot of times, when we have these hearings on or we talk about energy efficiency, people say, well, how important is that? I can't think of anything really right now that is more important and has the potential of getting bipartisan support, or really has had bipartisan support for a long time, that would actually reduce greenhouse gas emissions.

So when we talk about climate change, this is one of the most important things that we can address. And there is no reason really why the Trump administration should be turning the clock on this, even if they don't believe in climate change. What is the downside, if you will, of having more efficiency, saving money, reducing costs, and reducing greenhouse emissions?

Thank you. I yield back.

[The prepared statement of Mr. Pallone follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

Today we are here to find out why the Department of Energy (DOE) is dragging its feet in implementing energy efficiency standards that will save consumers money and help combat climate change by reducing greenhouse gas emissions.

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Sadly, the progress on this important program came to a grinding halt when President Trump was inaugurated. Since then, DOE has made a conscious choice to ignore the law by refusing to finalize or update efficiency standards for 16 products, including refrigerators, washing machines and room air conditioners. Even more egregious—the Trump administration refuses to publish in the Federal Register four efficiency standards finalized in December 2016. These standards were complete and awaiting official publication, but DOE refused to follow the law and follow through.

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Even worse, it's clear from publicly-available documents that political staff at the Office of Management and Budget intervened to make it nearly impossible for DOE to deviate from this new process—even when sticking to the process would conflict with legal mandates.

But, most egregious is the fact that this administration spent the last two years writing proposals that weaken efficiency standards, while completely disregarding the law's mandate to update or finalize efficiency standards for 16 products. While I may have issues with this new process rule, I don't have a problem with trying to make the process more efficient. But when the law says you need to take a specific action, the Department's job is to carry out the law, not go off and do whatever it wants. I hope that's something all members of this Committee can agree on.

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Every day the administration delays updating efficiency standards for these common household products, consumers electricity bills remain higher than necessary, and more electricity is unnecessarily generated to power these less efficient appliances. These delays must come to an end.

Mr. RUSH. The Chair thanks the gentleman. The Chair now recognizes Mr. Walden, the ranking member of the full committee, for the purposes of an opening statement. Mr. Walden has 5 minutes.

OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. Good morning, Mr. Chairman, and thanks for holding this hearing to continue our oversight over the Department of Energy's appliance and equipment standards program.

I want to extend a warm welcome to Assistant Secretary Dan Simmons, who leads DOE's Office of Energy Efficiency and Renewable Energy. Dan, we are glad to have you here and glad to know you are finally in place. I guess that all took effect officially in January, sworn in. So we appreciate your leadership at EERE.

Republicans are focused on solutions that save energy, help the environment, and save consumers money. So, we, too, welcome the opportunity to explore ways to strengthen and improve this important Department of Energy program.

Since the early 1980s, the Department of Energy has issued minimum energy efficiency standards for a wide variety of residential and commercial products, including air conditioners, refrigerators, washers and dryers, ovens, dishwashers, lighting, and other products that Americans use every day.

The Department's authority to regulate energy efficiency and commercial equipment in residential appliances is derived from the Energy Policy and Conservation Act of 1975, also known as EPCA. While Congress has passed a few updates to this 44-year-old statute, we learned through our oversight hearings in the last few Congresses that more could be done to modernize the law and to improve the process to formulate national energy efficiency standards.

Under the Obama administration and under the Trump administration, the Department of Energy has missed statutory deadlines for efficiency rulemakings. Both administrations have. These delays create uncertainty and they have led to unnecessary litigation, which makes matters even worse.

DOE is doing what it can to fix the process administratively. Under the Trump administration, DOE has completed more than a dozen rulemakings addressing conservation standards and test procedures for products such as external power supplies, light bulbs, ceiling fans, walk-in coolers and freezers, air conditioners, and pool pumps.

Just last month, DOE announced two new proposals. The first would revise the definitions of general service lamps to align with the definitions established by Congress in 2007. DOE was forced to take this action in response to a lawsuit and subsequent Department of Justice settlement agreement reached in 2017.

While some have described this action as a rollback, that is a mischaracterization. DOE has appropriately committed to undertake a separate rulemaking, as Congress intended, for certain specialty light bulbs such as those used in heavy machine and marine applications.

The second proposal, announced in February, would take long overdue steps to reform the regulatory process that DOE relies upon to develop efficiency standards. The Department of Energy's new proposal, an update to the process rule, would substantially improve the process for setting efficiency standards and test procedures.

The proposed rule to the process rule would enhance transparency, accountability, and regulatory certainty for manufacturers and for consumers alike. While it is hard to believe this is the first update to the process rule in more than 20 years, one of the most important things the process rule would do is to define what qualifies as significant energy savings. That seems pretty important to do. This will enable the Department to better prioritize rulemaking, save energy, and put more money back in consumers' pockets.

Under EPCA, there is not a lot of flexibility, which too often has led to unnecessary deadlines and rushed-through Federal regulations that fall short of providing customers the better—quality products that use less energy. We know that unless we amend EPCA, the regulatory backlog will continue, as it has under multiple presidential administrations. So it is up to us, the Congress, to fix this mess. We are ready to work with our colleagues on the other side of the aisle to do so.

Over the last couple of years, Republican members of this subcommittee have been working across the aisle and engaging in a wide range of stakeholders' meetings to identify bipartisan solutions to modernize EPCA. We have made some progress, but there is still plenty to do. So if the Democrats are willing to work with us, we are willing to work with you. And we welcome the opportunity to work with you to continue this effort this Congress.

Again, Mr. Chairman, thanks for holding this hearing, it is really important.

And I yield back the balance of my time.

[The prepared statement of Mr. Walden follows:]

PREPARED STATEMENT OF HON. GREG WALDEN

Thank you, Mr. Chairman for holding this hearing to continue our oversight of the Department of Energy's appliance and equipment standards program.

I would like to extend a warm welcome to Assistant Secretary Dan Simmons, who leads DOE's Office of Energy Efficiency and Renewable Energy. I understand that Assistant Secretary Simmons was officially sworn in in January, so we're glad that he's finally in place to provide much needed leadership to EERE.

Republicans are focused on solutions that save energy, help the environment, and save consumers money, so we welcome the opportunity to explore ways to strengthen and improve this important DOE program.

Since the early 1980's, DOE has issued minimum energy efficiency standards for a wide variety of residential and commercial products, including air conditioners, refrigerators, washers and dryers, ovens, dishwashers, lighting, and other products that Americans use every day.

DOE's authority to regulate energy efficiency in commercial equipment and residential appliances is derived from the Energy Policy and Conservation Act of 1975, also known as EPCA. While Congress has passed a few updates to this 44-year-old statute, we learned through our oversight hearings in the last few Congresses that more could be done to modernize the law and improve the process to formulate national energy efficiency standards.

Under the Obama administration and the current administration, DOE has missed statutory deadlines for efficiency rulemakings. These delays create uncertainty and have led to unnecessary litigation, which makes matters even worse. DOE is doing what it can to fix the process administratively. Under this administration, DOE has completed over a dozen rulemakings addressing conservation standards and test procedures for products such as external power supplies, light bulbs, ceiling fans, walkin coolers and freezers, air conditioners, and pool pumps.

Just last month, DOE announced two new proposals. The first would revise the definitions of general service lamps to align with the definitions established by Congress in 2007. DOE was forced to take this action in response to a lawsuit and subsequent Department of Justice settlement agreement reached in 2017.

While some have described this action as a "rollback," that is a mischaracterization. DOE has appropriately committed to undertake a separate rulemaking, as Congress intended, for certain specialty light bulbs, such as those used in heavy machinery and marine applications.

The second proposal announced in February would take long-overdue steps to reform the regulatory process that DOE relies on to develop efficiency standards. DOE's new proposal, an update to the "process rule" would substantially improve the process for setting efficiency standards and test procedures.

The proposed update to the process rule would enhance transparency, accountability, and regulatory certainty for manufacturers and consumers alike. While it's hard to believe, this is the first update to the process rule in more than 20 years.

One of the most important things the process rule would do, is define what qualifies as a "significant" energy savings. This will enable the Department to better prioritize rulemakings to save energy and put more money back in consumer's pockets. Under EPCA, there is not a lot of flexibility, which too often leads to unnecessary deadlines and rushed sue-and-settle regulations that fall short of providing consumers with better quality products that use less energy.

We know that unless we amend EPCA, the regulatory backlog will continue, as it has under multiple Presidential administrations. It's up to Congress to fix this mess and we are ready to work with our colleagues on the other side of the aisle to do so. Over the last couple of years, as Mr. Latta just mentioned, Republican members on this subcommittee have been working across the aisle and engaging a wide-range of stakeholders to identify bipartisan solutions to modernize EPCA.

We've made some progress, but there is still plenty of work to do. If the Democrats are willing to work with us, we welcome the opportunity to work with you and to continue this effort this Congress. Mr. Chairman, I want to thank you for holding this hearing. With that, I yield back the balance of my time.

Mr. RUSH. I want to thank the gentleman. The gentleman yields back.

The Chair would like to remind Members that, pursuant to committee rules, all Members' written opening statements shall be made part of the record.

And I would like now to introduce our witness for the first panel of today's hearing, Mr. Daniel Simmons, Assistant Secretary Simmons, who is the Assistant Secretary for the Office of Energy Efficiency and Renewable Energy in the Department of Energy.

Mr. Secretary, welcome to this subcommittee hearing. You have 5 minutes for an opening statement.

And before we begin, I would like to explain the lighting system to you. You might be familiar with it, but it is written in here to my script. In front of you is a series of lights. The light will initially be green at the start of your opening statement. The light will turn yellow when you have 1 minute remaining. Please begin to wrap up your testimony at that point. The light will turn red when your time has expired.

We want to thank you again for joining us today, and we all look forward to your testimony. You are now recognized for 5 minutes for your opening statement.

**STATEMENT OF DANIEL R. SIMMONS, ASSISTANT SECRETARY,
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY,
DEPARTMENT OF ENERGY**

Mr. SIMMONS. Thank you, Chairman Rush, Ranking Member Upton, Ranking Member Walden, as well as Chairman Pallone. Thank you for the opportunity for the Department of Energy to appear before the committee today and to discuss the appliance standards program and ways in which the Department is working to improve the process for developing energy conservation standards.

The program within DOE's Office of Energy Efficiency and Renewable Energy implements minimum energy conservation standards for more than 70 categories of labor-saving appliances and equipment and has far-reaching impacts on American consumers and businesses.

As EERE Assistant Secretary, I am responsible for overseeing a broad portfolio of energy efficiency and renewable energy programs, and one of my top priorities is energy affordability.

Affordable, reliable energy is critical to human well-being. When energy is more affordable, it frees up more of our budget and time, so we can spend these precious resources on the things we care about most. Affordable energy is one of the things that makes the EERE portfolio so important. We have seen multiple successes through EERE technologies over the past 10 years, including dramatic reductions in the price of photovoltaic solar, onshore wind, electric vehicle battery packs, and LED lights. Technological innovation is the driving force behind these successes.

In addition to its significant research and development responsibilities, EERE is also responsible for a large regulatory portfolio which implements State energy conservation standards for appliances and equipment.

Since January 2017, DOE has issued seven final rules pertaining to energy conservation standards, two final rules pertaining to test procedures under the appliance standards program. As reported in

the fall 2018 Unified Agenda of Regulatory and Deregulatory Actions, EERE plans to take action on 24 test procedures and 17 energy conservation standards in the coming months. There was a proposed test procedure that we announced yesterday. There will be another one, if not tomorrow, early next week. So we are making progress.

Since the passage of the Energy Policy and Conservation Act of 1975, DOE has used a process for considering new and amended energy conservation standards to ensure that they meet our statutory requirements. That process, which was first formalized in 1996 in DOE's so-called process rule, typically takes a minimum of three years to complete and consists of four phases, each with an opportunity for the public to provide input.

First, DOE publishes a framework document presenting the analytical, procedural, and legal principles that will guide the rulemaking. In the second phase, DOE conducts and publishes a preliminary assessment of available technical, economic, and market data about the product. During the third phase, DOE publishes a proposed rule in which DOE proposes an efficiency level that it has determined will result in the maximum improvement in energy efficiency that is both technologically feasible, and economically justified and would save a significant amount of energy. The fourth phase is the final rule, in which DOE considers public input in response to the proposed rule, further revises the analysis, if appropriate, and issues the final rule.

We have had great success administering the program, and we believe that DOE can further improve the process by which it develops standards to make the program even more effective. This is why we recently proposed to amend the process to enhance early engagement opportunities for stakeholders and increase certainty throughout our rulemaking process.

These improvements will reduce the burden of the process by which standards are developed, preserve product choice for consumers, and prioritize those standards that are expected to save consumers and businesses the greatest amount of energy. In addition, and importantly, these process measures can improve DOE's ability to comply with statutory deadlines that the program has had difficulty meeting throughout its history by focusing 100 percent of our efforts on the rules that have accounted for nearly 100 percent of the historical energy savings.

In addition to the process rule, DOE has also published a proposed rule to maintain the existing statutory definition for general service lamps and withdraw the definitions established in January 2017. Through this proposal, DOE is showing that it will follow the text of the law. Maintaining the statutory definitions provides manufacturers with regulatory certainty that they will not be prohibited from selling hundreds of millions of light bulbs. At the same time, DOE will continue to advance cutting-edge research and development of next-generation lighting technology to further drive improvements in efficiency and affordability.

As Ranking Member Upton mentioned, there was an article this morning about EERE's budget. Obviously, I cannot comment on the budget before it has been released. However, I am more than happy to talk about how we are executing the monies that have

been appropriated for FY 2019. In the last week, we have announced two funding opportunity announcements, one on hydrogen and the exciting technologies there, and another on efficiency improvements on medium- and heavy-duty trucks. So there is a lot going on, and you will see more in the coming weeks. But I, obviously, can't comment on a budget that has not been released.

DOE is committed to working with Congress as it considers these and other important issues of DOE's appliance standards program. Thank you for the opportunity to appear before the subcommittee today to discuss these important energy efficiency issues. And I look forward to your questions.

[The prepared statement of Mr. Simmons follows:]

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Statement for the Record

**The Honorable Daniel R Simmons
Assistant Secretary
Energy Efficiency and Renewable Energy**

FOR A HEARING ON

APPLIANCE STANDARD RULEMAKINGS

**BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON ENERGY**

March 7, 2019

Washington, D.C.

Chairman Rush, Ranking Member Upton, and members of the subcommittee, thank you for the opportunity to discuss the Department of Energy's appliance standards program and ways in which the Department is improving the process we use to develop energy conservation standards. The program, within DOE's Office of Energy Efficiency and Renewable Energy (EERE), has far-reaching impacts on American consumers and businesses, implementing minimum energy conservation standards for more than 70 categories of labor-saving appliances and equipment.

As EERE Assistant Secretary, I am responsible for overseeing a broad portfolio of energy efficiency and renewable energy programs. The technologies in my portfolio advance America's economic growth and energy security while enhancing the reliability and resilience of the U.S. energy system.

One of my top priorities for EERE is energy affordability. Affordable, reliable energy is critical to human well-being. The use of energy helps keep us safe, saves us time, amplifies our work efforts, and reduces the effects of distance, among other benefits. When energy is more affordable, it frees up more of our budget and time so we can spend these precious resources on the things we care about most.

While we have made positive progress toward more affordable energy, there is much more work to do. Economic growth has lifted billions of people out of extreme poverty, but nearly half of the world's population still lives on less than \$5.50 a day.¹ Energy affordability affects people in the United States. According to the most recent results from the U.S. Energy Information Administration's Residential Energy Consumption Survey (RECS), "[n]early one-

¹ The World Bank, "Nearly Half the World Lives on Less than \$5.50 a Day," *Press Release*, October 17, 2018. <http://www.worldbank.org/en/news/press-release/2018/10/17/nearly-half-the-world-lives-on-less-than-550-a-day>

third of U.S. households reported facing a challenge in paying energy bills or sustaining adequate heating and cooling in their homes.”²

When we work towards making energy more affordable, we are helping people who are struggling economically. When we have plentiful and affordable energy in the United States, it helps businesses grow by reducing a critical cost and it makes the United States more competitive globally.

This challenge of affordable energy is one of the things that makes the EERE portfolio so important. For example, we have seen large improvements in many EERE technologies over the last ten years alone. Probably the most cited successes are the dramatic reduction in the price of photovoltaic (PV) solar and onshore wind. But there are other important successes, including the reduction in the cost of electric vehicle (EV) battery packs, significant reductions in the cost of light-emitting diode (LED) lightbulbs, and improvements to the energy productivity of our homes, businesses, and industries.

Technological innovation is the driving force behind these successes. EERE has played a role in reducing the cost of various energy technologies and also the end-use equipment, appliances, and devices that consume energy—both through research and development and through the efforts of the EERE Appliance and Equipment Standards Program.

As reported in the Fall 2018 Unified Agenda of Regulatory and Deregulatory Actions, EERE has 50 active regulations in various stages of development that it plans to take action on in the coming year, the vast majority of which are implementing components of the Appliance Standards Program. This number includes 24 test procedures and 17 energy conservation standards for products ranging from microwaves and lamp ballasts to commercial refrigeration

² U.S. Energy Information Administration, Department of Energy, “One in three U.S. households faces a challenge in meeting energy needs,” September 19, 2018. <https://www.eia.gov/todayinenergy/detail.php?id=37072>

equipment. Since January 20, 2017, DOE has issued 7 final rules pertaining to energy conservation standards and 2 final rules pertaining to test procedures under the Appliance Standards Program.

While we have had great success in administering the program, we believe that DOE can improve the process by which it develops these minimum standards to make the program even more effective. This is why we recently proposed to amend this process to enhance early engagement opportunities for stakeholders and increase certainty throughout our rulemaking process. These improvements will help reduce the burden of the process by which standards are developed, which can be costly and time consuming for stakeholders, and ensure that consumers' interest in avoiding significant increases in upfront cost and a loss of product choice are protected in the standards development process. These process improvements can be done within DOE's statutory mandate to establish energy conservation standards that achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified and that saves a significant amount of energy. Equally as important, these process measures can improve DOE's ability to comply with statutory deadlines the program has had difficulty meeting throughout its history.

Since the passage of the Energy Policy and Conservation Act in 1975, DOE has utilized a process for the consideration of new and amended energy conservation standards intended to ensure that such standards meet the statutory requirements that I just described. That process was first formalized in 1996 in DOE's so-called "Process Rule." The non-binding procedures established by the 1996 Process Rule typically take a minimum of three years to complete and consist of four phases, each with an opportunity for the public to provide input for the Department's consideration.

I'll briefly describe each of the 1996 Process Rule's four phases. In the first phase, DOE publishes a framework document that presents the basic analytical and procedural principles and legal authority that will guide the rulemaking. DOE also solicits feedback from stakeholders on specific questions. In the second phase, preliminary analysis, DOE gathers available data and information about the product's technical, economic, and market characteristics and makes preliminary determinations concerning methods of improving efficiencies and the impacts of doing so. DOE then publishes this analysis and solicits public input. During the third phase, the proposed rule, DOE considers public input from the preliminary analysis, revises its analysis as appropriate, and proposes to the public an efficiency level that it has determined would result in the maximum improvement in energy efficiency that is both technological feasible and economically justified, and would save a significant amount of energy. The final phase is the final rule, in which DOE considers public input in response to the proposed rule, further revises its analysis if appropriate, and issues the final rule. The final rule establishes any mandatory minimum energy conservation standard or sets forth DOE's determination that the current standards do not need to be amended. Typically, a final rule establishing a new or revised standard requires manufacturers to comply with the new standard within 3 to 5 years, providing those manufacturers time to make any investments or changes.

Additionally, during the four phases of the rulemaking process, DOE must also design a procedure to test the products subject to an energy conservation standard to measure their energy use for certification and compliance purposes. Doing so requires both engineering and analytical work to establish a test method that is reasonably designed to produce test results that measure energy efficiency of a covered product during a representative average use cycle or period of use and that is not unduly burdensome to conduct, as well as a rulemaking process to

receive public input. Moreover, the test procedure must be set in advance of determining a potential standard level for a product so that participants in the standards rulemaking have a uniform method by which to understand the technical basis for DOE's standards proposal and how a product's energy use will be measured.

All of this is to say that DOE's standards are not developed with a snap of the fingers. The process by which standards are developed is intended to ensure that all issues are thoroughly considered in the process so that the resulting standard meets DOE's statutory requirements with regard to energy savings, technological feasibility, and economic justification.

However, members of the public, including energy efficiency advocates, regulated manufacturers, their trade associations, and other interested stakeholders, have stated to DOE that there are ways to make the standards development process more effective for participants and result in better outcomes. In response to these well-informed suggestions, and as an important part of DOE's regulatory reform efforts, DOE released a proposed rule to amend its 1996 "Process Rule" to streamline and modernize its methods for setting energy efficiency standards and test procedures for residential appliances and commercial equipment on February 6th.

The proposal would substantially improve DOE's internal framework for establishing new energy efficiency regulations, guided by the principles of transparency, accountability, and certainty for stakeholders. The proposal would, among other things:

- 1) Establish a threshold for "significant" energy savings at 0.5 quads for each standard over the 30 year analysis period. The law requires DOE to regulate only where doing so would save a significant amount of energy. DOE reviewed the 57 standards rulemakings it has issued since 1989 and found that, of these

rulemakings, those that were estimated to save over 0.5 quads of energy totaled 109 quads in cumulative energy savings. These savings represent more than 96% of the total energy savings from all appliance standards since 1989. In contrast, those that saved less than 0.5 quads totaled 4.24 quads of cumulative energy savings over the same time period, or less than 4% of total energy savings. Prioritizing standards that are poised to save more than 0.5 quads over 30 years allows the Department to focus on the rules that have the greatest impact on the environment and save the most money for consumers. As a backup, DOE also proposes an alternative threshold such that each rule would need to achieve at least a 10% energy savings over the current standard so that rules covering fewer products do not slip through the cracks. Drawing the line here seems eminently reasonable given the results of DOE's rulemakings over the course of nearly 30 years. Moreover, this threshold allows us to implement Congress' mandate that the Department regulate only when doing so will save a significant amount of energy without sacrificing the energy savings that consumers and businesses value.

- 2) Require that DOE establish test procedures 180 days before initiating a new energy conservation standard rulemaking. This timeframe is the same as that prescribed in the Department's 1996 Process Rule; however, in the past DOE has not always met this timeframe, and as a result stakeholders have been concerned when DOE regulates the efficiency of products before specifying how energy use will be measured through the test procedure. This provision provides certainty to all stakeholders.

- 3) Clarify that DOE will codify industry consensus standards for test procedures, but only when doing so would accurately reflect energy efficiency, energy use, and estimated operating costs during a representative average use cycle and not be unduly burdensome. This change would insert the statutory criteria for assessing a test procedure into the process and allow manufacturers to test their products at lower cost than when DOE creates a separate testing metric.
- 4) Expand the opportunities for stakeholders to become engaged early in the rulemaking process. DOE interacts with a wide spectrum of stakeholders in the development of new energy conservation standards and test procedures. These stakeholder perspectives are a crucial component of the rulemaking process.

The proposed Process Rule would modernize the framework for DOE's Appliance Standards Program, which has not been updated since its issuance in 1996. This updated framework would require the development of test procedures before energy conservation standards, creating a more transparent and predictable rulemaking process. In addition, the changes that DOE is proposing would focus the Department's resources on the rulemakings that stand to benefit consumers the most by prioritizing the standards that have the potential to save the greatest amount of energy. This change also shows that the Department is truly focused on pursuing standards with the greatest environmental benefit. By prioritizing the rules that are primed to save consumers the most money, the Department is streamlining its rulemaking process and better able to focus on meeting its statutory deadlines.

DOE believes that the proposed changes to the "Process Rule" would result in a fair, well-reasoned and legally compliant process for standards development according to the requirements established by Congress in the Energy Policy and Conservation Act.

In addition to the “Process Rule” improvements, DOE has proposed another rule as an important part of its regulatory reform efforts for the Appliance Standards Program. On February 6th, DOE released a proposed rule to maintain the existing statutory definition of general service lamps and withdraw the definitions established in January 2017. This proposal reduces regulatory uncertainty by making clear that the sale of several lamp types (that is, light bulbs) will continue, including certain halogen A-line lamps, incandescent reflector lamps, globe lamps, and candelabra lamps. Millions of households use these light bulbs every day, and the Department recognizes the importance of access to reliable and affordable options that meet their needs, as well as the importance of consumer choice generally. For the first half of 2018, consumer shipments of the lamps that would have been included under the expanded scope of lamps established by the 2017 final rules totaled approximately 275 million units. Over half of these shipments went to home center stores and discount, variety, and department stores.

Through this proposal, DOE is showing that it will follow the text of the law. Maintaining the statutory definitions provides manufacturers and retailers with the regulatory certainty that they are not prohibited from selling hundreds of millions of bulbs. At the same time, DOE will continue to advance cutting-edge research and development of next-generation lighting technologies to drive further improvements in efficiency and affordability.

DOE is committed to working with Congress as it considers these and other issues of importance to DOE’s Appliance Standards Program. Thank you for the opportunity to appear before the Subcommittee today to discuss these important energy efficiency issues, and I look forward to your questions.

Mr. RUSH. I want to thank the Assistant Secretary.

We have now concluded the opening statement. We will now move to Member questions. Each Member will have 5 minutes to ask questions of our witnesses, and I will start by recognizing myself for 5 minutes.

Assistant Secretary Simmons, it is very, very disturbing to me that DOE, under the current administration, has invested so much valuable time in working on two new proposals that are both unnecessary and would actually harm consumers. Yet, at the same time, it has spent little to no time in publishing the legally-mandated efficiency standards that it should have been working on.

Mr. Assistant Secretary, is it your interpretation that DOE has the discretion to choose when or if it must follow congressionally-mandated laws and obligations?

Mr. SIMMONS. No, we must follow the text of the law.

Mr. RUSH. Well, what is the reasoning for these delays in publishing these mandates that are congressionally-directed to the Department?

Mr. SIMMONS. So the law requires, the law sets out certain deadlines. The law also requires, for setting standards, what we need to determine is the maximum improvement in energy efficiency that is both technologically feasible and economically justified. And there are seven different factors that go into deciding whether something is economically justified.

That process can take a decent amount of time to consider what is a maximum improvement in energy efficiency that is possible, what is technologically feasible. That process can take literally years to consider, especially because we are not allowed to reduce the performance characteristics of products. So the process can take a long time to go through, and it is important that we do a good job following the process to make sure the substance of the rules—

Mr. RUSH. Mr. Secretary, was this process that you are currently discussing, wasn't this analyzed during the last administration? And all that remains of you and the Department today is to publish these standards?

Mr. SIMMONS. If you are talking about the four rules that are currently in litigation that were not finalized by the Department by sending them to The Federal Register, those are currently in litigation, and because they are in litigation, I can't discuss those rules.

Mr. RUSH. Well, what about the other 12 rules that are not in litigation?

Mr. SIMMONS. Those rules are currently moving forward. As you said, we have a statutory obligation, we have a legal obligation to complete those rules, and we are working on those rules. If those rules were ready to go, we would be sending them to The Federal Register, but there are no rules that—

Mr. RUSH. Mr. Secretary, we know that a typical household saves about \$500 per year because of the current standards, making energy conservation standards the most efficient tool DOE has for making anything more affordable for the average American. Additionally, the cost of LED lights has decreased significantly over the past 10 years. You have even stated publicly that these bulbs have dropped over 90 percent in price over the past decade. According

to the Appliance Standards Awareness Project, this proposed light bulb rollback will cost the average American household an extra \$100 a year, and overall, consumers will be forced to pay an additional \$12 million between now and 2025 on electric bills.

So my question to you is, why are you rolling back the light bulb standards? What is the reason or justification for this action on your part? And who exactly are you trying to help by this proposed rollback?

Mr. SIMMONS. To clarify, we are not rolling back a standard. We are defining what is a general service lamp by using the text of the statute. We are following the law about what is a general service lamp. That is a change in definition from what was previously put in place, but it is critical for us to follow the law, including for things that may result in energy savings.

One of the things that I will note is that I am very skeptical of large amounts of harm to the American people because they have greater selection of light bulbs available to them. This definition does not take any light bulbs off the table, and if you go to Home Depot today, you will see, for example, you will see where the lighting industry is headed and that that future is LED lights.

Just the other day, I bought some of the lights that are not required, would not be required to be LEDs. I bought them as LEDs when I was at Home Depot. The future is LED. The future is greater energy conservation in lighting.

Mr. RUSH. My time is up. The Chair will now recognize Mr. Upton for 5 minutes to ask questions.

Mr. UPTON. Well, thanks, Mr. Chairman, again.

I have long been a supporter of DOE's work on appliance standards, but I realize we have to be realistic about the challenges. And I know that you have got a good number of delayed rulemakings that has built up over a number of different administrations.

And I just want to go back to a comment that I made in my opening statement about the process rule. This is the look-back. Why is it so important to update that process rule, and how will some of the changes, such as defining significant energy savings, help prioritize in that effort?

Mr. SIMMONS. I think the most important thing for DOE to do is to follow the process rule. When the Clinton administration in 1996 put the process rule in place, it was overall a good rule. And what is critical is that we follow all the steps, as in that we have a test procedure and that test procedure is finalized to know how we are measuring energy before we discuss how much energy an appliance can use, because you can't—that just can result in disconnects. And that has not always happened.

So what we really wanted to stress, first and foremost, is to follow the process that was outlined in 1996. Second, the best way that we achieve substantive good rules, good rules substantively, is to make sure that there is robust stakeholder engagement, robust public engagement. And the best way we do that is by going through the process. That can take time, as we have seen.

Mr. UPTON. And how has the look-back requirement hampered your ability to comply with the statutory deadlines, the six-year look-back?

Mr. SIMMONS. Well, one of the challenges is that there are some circumstances where a rule, a compliance date—we have a compliance date, and then, we have to start looking at a new rule just after that. One example is with clothes dryers. There was a compliance date of January 2015, but, then, the program started to look, in March of that same year, at regulating the product again. And that sort of thing has also happened with commercial clothes washers, where work started on a new rule even before the previous rule was finalized, even before the compliance date.

Mr. UPTON. So would it be better, as we try to address this or think about the future, would it be better to have it maybe six years after the rule is finalized and, actually, the product in use at that point?

Mr. SIMMONS. There is definitely an argument to be made that, after the compliance, it could be after the compliance date. Because the challenge is that we have to look at what is out on the market. We have to look at the art of the possible. And that is difficult to do when you have a compliance date and then, we start a couple of months later looking at revising the standard.

Mr. UPTON. The last question I have—and we are going to talk a little bit about this on the second panel—DOE has been sued, we know, by efficiency advocates and product manufacturers over missed deadlines. What are you doing to improve the transparency in the rulemaking process, so that consumers can be confident that the new products that they are purchasing meet that expectation for quality, convenience, and, obviously, for energy efficiency?

Mr. SIMMONS. Well, the biggest thing we are doing is following the process and moving stepwise through the process, making sure that we are conducting a process that is overall open and transparent, and that there is stakeholder engagement, and there is plenty of time for public comment. Because the public comment is critical to making sure that we get rules that are, in the end, substantively beneficial.

Mr. UPTON. Is there fairly universal agreement that, when you go to an appliance store, whether it be Best Buy or someplace else, that, in fact, the labels on those appliances, whether they be air conditioners or freezers, or whatever it is, are sufficient for the consumer in terms of what that energy savings is going to be?

Mr. SIMMONS. I don't know, I don't know the answer to that question.

Mr. UPTON. Have you heard any complaints? I mean, it seems like the labeling is pretty apparent.

Mr. SIMMONS. The labeling is very apparent with the EnergyGuide standard that the Federal Trade Commission puts on them, using our data. Is that sufficient? I don't know. That is a really good question.

Mr. UPTON. OK. Mr. Chairman, I yield back. Thank you.

Mr. RUSH. The Chair now recognizes Mr. Peters of California for 5 minutes.

Mr. PETERS. Thank you, Mr. Chairman.

And I thank the Assistant Secretary for coming before the committee.

Many of the policies under your portfolio are debated here in DC. I think there is a widespread recognition that energy efficiency is

something that can be a bipartisan issue. In California, with the buying power of nearly 40 million people, our energy efficiency goals support the notion that we could do much more at a Federal level.

In these meetings, we sometimes get caught up in the law that exists and how to administer it. I just want to take a minute to ask you if there are ways you think that the Congress could help support more energy efficiency, either by enacting new legislation or by fixing legislation that you are having to deal with. Are there things that you are seeing that we could be doing better to promote energy efficiency?

Mr. SIMMONS. Well, when it would come to legislative changes, that would need to go through the appropriate process, which, unfortunately, wouldn't just be me today. But one of the things that I would like to stress is Congress provides robust funding to the Building Technology Office, which does research and development on looking at new building technologies, such as solid-State heating and cooling for next-generation appliances. We will be announcing the funding opportunity from the Building Technology Office for a number of different topics in the next few weeks.

And so there is the regulatory angle, but, then, there is also the R&D angle. And I think that we consider both. Off the top of my head, I don't have any statutory changes, but I would be happy to go back to the Department and to work on some ideas.

Mr. PETERS. Well, the reason I am asking you is that this is the process for finding out if we need to make legislative changes. You are in a position to observe kind of how the administrative rules that have been set up by prior Congresses and rulemaking are working. So I just want to give you the opportunity, if you see anything that you think needs to be improved or any way in which you are restricted from doing what would best serve energy efficiency, I want to give you that chance. If you don't have that today, that is fine, but I think this is the right place to do it, if you have those suggestions for us.

Mr. SIMMONS. And I will be happy to try to provide some comments in the questions for the record on that.

Mr. PETERS. OK. I appreciate it. I mean, it is sort of a left-field question maybe, but any thoughts on that would be helpful to us.

Mr. SIMMONS. Sure thing.

Mr. PETERS. I also want to reiterate what Mr. Upton said, that the integrity of the labeling and the measurements for appliances is going to be very important. There are some discussion of whether we should have market incentives that would encourage consumers on their own to make purchases with energy savings in mind, if a carbon tax would be an appropriate price signal through the economy. But if they don't have the right information about those appliances, it is not going to be as efficient as, theoretically, people think it would be. So again, I appreciate working with you to make sure that those labels are correct and that your information is relied on. It is by the FTC, I guess, is that right?

Mr. SIMMONS. Yes, yes. And I use those labels when I look at new products and I am figuring out what to put in our house. I hope they are accurate. I haven't heard that they are not. But it is definitely an area where there could be research.

Another part is with the ENERGY STAR labeling program to label the products that are the most energy-efficient. We work on that with the EPA.

Mr. PETERS. Right.

Mr. SIMMONS. And that labeling has very high adoption and is very much appreciated by consumers.

Mr. PETERS. Since you brought it up, I mean, you don't directly administrate it, but do you have comments on the ENERGY STAR program?

Mr. SIMMONS. Well, we jointly administer it with EPA. I don't have any comments on ENERGY STAR today.

Mr. PETERS. All right. Well, thank you.

Mr. Chairman, I yield back.

Mr. RUSH. The gentleman yields back. The Chair now recognizes the ranking member of the full committee, Mr. Walden, for 5 minutes.

Mr. WALDEN. Thank you, Mr. Chairman.

And again to our witness, thank you, Mr. Simmons, for being here.

I want to follow up on what our colleague from southern California was talking about because I think it is important for both sides of the aisle. Congress bears some responsibility here. We write the laws that you get to administer, and sometimes we don't always get it right.

Over the last few years, the committee has conducted some pretty rigorous oversight and we have received testimony that highlights the importance of EPCA modernization. So I would just pose it this way: I understand you can't take positions on legislation initially sitting there right today. But will you commit to working with the committee by providing your comments and technical assistance as we work to modernize this law?

Mr. SIMMONS. Yes, definitely.

Mr. WALDEN. Thank you, because I think that would be really helpful. You have got the technical people, and we are going to write the law, and we both want to get it right for consumers.

I have got a couple of questions. Like you, when I buy new appliances for my home, I look at those ratings. They are helpful. I think the more we can empower consumers to make the right choices to save energy, reduce emissions, and cut costs is a good thing for the country and for the world. I just have a couple of questions, since I have you here, about how all that works.

When you are doing this analysis on various appliances, whether it is a water heater or a washer or dryer or an air conditioner, is that based on more than one sort of temperate zone? I mean, is it all based out of savings in Arizona or savings in Michigan? How does that work? I know it is an average. I get that. But our power costs in the Northwest, thankfully, are a little lower than some parts of the country, but our climate is different, too. So as a consumer, what should I know about that labeling?

Mr. SIMMONS. Well, with the labeling, I think it can be kind of difficult because on like the EnergyGuide label, I believe it is the average electricity rates in the entire country. Since you are from Oregon, Oregon has a lot of hydro and has some of the lowest elec-

tricity rates in the country. So those numbers are kind of high for—

Mr. WALDEN. And lower emission rates, too, just to stick it into the record.

[Laughter.]

Mr. SIMMONS. Correct. And so that is a challenge with those kind of labels in a place like Oregon.

Mr. WALDEN. Yes.

Mr. SIMMONS. They are going to overrepresent the amount of electricity, for example, that people would save because that is a national average. For various products such as furnaces, we do look at performance in different zones of the country because a furnace that is for the Northeast doesn't necessarily need to be as efficient because—well, it needs to be more efficient, I should say, than a furnace that is in Atlanta, for example.

Mr. WALDEN. Right, where it wouldn't be used as much.

Mr. SIMMONS. Where you might not have to use it very many hours out of the year.

Mr. WALDEN. Right.

Mr. SIMMONS. And so the payback is different. So we do consider different climate zones. I believe some of the analyses that we do have seven different climate zones, if I am not mistaken.

Mr. WALDEN. OK. And is that reflected on the labels then?

Mr. SIMMONS. That is not reflected on like the EnergyGuide label, I do not believe.

Mr. WALDEN. So as a consumer, how would I know, then, the differences that may occur in these seven zones, if it is seven?

Mr. SIMMONS. Some products may not be available in your area, for example, but I am not sure of how a consumer would know which zone they are in, as well as what the energy prices are in that part of the country.

Mr. WALDEN. Yes. You would think, with today's Information Age technology, you could have a code that you could scan, and it would link to a database or something and give you more realistic data.

I will probably get myself in real trouble here, but when I shop for a car and look at the miles per gallon that EPA says that car is going to get, I have yet to have had that actually work out that way. And so I think, as a consumer, I want labels I can trust and data that I know I can factor into my equations. And so that would be something I would love to work with you on.

Mr. SIMMONS. OK.

Mr. WALDEN. We want it to be practical, too. I get that. But the cost of energy is really important, and I know the Green New Deal was just evaluated to drive up electricity costs by 22 percent. So if they are going to march forward with that proposal, it is going to become even more important that we look for ways to save energy everywhere we can, if they are going to drive up energy costs 22 percent for American consumers. That seems like a pretty big hike in energy costs.

With that, Mr. Chairman, I appreciate the hearing.

And, Mr. Simmons, thanks for being willing to take on this task, and we look forward to working with you in a bipartisan way on

technical assistance, as we work to improve this program. It is really important to consumers.

Mr. SIMMONS. Thank you.

Mr. WALDEN. Thank you.

Mr. RUSH. I want to thank the ranking member. The Chair now recognizes the chairman of the full committee, Mr. Pallone, for 5 minutes.

Mr. PALLONE. Thank you, Chairman Rush.

In the last two years, the Department has blown through 16 legally-mandated deadlines to finalize changes for appliances. Instead of updating these standards, DOE has spent this time crafting a draft rule to get rid of efficiency standards for light bulbs that are projected to save the average household \$100 per year on its electricity bill in 2025.

Now I sent a thorough letter to Secretary Perry in November of last year asking for, among other items, documents related to the Department's schedule for action on appliance standards rulemakings that are overdue. And what I received in response—and I actually have a copy of it here, Mr. Chairman; I'll ask unanimous consent to put it in the record—this was the response.

Mr. PALLONE. It was a three-line letter that said, quote, "Attached is a list of hyperlinks," and that was followed by five pages of links to different portions of the DOE website. I think, honestly, sir, this ranks up there as one of the most disrespectful and uncooperative letters I have ever received from a Federal agency.

I, then, resent the letter last month. And while the response this time around was more accommodating, it still left many questions unanswered. One of the items that DOE provided was the December 2018 Report to Congress. That is this document that contains, in my opinion, no useful information about what actions DOE has taken on these 16 products. It simply states, and I quote, "in development" for many of them. Frankly, unless I am shown otherwise, I am going to assume that "in development" means that the Department hasn't done anything.

So my question is, Mr. Secretary Simmons, will you commit to finishing these standards that the DOE is legally mandated to update? And I am just looking for a yes or no. Will you commit to finishing these standards—

Mr. SIMMONS. Yes.

Mr. PALLONE [continuing]. That are legally mandated?

Mr. SIMMONS. Yes.

Mr. PALLONE. OK. Will you finish them in six months?

Mr. SIMMONS. Probably not.

Mr. PALLONE. How about by the end of the year?

Mr. SIMMONS. Some will be, some are possible, but it is important that we meet our legal deadlines, but it is also important that we meet these substantive requirements of EPCA.

Mr. PALLONE. Well, look, I want to say—

Mr. SIMMONS. And there are many substantive requirements.

Mr. PALLONE. I know; I understand, but, it just seems to me you are not going to follow the law. The law says that you have deadlines. If you had said six months, I would have said OK. And then, I say the end of the year; you say, "I don't know, maybe." To me, that is a clear indication that there is not a serious effort here. I

think that we really need to see some action now to update and finalize these critical efficiency standards because they save consumers money and reduce greenhouse gas emissions.

I have one more question, Mr. Simmons. I am going to shift gears to quote from a letter for the record we received for today's hearing, which I would ask to be included in the record. I would ask unanimous consent, Mr. Chairman.

This is from Alexander Karsner, who was the Assistant Secretary for Renewable Energy under President Bush.

Mr. RUSH. Hearing no objections, so ordered.

Mr. PALLONE. Thank you, Mr. Chairman.

[The information appears at the conclusion of the hearing.]

Mr. PALLONE. Let me just quote from this, and then, I am going to ask you a question, Mr. Simmons. This is a quote from that letter. "I want to affirm to all the members of this subcommittee today that there is no basis in science, technology, policy, or economics for these new proposals for the administration to roll back progress or to undermine bipartisan lighting standards. The administration's proposals are measurably harmful to consumers, to markets, and to the environment. Further, there is no reason for the Department to continue missing statutory deadlines to promulgate new efficiency standards and remain in compliance with the will of Congress. These hurdles have been overcome already, and the failure to continue progress simply reflects a lack of acumen, denying the benefits of innovation for the many, in favor of the profits of a few."

As I said, this is not from a national environmental group or a major consumer nonprofit. It is a letter from Alexander Karsner, who was Assistant Secretary from 2006 to 2008 during the George Bush administration. Basically, Mr. Karsner held your job under President Bush, and he finds it hard to understand why DOE has missed so many standards.

Do you have any response to that comment by Mr. Karsner, Mr. Simmons?

Mr. SIMMONS. Sure. I don't know that he has read the law.

Mr. PALLONE. OK. Well——

Mr. SIMMONS. As in, we took this action——

Mr. PALLONE. That is pretty sorry.

Mr. SIMMONS [continuing]. Because it most closely conforms with the statute. It most closely conforms with the text of EPCA. That is the reason that we did it. You can make all the other arguments, but we need to do this because it is the most legally supportable.

Mr. PALLONE. Well, I think it is pretty sad. Quite frankly, the record of the appliance and equipment standards program under the Trump administration is dismal, and I think it is time for the Department to step up to the plate and begin acting on these standards. It doesn't seem like you will, but, hopefully, you will.

Thank you, Mr. Chairman.

Mr. RUSH. The Chair wants to thank the full committee chairman. The Chair now recognizes Mr. Latta of Ohio for 5 minutes.

Mr. LATTA. Well, thank you, Mr. Chairman.

And, Mr. Assistant Secretary, thanks very much for being with us today.

My first question is, why is it important to establish a threshold for significant energy savings?

Mr. SIMMONS. Sure. We did an analysis and we looked at the rules that we have done in the past and how much energy savings there has been for those rules. What it turns out is that 60 percent of the rules that we did resulted in 96 percent of the overall energy savings. What that means, if you look at it on the flip side is that we spent 40 percent of our time on rules where we only saved 4 percent of energy savings overall. So that is an issue.

What the difference is, is that on rules where you save over .5 quads over 30 years, that is rules where you save over .5 quads over 30 years, those are the 60 percent of rules that resulted in 96 percent of the savings. So what we want to do is to make sure that we are saving over .5 quads in a rule, because those are the rules where there is the most bang for our buck, the most energy savings for the time that we spend on it. And so it is critical to focus our efforts there because I believe it will help us meet our regulatory deadlines as well as making sure that we have rules that are substantively defensible.

Mr. LATTA. Thank you.

One of our witnesses in the next panel specifically mentioned the example of DOE's proposed standard for dishwashers and how the standard was such that dishwashers could no longer get the job done. It is a good example of something I would like to make sure DOE was taking into consideration. How will DOE ensure that a proposed standard does not and will not negatively impact a product's performance?

Mr. SIMMONS. So this is a very important issue because we are forbidden by statute to impose a standard that would decrease performance or reduce product features. However, there are some examples where reasonable people could disagree. One of the things, for example, where we have found it is a feature is on an oven, whether or not there is a window. We have found that that is a feature, but people can and have disagreed over things such as whether the venting for a water heater, is that venting a performance feature or not? So this is an important area for us to look at. It is important for us to ask questions of the public, of stakeholders, to make sure that we have rules to make sure that products are doing a good job of saving people's time, because people's time is an important—

Mr. LATTA. I think it is important because, again, this is from a dishwasher or a washing machine, or something else, or a dryer, that someone finds that you have to keep pressing the button to get something done. So actually, in the end run, you are losing more energy because you have to keep using that product, the appliance over and over and over. So I think it is really important that DOE takes that into consideration.

Let me move on. In your proposed update to the process rule, one of the new changes, it would make the process rule binding on DOE. My understanding is that this will mean that DOE will be required to follow the process and requirements established in the process rule when proposing future energy efficiency standards. Is that correct?

Mr. SIMMONS. That is correct, yes.

Mr. LATTI. OK. And could you please explain why the Department believes that this is a necessary change in the process rule then?

Mr. SIMMONS. Sure. So when the process rule was started in 1996, one of the key features is that you have test procedures before you have—you finalize a test procedure. You know how you are going to measure energy before you set the standard for the energy or before you have a proposal for setting the standard for energy consumption. That wasn't always followed. And as a result, it becomes difficult to understand where the standards should be if you don't know what the test is. Because that had been messed up in a number of rules or there had been a lack of following that procedure, we wanted to emphasize that that procedure is very important, so that we get the substance of the rule correct.

Mr. LATTI. Well, thank you very much, Mr. Chairman. I yield back the balance of my time.

Mr. RUSH. The Chair thanks the gentleman. The Chair now recognizes Mr. McNerney for 5 minutes.

Mr. MCNERNEY. Thank you, Mr. Chairman. The gentleman from California assumes the microphone.

Thank you for your testimony this morning, Mr. Simmons. And I appreciate your point about focusing on standards that have the most impact in terms of energy savings. However, by not regulating appliances with less than half a quad of energy, you are, in effect, causing consumers to pay increasing electricity costs, wouldn't that be true?

Mr. SIMMONS. Well, not necessarily. Let me be clear about what it is. It is half a quad of savings or, then, 10 percent. So even if it doesn't meet the half-a-quad savings, if there is a product that we could still achieve a 10 percent increase, we would also increase, could increase the standard for that product as well.

Mr. MCNERNEY. OK. That may be true, but, still, you are leaving a lot of products without standards, and that is going to cause consumers to pay more for their electricity. And this would, in fact, impact the lowest-income Americans, given the elasticity of electric spending. So we are doing consumers a disservice here.

Also, my understanding of the Energy Policy Conservation Act of 1975 is that it identifies products that DOE should set standards for energy efficiency and update them every seven years. But you are now saying that the DOE will not update any standards unless they meet your process rule. This violates the Congress' intent of constantly updating standards. What is your response?

Mr. SIMMONS. No matter what—I mean, I think that is a misinterpretation of what we are saying in the process rule. Because we have to meet the statutory requirements, regardless of the process rule. Because we understand that the process rule is not allowable us some kind of loophole to not follow EPCA.

Mr. MCNERNEY. So does the process rule state that it will not update any standards unless they meet the process rule? I mean, isn't there some sort of a block here?

Mr. SIMMONS. No, the process rule is saying that we will review the standards and we need to make sure that it meets the requirements in EPCA.

Mr. MCNERNEY. So by reviewing standards, it doesn't mean updating standards and upgrading standards?

Mr. SIMMONS. And EPCA does require us to update standards. For example, at the end of the previous administration—and we have the Acting Assistant Secretary at the time here—the Obama administration did not update the standard for dishwashers. And I am sure Mr. Friedman can talk to you about that.

Mr. MCNERNEY. OK.

Mr. SIMMONS. Update? Did not increase the standard for dishwashers, I should say.

Mr. MCNERNEY. OK. Should we be expanding the amount of covered products, moving away from dishwashers and refrigerators to routers and telecommunications products?

Mr. SIMMONS. Well, it is not the position of the administration to expand the scope of covered products.

Mr. MCNERNEY. And these products are often called vampires because they sit there and they consume power 24 hours a day, whether they are being used or not. So I think there is a need to be looking at those kinds of products as well.

Mr. SIMMONS. One note on that is that the industry for dealing with set-top boxes did a voluntary program, so that your DVR, your set-top boxes for TVs, to voluntarily set a standard for set-top boxes, so that they improve the energy efficiency. And they have dramatically increased the energy efficiency of those products through a voluntary program.

Mr. MCNERNEY. I am a little skeptical of voluntary programs with these industries.

But I don't have any more questions, Mr. Chairman.

Mr. RUSH. The Chair thanks the gentleman. The Chair now recognizes the gentle lady from Washington State, Mrs. McMorris Rodgers, for 5 minutes.

Mrs. RODGERS. Thank you, Mr. Chairman.

First of all, congratulations on your appointment—

Mr. SIMMONS. Thank you.

Mrs. RODGERS [continuing]. And confirmation to serve as Assistant Secretary for Energy Efficiency and Renewable Energy.

The Obama administration published new efficiency regulations at a record pace. The current administration appears to be taking a more deliberative and focused approach to achieve the maximum improvement in energy efficiency that is also technologically feasible and economically justified.

I wanted to ask you to speak to the vision, your vision, for DOE's appliance standards program in general.

Mr. SIMMONS. Overall, the most important thing to me is that we are meeting our legal requirements. That is what matters. And those legal requirements are the deadlines, but they are also the substantive requirements in the statute. The way that I think that we do the best job of meeting those substantive requirements is to follow the process laid out in the 1996 process rule, and I think it is, hopefully, improved with our proposed updates to the process rule. It is important to follow the law. I am a member of the Executive Branch; my job is to execute the law, and that is our number one priority.

Mrs. RODGERS. I certainly appreciate hearing that from anyone in the Executive Branch.

Another question. The appliance standards program has been around for decades. Is it true that many home appliances have already been subjected to three, or even more, rounds of successively tighter standards?

Mr. SIMMONS. Yes.

Mrs. RODGERS. Does the law require DOE to continue tightening these standards with no end in sight, even if you are seeing substantially diminishing returns?

Mr. SIMMONS. So what the law requires, a maximum improvement in energy efficiency that is technically feasible and economically justified. That is what we are required to look at. That doesn't mean that the standard has to be increased, particularly where a product has been regulated multiple times and there just isn't as much energy efficiency to squeeze out. Now, that said, we are working on research and development, so that there could be more headroom for opportunities for the future, as in things such as solid-State lighting. That is a good example of R&D creating more efficient products over time.

Mrs. RODGERS. Thank you very much.

Mr. Chairman, I yield back.

Mr. RUSH. The Chair thanks the gentle lady. Now the Chair recognizes the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chairman.

Assistant Secretary, welcome, and thank you for your testimony.

I want to echo my colleagues' concerns over DOE's implementation of the standards program since 2017. DOE investments and policies have resulted in once unfathomable cost reductions in LED lighting, somewhat an American technology success story, with the United States now leading the world in LED technology. These bulbs are available in the same shapes as the incandescent and halogen bulbs they replace and produce the same quality of light much more efficiently. This is the energy innovation all Members claim they want.

So, Mr. Secretary, do you have a sense of those cost reductions over the last decade?

Mr. SIMMONS. Over the last decade, I believe it is greater than 90 percent for LED lighting.

Mr. TONKO. Which is a great bit of success. Certainly, Federal R&D investments have played a role, but is it fair to say that at least some of this cost reduction can attributed to market conditions created by energy conservation standards?

Mr. SIMMONS. It could be.

Mr. TONKO. I would say that it is probably more than some, and that these kinds of savings are achievable precisely because we have had a robust energy conservation standards program. So, Mr. Secretary, is it accurate that LED replacement bulbs are widely available, use less than one-quarter of the amount of energy to produce the same amount of light, and can last as long as 10 years?

Mr. SIMMONS. Yes.

Mr. TONKO. So I would like to unpack two issues from the February Notice of Proposed Rulemaking. In 2007, in a law signed by

President Bush, Congress included a backstop light bulb standard to ensure a minimum level of savings starting in 2020. Since DOE did not act by the 2017 deadline, can you explain why some officials have suggested that the statutory backstop hasn't been triggered?

Mr. SIMMONS. Sure. So on the backstop there, it requires us to first make an assessment. We were forbidden from doing that through an appropriations rider for years. We were not allowed to expend funds to do the work necessary to make that finding. And without making the finding, then the backstop doesn't happen or—

Mr. TONKO. So what happens, then, in January of 2020?

Mr. SIMMONS. Well, currently—

Mr. TONKO. What does this mean in that regard?

Mr. SIMMONS. Currently, the backstop would not kick in because we haven't done the condition precedent.

Mr. TONKO. Isn't that against the law, the letter and spirit of the law?

Mr. SIMMONS. We were forbidden from doing the work necessary to make the finding by the law by appropriations law.

Mr. TONKO. So I think the concerns for affordability and energy efficiency enhancement are then lost because of that.

The second issue is that the proposal would change the definition of general service lamps to exclude certain shapes of bulbs that go into almost half of America's light sockets from the 2020 standard. You have spoken about energy affordability, and I share that goal, but can you explain how this proposal promotes energy affordability?

Mr. SIMMONS. Well, first and foremost, the proposal complies with the law, and that is the most important thing, as in it could save all the money in the world, but if it is illegal and we get sued, we would lose. And so first and foremost, our definitions are the statutory definitions of what is a general service lamp.

Second of all, as I noted earlier, I truly believe that the future is solid-State lighting, LEDs and other lights in the future, other types of lighting such as OLEDs. And many of these lights are available today, and I believe—well, I believe—I know that there is massive uptake of consumers purchasing even the lights that are not defined as general service lamps.

Mr. TONKO. But if the letter and spirit of the law is to address affordability and energy efficiency growth, why wouldn't we just embrace that opportunity to have that much more available for consumers and consumers' savings?

Mr. SIMMONS. We can only do what we are legally allowed to do, and this is an area—

Mr. TONKO. Well, but the law also says there cannot be any rollback in progress.

Mr. SIMMONS. Which there has not been. What there has been is a change in definition.

Mr. TONKO. But it is a rollback if you have all of this opportunity now with this additional amount of sockets. These are huge savings for the consumer, for households, and an improvement in energy efficiency.

Mr. SIMMONS. Well, and I believe that the vast majority of consumers are going to achieve those savings because many of those products are currently on the market and people will purchase LEDs. I mean, that is the trend in the market today.

Mr. TONKO. Could some people conclude that that was a backsliding, that you denied those opportunities that were enhanced in 2017?

Mr. SIMMONS. Well, the Department does not think so.

Mr. TONKO. Well, do you think so?

Mr. SIMMONS. Now NRDC is on the next panel. They might have a different opinion on that probably.

Mr. TONKO. But do you think so?

Mr. SIMMONS. No.

Mr. TONKO. Do you think that is a backsliding?

Mr. SIMMONS. I and the Department do not.

Mr. TONKO. Do you see it as a denial of a great amount of efficiency improvement?

Mr. SIMMONS. There could be efficiency improvement, yes.

Mr. TONKO. Could be?

Mr. SIMMONS. There would be efficiency improvement.

Mr. TONKO. So you would deny that?

Mr. SIMMONS. Well, I am a little bit lost in terms of what I would be affirming or denying. But I am not sure about the exact question, sir. I'm sorry.

Mr. RUSH. The gentleman's time has expired.

Mr. TONKO. I yield back, Mr. Chair.

Mr. RUSH. The Chair now recognizes my good friend from the State of West Virginia, the one and only Mr. McKinley.

Mr. MCKINLEY. Thank you, Mr. Chairman.

And thank you, Mr. Simmons, for appearing before us.

Yes, I look down the dias and I look at some of the folks that I have worked with in the last seven or eight years on energy efficiency, with Peter Welch and Tonko. We have put several things together, and I think we have been successful. And I like working on energy efficiency. As one of just two engineers in Congress, it makes a lot of sense for an engineer to be involved in this.

But one of the issues that I don't understand, from the previous administration we couldn't get any traction. I am curious to see whether or not in the efficiency—we make our buildings more and more, particularly homes, they are probably the most demonstrative way that we can see that they are improving on energy efficiency. But, in so doing, the previous administration, they turned their back. The previous groups have turned their back on the indoor air quality. Because the more efficient, the more tighter we make our buildings, the less we are having fresh air and air turnovers.

So I am curious to see how you are going to reconcile energy efficiency and a healthy environment on the inside of our buildings. Because we know that if we do the two to five air turnovers in any one given room, it is going to increase the utility cost to the consumer at that point. And what they do in schools, they just turn that off; they don't use that. So we are putting our children and our homeowners in unhealthy situations. Yes, we are efficient from

a cost standpoint, but from a health standpoint we are cutting corners.

Is this administration, are you all going to be addressing—I don't know whether this comes up under your purview, your jurisdiction, or is this someone else within DOE that we would be talking to?

Mr. SIMMONS. It is my purview, and it is an issue that we take seriously, to make sure that we are looking at ways, both indoor air quality issues such as mold, when you have much tighter homes than we have had in the past. But we need to look at the health of the environment to make sure that, as we are increasing the energy efficiency of our homes, that we are not leading to unintended negative consequences.

Mr. MCKINLEY. I don't think you are denying that it is causing some consequences.

Mr. SIMMONS. Oh, sure, sure, sure.

Mr. MCKINLEY. But we could not get the previous administration to address this. We know that you spend 90 percent of your time indoors. And without the air turnover, you are breathing fumes, you are breathing diseases. They say, even with measles, the molecules are in the air for what, three days after a person has left the room. I just wonder what we are doing, how we are going to reconcile the combination of the two.

Do you think you are going to come out with something that might pass on recommendations or thoughts to ASHRAE to change or modify their standards? Or what are we going to do for our school systems about getting, as high efficient as they are, but, yet, they are putting our children in unhealthy environments? How do you think you are going to come out through this?

Mr. SIMMONS. I don't know. However, I know that our Building Technology Office is thinking about this issue, and I will be more than happy to have them discuss the issues, where we currently are, what we are currently doing, with you as well as any of your staff, or whomever else, to make sure that we are really considering the health of the environment indoors.

Mr. MCKINLEY. I would appreciate if you would get back to me.

Mr. SIMMONS. OK.

Mr. MCKINLEY. Putting aside for now, even though that is something I want to focus on, indoor air quality, what do you think is the most underutilized efficiency project that a homeowner could undertake? What would be the one you think that would help the most?

Mr. SIMMONS. The answer is going to be somewhere around heating and cooling, whether it is the HVAC system. Because lighting, as efficient as lighting is now, it is now consuming a smaller and smaller part of people's overall electricity bill. So something around probably HVAC systems, if not water heating.

Mr. MCKINLEY. OK. I yield back. Thank you.

Mr. RUSH. The Chair thanks the gentleman. The Chair now recognizes Ms. Kuster of New Hampshire for 5 minutes.

Ms. KUSTER. Thank you very much, Mr. Chairman.

And thank you to Mr. Simmons for appearing before us. We appreciate it.

Today's topic touches on every single American household and business. Energy efficiency standards for home appliances have

helped American families save billions of dollars in energy costs over the past 30 years. And that is why I am so disappointed that the Department of Energy has failed to publish new energy efficiency standards, thereby violating the Department's statutory obligations under the Energy Policy and Conservation Act.

According to DOE's own analysis, efficiency standards have helped American families save \$63 billion on their utility bills in 2015. The Department's failure to update efficiency standards is costly and will come at the expense of American families' pocketbooks, public health, and the environment.

Mr. SIMMONS, I want to ask a series of just basic questions to understand the theory behind the delay. Would you agree that improved efficiency standards for home appliances have dramatically reduced carbon pollution in the United States?

Mr. SIMMONS. Yes.

Ms. KUSTER. And would you agree that improved efficiency standards for home appliances have dramatically reduced aggregate home energy costs for families?

Mr. SIMMONS. They have helped.

Ms. KUSTER. And would you agree that reduced carbon pollution is beneficial to public health and reducing rates of asthma and cardiovascular disease?

Mr. SIMMONS. I might disagree on that one, as in carbon dioxide—

Ms. KUSTER. Do you not believe that lowering carbon pollution is helpful to the public health?

Mr. SIMMONS. What I wanted to—

Ms. KUSTER. I am an asthma survivor. So I am just wondering—

Mr. SIMMONS. I am saying that carbon dioxide does not cause asthma.

Ms. KUSTER. But don't you believe that pollution in our air, including carbon, increased carbon—or lowering carbon would improve upon the quality of air that we breathe and lower asthma rates?

Mr. SIMMONS. Yes, for things such as particulate matter, I think that could help reduce asthma. But we have seen increases in asthma rates as our air quality has improved over time. So I am not sure what is generating this increase of asthma rates over time. That is what I am trying to say.

Ms. KUSTER. OK. And why would your Department fail to issue energy efficiency standards that could help us improve the quality of health, improve the quality of life, and save our planet?

Mr. SIMMONS. So one of the things that is very important for the President is for there not to be unnecessary regulatory burdens.

Ms. KUSTER. Well, let me ask you this.

Mr. SIMMONS. And so where we are not required—

Ms. KUSTER. Do you agree that it would improve the quality of our life if we save—you have said—let me go back—you have said that improved energy efficiency standards dramatically reduced aggregate home energy costs? On that, we have agreed. And you have said that you agree that reduced carbon pollution is beneficial to public health. You had a debate about the asthma. I do understand that. But would you agree or not—maybe you don't agree—do you

agree that better energy efficiency is better for quality of life for American families?

Mr. SIMMONS. Yes, on that, I will definitely agree. The better energy efficiency, it is one of the reasons that we spend millions of dollars a year doing research and development in the Building Technology Office to improve energy efficiency overall.

Ms. KUSTER. So if we can agree on that—well, let me start with this. Is it correct that the Department of Energy has missed 16 legal deadlines for new energy efficiency standards for products?

Mr. SIMMONS. I believe so.

Ms. KUSTER. And does the Department of Energy believe it no longer has to comply with statutory obligations under the Energy Policy and Conservation Act?

Mr. SIMMONS. No.

Ms. KUSTER. So if you agree that the Department of Energy should comply, then why is your Department engaging in the delay? That is what I am trying to get to.

Mr. SIMMONS. We are not engaging in the delay. We are working through the process that is required for each and every one of the products that we are required to regulate. That is a process—

Ms. KUSTER. But despite missing 16 legal deadlines?

Mr. SIMMONS. Despite missing deadlines, we are working through that process. The process is ongoing, but I definitely—

Ms. KUSTER. What is it that we can do to help you and your Department comply with these legal deadlines? Is it a question of lack of resources? What is it that you need from Congress?

Mr. SIMMONS. It is not a—

Ms. KUSTER. Because we want to improve the quality of life for our constituents. We want them to save money, not just low-income people, but all people. My husband and I spend quite a bit of time when we are choosing an appliance for our family, to get the most energy-efficient, cost-effective—I live in New Hampshire. It is cold. Energy costs are high. I try to get the best deal for my family. What can we do to help you, so that we can help all Americans get that best outcome?

Mr. SIMMONS. So I don't have a—we have sufficient resources. I have not heard from the program that we need more resources. What we do need to do is to work through the process.

Ms. KUSTER. Do you think there is a lack of will in this administration?

Mr. SIMMONS. There is a—

Ms. KUSTER. Because you keep falling back on the process.

Mr. SIMMONS. The process takes—

Ms. KUSTER. I am wondering if there is a lack of will.

Mr. SIMMONS. The process takes a lot of time, and it is not—like I have not heard from the—

Ms. KUSTER. I yield back.

Mr. RUSH. I want to thank the gentle lady. And I also want to extend my apologies to her for misidentifying her state. She is from New Hampshire.

Ms. KUSTER. And I apologize for not keeping a better eye on the clock.

Mr. RUSH. Yes, ma'am.

All right. The Chair now recognizes the gentleman from the great State of Illinois, Mr. Kinzinger, for 5 minutes.

Mr. KINZINGER. Thank you, Mr. Chairman, and thank you for yielding.

Sir, thank you for being here. Congratulations.

It kind of feels reminiscent. When we had a prior administration, we were talking about deadlines a lot. It is just the process. Sometimes it takes some time, and we appreciate you and your staff diligently working through these.

I think it is safe to say that every member of this committee shares some common energy goals, including cleaner emissions and cost savings for our constituents. Of course, like most issues in DC, the devil is in the details, and it may seem to those watching or listening back home that the two parties stand against one another on the issue of energy efficiency and the environment. So I would just like to state for the record that, as we begin debate in earnest on these important issues, I am willing to work in a bipartisan fashion to address these issues. Most people, if not everybody, is. Provided that we can stick to facts, we can avoid some of the unnecessary partisanship and engage in logical conversations.

This hearing is focused on energy efficiency standards, for which I have a longstanding record in support. But we are currently grappling with a set of laws that, through subsequent regulation and court proceedings, have become unclear, to the detriment of consumers and industry alike.

When the industries that manufacture energy-efficient consumer products are uncertain about the application of laws and regulations, it leads to less confidence. The lack of confidence can lead to higher production costs. Higher production costs are passed along to consumers. And, of course, if the consumer is uncertain about the energy saving and cost savings benefit of these products, they could either pay more for less efficiency or, if they are not so sure, they could altogether choose not to buy these energy-efficient products. In sum, each of these issues should be thoughtfully addressed for the betterment of consumers, the environment, and yes, even industry.

So I would like to give you an opportunity to correct the record on some of the claims that are being made here. I understand there are about 50 active regulations that DOE plans to take action on in the coming year. Is DOE committed to following the law and carrying out its responsibilities under the appliance standards program?

Mr. SIMMONS. Yes.

Mr. KINZINGER. We are going to hear testimony on the second panel that references a high percentage of consumers who experience a net cost for newer proposed product standards. In other words, the life-cycle cost of the product will be greater than the savings from efficiency. Do you believe that increasing net cost for consumers fits the goals of the Energy Policy and Conservation Act?

Mr. SIMMONS. No.

Mr. KINZINGER. How can DOE do a better job to ensure efficiency standards actually lead to consumer savings?

Mr. SIMMONS. One of the most important things I think that we can do is to have a robust, open, transparent process of setting the standards, so that we are making sure to take sufficient comment to understand all of the issues around a new standard. So that we don't get in situations, or that they are as minimized to the greatest extent possible, where we are imposing negative impacts on certain classes of consumers.

Mr. KINZINGER. I think it is important to remember, you can impose rules. We are Congress; we can do whatever we want imposing rules. What we can't impose is human behavior. So human behavior has a reaction to any set of rules. Just like if something becomes convoluted, people can choose to go buy something else, maybe less energy-efficient and totally violates any goals that we have here in the House.

I have got one other question. When considering the net costs, are there other features or performance attributes that consumers might lose?

Mr. SIMMONS. That can happen. And one of the challenges is what gets defined as a feature. That is not always clear. One thing that is a perennial issue is venting for furnaces or venting for water heaters. Is that a feature? Is that a performance feature? And reasonable people can disagree.

Mr. KINZINGER. And I do have another question. The stated mission of EERE is "to create and sustain American leadership in the transition to a global clean energy economy". The vision is a "strong and prosperous America, powered by clean, affordable, and secure energy". Are you committed to following the laws that Congress passes as Congress intends?

Mr. SIMMONS. Yes.

Mr. KINZINGER. Has Congress provided EERE with sufficient resources to carry out its responsibilities?

Mr. SIMMONS. Currently, yes.

Mr. KINZINGER. How are you positioning EERE to create and sustain American leadership in the years ahead?

Mr. SIMMONS. Three things overall for our office to focus on generally. The first is energy affordability. We need to drive down the cost of all types of energy, as well as the things that use energy.

Number two we need to figure out how to do a good job to bring together all of the energy and all of the users of energy together into an energy system. We need flexibility in the electric grid of the future. I think that that is very important. It is the one key thing that the office is focused on.

And then, the third overall priority for my office is energy storage, ways to look to have energy storage, especially because it can improve that flexibility, so you can have more things like more wind or more solar on the electric grid of the future.

Mr. KINZINGER. Thank you. Thank you for your service.

Mr. Chairman, I yield back.

Mr. RUSH. I want to thank the gentleman. The Chair now recognizes the gentleman from Virginia, Mr. McEachin, for 5 minutes.

Mr. McEACHIN. Thank you, Mr. Chairman, and thank you for calling this hearing today.

And to the Secretary, thank you for being here today as well.

Increasing efficiency really means reducing waste, doing more with the resources we are already using. And reducing waste is an idea that I would think everyone should be able to support. Greater energy efficiency offers one of the paths of least resistance economically, technologically, and logistically for reducing greenhouse gas emissions. So strengthening efficiency standards carries significant benefits for public health and for our environment.

Mr. Simmons, in your testimony you speak of DOE's, quote, "statutory mandate to establish energy conservation standards that achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified, and that saves a significant amount of energy". What I would like to do with you today is to unpack the meaning of "economically justified". Because what looks reasonable in one light may look unreasonable in another.

I have introduced legislation to ensure that long-term climate impacts are properly weighted in the regulator's dollar-and-cents benefit/analysis, and I want to apply that same line of thinking here. In determining whether efficiency standards for many consumer products are justified, DOE is supposed to look at, among other considerations, the need for national energy and water conservation and other factors the Secretary considers relevant. Energy efficiency, as I have said, offers one of the paths of least resistance for reducing greenhouse gases. So it seems clear to me that the need for national conservation is urgent and great, and that it reflects our need to minimize climate change and to mitigate its potentially devastating effects. And it seems equally clear, given the urgency of the challenges we face, that the current and projected state of our climate should be factors the Secretary deems highly relevant to the setting of energy conservation standards.

Question: so to what extent does the reality of climate change and the climate consequences which we are already having to live with influence standard-setting decisions?

Mr. SIMMONS. So when we do the economic analysis, one of the things that is considered is climate. It was in the standards rule set by the Obama administration. That consideration is also in the standards rule set by this administration.

Mr. MCEACHIN. So is it fair to say that DOE is grappling with the fact that, absence significant increases in energy efficiency, our society could face existential threats within the lifetime of the folks in this room?

Mr. SIMMONS. What we are considering is the impact of greenhouse emissions on the climate from the particular rules, given that is what our mandate is.

Mr. MCEACHIN. If I hear you correctly, then, DOE acknowledges that climate considerations can and should play a role in shaping regulations. Can you speak to why that role is not greater? If nothing else, surely the urgency of our climate needs is a compelling argument for moving forward on some of the standards the DOE has finalized but neglected to publish.

Mr. SIMMONS. You mentioned the seven factors that go into considering what is economically relevant. The first one is economic impact on consumers and manufacturers, lifetime operating cost compared to increased cost. Talking about consumers is mentioned

numerous times in EPCA. Climate is not mentioned in EPCA. So while it gets included in the overall economic analysis, first and foremost, EPCA is designed to focus on consumers currently. Obviously, Congress can change that.

Mr. MCEACHIN. All right. Thank you. Mr. Simmons.

Mr. Chairman, I yield back.

Mr. RUSH. The Chair thanks the gentleman. The Chair now recognizes the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. GRIFFITH. Thank you very much. I appreciate it.

I am going to head in the same direction of sorts that my colleague from Virginia, Mr. McEachin, just touched on, but in a slightly different vein, and that is the economically-justified aspect. Mr. Latta of Ohio previously brought some of this up. That is, are the consumers getting the same product, even if it is more energy-efficient?

We had some folks testifying a couple of years ago about hot water heaters and they were going to lower the size of a hot water heater in an attempt to save energy. And I raised the point that if somebody has the money to buy a 100-gallon hot water heater, they probably have the money to buy two 50-gallon hot water heaters, and are you really making any gain, if you just lower the size of the hot water heater?

Likewise, I have a constituent who has been very upset, although this was an EPA rule, about her washing machine because they don't work as well now that they have changed the rules some time ago. And so accordingly, she either double does the wash, in other words, she has two loads where she would have had one, or on occasion, when she has time to babysit her machine, she adds additional water to her machine because it doesn't currently—part of the way they got their efficiency was they didn't put as much water in it; therefore, they didn't have as much water to heat. Well, she adds extra water to it to get around that, so that she can get her clothes clean. And there were other problems, mold and other issues, that came up.

Is that part of what you look at for economically justified as well? Is the consumer going to get what they want and are they likely to be running their washing machines or their hot water heaters or their dishwashers twice as much to accomplish the same thing, which actually adds to our energy demand, as opposed to reducing it?

Mr. SIMMONS. That is, it can be included in whether or not something is economically justified. Also, there is another statutory provision in EPCA that forbids us from reducing the performance or the features of a product. So it is in EPCA. The question is, sometimes people can disagree about what that means.

Mr. GRIFFITH. Well, and I heard you mention earlier windows in ovens. Tell me what the fight there is.

Mr. SIMMONS. There hasn't necessarily been a fight, but that is an example of something that is—like is this, deciding if that is a feature. And I think that everyone can agree that that, nearly everyone can—like we could have more efficient ovens if we didn't have a window on them. However—

Mr. GRIFFITH. Most of your cooks like to look.

Mr. SIMMONS. What is that?

Mr. GRIFFITH. Most of your cooks like to look.

Mr. SIMMONS. Exactly, and that is the overall point, is that it could be more efficient, but we need to have that feature because it is important to the function of the product to be able to look and to see if your pie is done.

Mr. GRIFFITH. Well, and along those lines, if you don't have the window, aren't you going to open that door more?

Mr. SIMMONS. Yes.

Mr. GRIFFITH. And couldn't that potentially lead to using more electricity?

Mr. SIMMONS. It could. Or with dishwashers, if people are spending more time washing their dishes by hand and running water, that may overall lead to more energy consumption than just putting a slightly dirty dish in the dishwasher.

Mr. GRIFFITH. Got you.

Well, I appreciate your being here today. I look forward to working with you on these issues.

And I yield back, Mr. Chairman.

Mr. SIMMONS. Thank you.

Mr. RUSH. The Chair thanks the gentleman. The Chair now recognizes the gentle lady from Delaware, Ms. Blunt Rochester, for 5 minutes.

Ms. BLUNT ROCHESTER. Thank you, Mr. Chairman.

And thank you, Assistant Secretary Simmons, for being here.

Your agency is one that oversees some very important functions as part of the Federal Government. And I want to start by emphasizing the importance of issues to my State of Delaware, where we are the lowest mean elevation of any State in the country. And consequently, we are on the front lines of climate change. And while I know there has been some skepticism in the administration about the legitimacy of climate change and the sense of urgency that we must have, I can tell you that my constituents see it firsthand. From constant beach erosion in Sussex County to the changing growing seasons in Kent County, to chronic flooding in New Castle County, climate change is a top priority for Delawareans.

As we have mentioned here, your work, energy efficiency, focuses on our health. It also focuses on our economy and, as I mentioned, the environment. One of the things that we want to do here is to be able to attack climate change as quickly as possible. And so energy efficiency plays a big role.

My colleagues have already shared some of their concerns about the number of deadlines that have been missed by the administration, even though they are mandated by law. But I want to shift and ask some different questions.

Mr. Simmons, in your testimony you submitted to the committee you say that one of your top priorities is energy affordability. With that priority in mind, do you support fully funding and utilizing programs such as LIHEAP, the Low-Income Home Energy Assistance Program?

Mr. SIMMONS. I don't have anything to do with—

Ms. BLUNT ROCHESTER. Correct.

Mr. SIMMONS. I don't have anything to do with LIHEAP.

Ms. BLUNT ROCHESTER. I know it is not under your—

Mr. SIMMONS. From the perspective of an administration witness, I don't know enough to have a comment on that one. I'm sorry.

Ms. BLUNT ROCHESTER. It is an energy efficiency, low-income program. How about the weather assistance program? Maybe you could talk a little bit about that?

Mr. SIMMONS. So you saw in the previous budget that the Weatherization Assistance Program was zeroed out in the President's proposed budget. The new budget is coming out soon, and we will see what is there.

One of the things that I really wanted to emphasize is that, even though the Weatherization Assistance Program was zeroed out, that my office worked diligently as soon as funds were provided to carry out the mission of that office. And that is something that I think is critical. We are executing on the monies provided by Congress.

Ms. BLUNT ROCHESTER. Mr. Simmons, in Title X, Chapter 2, Part 430, of the Federal Code, there is a specific reference made to low-income families and the consideration the Department must make when determining standard levels. Like the rest of the country, Delaware has seen an increase in the number of residents who are now renting, rather than owning their own homes. And so obviously, that means that those individuals are unable to make decisions to upgrade to more energy-efficient appliances but are still often saddled with the energy costs of more inefficient appliances. Can you talk about what your Department has done with rental properties in relation to energy efficiency?

Mr. SIMMONS. So overall, the Building Technology Office, I don't know if there has been any specific focus on rental property as opposed to all property, as, then, trying to increase energy efficiency of windows, energy efficiency of insulation. As one of the Representatives pointed out previously, Mr. McKinley, talking about increasing insulation that makes the area, the housing tighter, which can lead to air quality issues, but we could put those aside for a minute. We are doing a lot of things on research and development. I don't know if there has been any specific focus on rental properties.

Ms. BLUNT ROCHESTER. One of the reasons why I ask is because, when we don't deal with the standards that impact all of us, some of us don't get the same level of support they need to be able to be energy-efficient.

But I want to shift, one last question. Are there strategic investments that can be made in an infrastructure policy package to accelerate energy efficiency strategies in buildings or industrial processes? And if so what are they?

Mr. SIMMONS. That is a—

Ms. BLUNT ROCHESTER. I have about 28 seconds.

Mr. SIMMONS. Yes.

Ms. BLUNT ROCHESTER. So you could probably submit that in writing because I am sure you won't get it all out.

Mr. SIMMONS. Exactly.

Ms. BLUNT ROCHESTER. But you can start. You have got 20 seconds.

Mr. SIMMONS. That is just what I was going to say, is that one I would have to get back to you in writing.

Ms. BLUNT ROCHESTER. OK. Thank you. I yield back.

Mr. WELCH [presiding]. The Chair recognizes Mr. Johnson from Ohio.

Mr. JOHNSON. Thank you, Mr. Chair.

And, Assistant Secretary Simmons, I would like to start off by saying right upfront that DOE's work on efficiency standards is important. There is a benefit to these programs, but it is crucial that the process is fair and transparent. I think your work on the appliance standards program and bringing stakeholders into the fold early is equally important and can result in a more workable and achievable set of standards.

Now one important aspect of setting efficiency standards should be understanding the upfront cost to consumers of a product associated with any efficiency gains. I represent a very rural part of Ohio, eastern and southeastern Ohio. Many of my constituent's live paycheck to paycheck. And I worry that these standards could have a disproportionately adverse impact on low-income households as the costs of appliances go up.

So to what extent does DOE consider the impact of cost to the consumer in consideration for efficiency standards, especially as it relates to low-income households?

Mr. SIMMONS. So our statutory mandate is to look at the maximum improvement in energy efficiency that is technologically feasible and economically justified. And so in the consideration of what is economically justified, that is where we do the analysis to try, to the maximum extent possible, to make sure that we are not increasing the cost of products and making things more difficult. Because if you cannot afford a new product, if you cannot afford a new HVAC system, for example, then you are not going to receive any benefits from it, and you may, then, put in window units that are less efficient. So the cost considerations are of paramount importance.

Mr. JOHNSON. Can you just briefly indicate any specific cost factors that you consider in that type of analysis?

Mr. SIMMONS. Well, there are seven. The economic impact for consumers and manufacturers, and to do that, we have to consider various types of consumers, whether it is higher income or lower income; the lifetime operating cost compared to increased cost, and that is a big issue. If you can't afford it upfront, you are not going to get those lifetime benefits. Projected energy savings, impact on utility or performance. So there is a number of factors that we consider that directly look at making sure that, as we are increasing a standard, that it does not result in consumer disutility or consumer harm.

Mr. JOHNSON. OK. Along similar lines, we have seen DOE propose efficiency standards that raise the upfront cost of an appliance with the promise that we will achieve those savings over time. In some cases, like dishwashers, the payback period could exceed 10 years. I can tell you, I got a dishwasher and I am already having to do major repairs, and I haven't had it for 10 years. So I would never achieve that efficiency payback.

So does DOE have any criteria for what it considers a fair payback period for appliances?

Mr. SIMMONS. I would have to get back to you. I don't think so. We don't have an exact level. But it is one of the considerations that is looked at, is what is the payback period. Because if it gets very long, if it is 10 years, in my opinion, that is far too long because of all of the possible intervening events that can happen in that 10 years, that paybacks need to be quicker.

Mr. JOHNSON. Yes, I am certainly not trying to be funny, but back to that paycheck-to-paycheck analysis, if it doesn't have a return on investment within the next month, people in rural America are going to be hard-pressed to purchase efficiency systems.

Can you provide some examples where the payback period exceeded the life of the product? Have you run across any of those examples?

Mr. SIMMONS. I believe they exist. I don't have any at my fingertips currently. I would be happy to provide that in writing.

Mr. JOHNSON. OK. If you could get back to me, I would appreciate it.

Mr. SIMMONS. Yes.

Mr. JOHNSON. Mr. Chairman, I yield back a whole 26 seconds.

Mr. WELCH. You are very generous today. Thank you.

The Chair recognizes Mr. O'Halleran.

Mr. O'HALLERAN. Thank you, Mr. Chairman and ranking member, for having this meeting today.

Cutting-edge energy efficiency technologies of tomorrow are available today. And it is this committee's responsibility to ensure that the Department of Energy continues to deploy energy efficiency standards as they are described in the Energy Policy and Conservation Act to not only benefit Americans, but also the environment we live in.

The effects of climate change are impacting rural America the hardest, especially in my State of Arizona, where droughts are impacting our farmers, crop yields. Wildfires are devastating our National Forests and Parks. Following the United States' fourth hottest summer on record, according to NOAA, these energy efficiency standards that we are discussing today have never been more important.

The benefits of energy efficiencies technologies are very clear. But protecting the environment should not be a partisan issue, but, rather, a call to action in which members of both sides of the aisle may find common-sense solutions.

As a member of this committee, I am new. And so I guess where I come from is you are the head of a fairly large group of people. When you put these projects together, as you stated, your most important issue to meet the statute requirements. And so what does that work plan that you put together look like in order to meet those? What are your timelines? What are your milestones? Do you put that together for each plan, so that you can make those guidelines become available to the public?

Mr. SIMMONS. So that is, at the highest level, that is available to the public. That is what is called the Unified Agenda of Regulatory and Deregulatory Actions. That describes the 50 active regulatory actions that are currently occurring in the Department of Energy. And the most recent update to that was in the fall. In that, there were 24 test procedures that were on the active agenda.

There were 17 energy conservation standards that we are actively working on. We have just sent updates to that to OMB, to OIRA, for the spring Unified Agenda that will lay out what regulations we are going to be actively working on. And I expect that when we are done with that process, there will be more—that we will be adding new active regulatory actions to that agenda.

Mr. O'HALLERAN. As you miss milestones and other deadlines, do you try to identify do you have a lack of personnel or are there change orders that are coming in, similar to a construction project, that require, whether it is political or otherwise, require changes that would move that end date of accomplishment of meeting statutory requirements?

Mr. SIMMONS. There is some internal work that I definitely can engage in to make sure that we are doing a better job of meeting our deadlines and interacting with staff. I have not spent as much time as maybe I would like to talk with the program about looking for how they believe that we can do a better job of meeting our standards, and I will do that.

Mr. O'HALLERAN. Has there been any request for additional funding in order to be able to meet standards on a timely basis?

Mr. SIMMONS. Not internally, no.

Mr. O'HALLERAN. OK. I guess when I am late getting my taxes in, if I am, I either file an extension and let everybody know in the IRS or I get penalized. If I am late with a payment to the bank, after a while they say, "You owe your money." And when we are late with getting a statutory requirement into Congress, I would think that our agency would say we need to find a way to get it there on time. And I am trying to figure out why that is not being accomplished.

Mr. SIMMONS. One reason is that this process takes a long time, and it takes a long time to do right.

Mr. O'HALLERAN. But, you know that at the beginning anyway. It has taken a long time, time after time after time. So the idea is, the American people are waiting to be able to save money, to save energy, and to be more efficient with the use of that energy. And the more that there are delays in the system, it is apparent, some of the billions of dollars of savings that are accomplished over time, that we are costing the American taxpayers money. And it would be efficient for us to be able to get these statutory requirements that you identified as the most important process, to get it finished.

Mr. WELCH. And the gentleman's time—

Mr. O'HALLERAN. Thank you, Mr. Chairman. I yield.

Mr. WELCH. Thank you.

Mr. SIMMONS. May I respond to just say that that's a good and valid point.

Mr. O'HALLERAN. Thank you.

Mr. WELCH. The Chair recognizes Mr. Bucshon from Indiana.

Mr. BUCSHON. Thank you.

And thank you, Assistant Secretary, for being here.

I was a doctor before. I just want to clarify that carbon dioxide is a byproduct of normal human respiration, and in and of itself has no effect on cardiovascular disease or asthma. That has been implied over and over in the climate discussion. I believe that the

climate is changing, but to imply that that byproduct of respiration has a direct effect on those diseases is hyperbole and meant to scare the American people.

Why are four rules under litigation?

Mr. SIMMONS. Four rules are under litigation because we did not send them to the—we did not finalize them by sending them to The Federal Register.

Mr. BUCSHON. OK. Are these rules from the previous administration or—

Mr. SIMMONS. Yes.

Mr. BUCSHON. OK. So the litigation doesn't have anything to do with the rule itself; it has to do with the timing of submitting them to The Register? Or are there flaws that you can comment on in the rule that was—

Mr. SIMMONS. The litigation is about whether or not it was legally permissible for us not to send them to The Federal Register.

Mr. BUCSHON. OK. Thanks for clearing that up.

Did the Obama administration that you are aware of meet all its statutory deadlines? Has this been a chronic problem?

Mr. SIMMONS. It has been a problem for multiple administrations, including—

Mr. BUCSHON. Yes, probably for decades, right?

Mr. SIMMONS. Yes.

Mr. BUCSHON. Yes. So that is on us, on Congress really, to help you with that, I would say.

So the proposed energy efficiency standards must be developed and tested using sound science, transparent data, and clear metrics for determining the economic justification. You have talked about this some. Can you describe how your office plans to adhere to these most basic requirements in formulating new energy efficiency standards?

Mr. SIMMONS. Well, many of the issues have been highlighted today—

Mr. BUCSHON. Yes.

Mr. SIMMONS [continuing]. Of the need that we have to make sure that we are doing a good job, whether it is to be making sure that these products have good performance, that the cost increases, the possible cost increases are not unduly burdensome. And that process can take time to make sure that we are talking to, that we are hearing from all stakeholders, from the general public, to make sure that—you know, these are things that people interact with every single day. People interact with their dishwashers, with their microwaves, with their refrigerators, with their water heaters, with their HVAC systems. So it is critical that we get it right, and that can take time.

Mr. BUCSHON. Understood. Well, I think we can all agree energy efficiency is something every consumer and manufacturer should strive to adapt. However, I am concerned that tightening energy efficiency standards to unrealistic levels could have an unintended impact of costing American manufacturing jobs.

And I am from Indiana and I think we know the Carrier case in Indiana. When I met with the parent company, United Technologies, they said that the 50 standards that were put in place over at the Obama administration made it essentially impossible

for them to continue to manufacture in my state, as one of the main factors, because regulations were piled on them very quickly, probably for the most part for ideological reasons.

And this can affect small manufacturers particularly, that can't absorb this type of hit. So our State is a big manufacturing State, home to a lot of small manufacturers in the Eighth District.

So to what extent does the DOE take employment impacts into account when they set efficiency standards?

Mr. SIMMONS. So one thing that we are legally required to do, so it is very important that we do do it, is that when we are considering the factors that make up whether or not a rule is economically justified, one of those factors is impact of lessening of competition. And I think that can be read in a number of ways. It doesn't explicitly talk about employment, but employment I believe should be included there—

Mr. BUCSHON. Sure.

Mr. SIMMONS [continuing]. To make sure that the United States is as economically competitive as possible, and that we are not reducing needlessly—

Mr. BUCSHON. So you would probably agree, then, that putting standards in place are difficult to meet from an economic standpoint, that results in jobs being transferred to other countries than the United States, probably need to be looked at pretty closely, and that should be a substantial factor in applying these efficiency standards to the United States?

Mr. SIMMONS. Yes. I mean, it is very much contrary to the administration's position to be shifting jobs outside the United States. We want to grow—

Mr. BUCSHON. And I would agree with that.

Mr. SIMMONS [continuing]. To grow U.S. manufacturing.

Mr. BUCSHON. Thank you. I yield back.

Mr. WELCH. Thank you, Mr. Bucshon. The Chair recognizes himself.

This question on efficiency standards, it's interesting. I want to say a couple of things. Number one there is a lot of bipartisan support for aggressive energy efficiency. That is number one. In fact, when we passed in the House the Waxman-Markey bill that had as its goal 80 percent carbon reduction by 2050, 40 percent of the carbon reduction was through efficiency.

Secondly, there has been a lot of leadership on the Republican side of the aisle when they were in the majority, and now in the minority. So there is a real potential here for common ground.

Third, efficiency standards play a major role. And some of my colleagues have been rightly raising some questions about what the impact is which you are trying to assess. What does it do to small manufacturers? What does it do to consumer cost? And those are difficult questions. They have to be addressed. Because if it is unaffordable, you are not going to buy it and you are not going to get the benefit.

But a lot of manufacturers acknowledge that having standards that all of them have to compete to meet, and then, have that out in the marketplace actually helps them, because it is not a race to the bottom, where competition is on the basis of the lowest-quality product. So I have sympathy for the challenge of these competing

interests. Mr. Johnson raised some questions. Dr. Bucshon just did, and others. But it does require that you get the standards out, and that hasn't been happening. And I don't want to go into the delays in the Obama or this administration. It doesn't matter. The bottom line, how are we going to get these standards out?

As I understand it, there is a huge delay. We are very late in getting the energy efficiency improvements associated with the latest model of code. So I am kind of following up on what Mr. O'Halleran said. What have we got to do to get these standards out from you? That is number one.

Mr. SIMMONS. Well, it is one of the reasons that we have the proposed process rule, because we think that that will streamline the process by having an early-look procedure where we have an assessment early in the process, and that if it isn't possible to meet our statutory requirements, then we can more easily move to the rules where there is the greatest opportunity for energy efficiency.

So that is why it is also important to define what is a significant savings of energy, because the law requires, EPCA requires us for rules to save a certain amount—

Mr. WELCH. Yes. Well, you know, you have got a hard job because of all of these competing considerations you have got to take into account, but we really need you to get that done. And then, we can have an argument about what the impact is.

Another issue is about the DOE loan program, and I understand that is a different office than yours, but it overlaps a bit with your focus area. Currently, as I understand it, there is \$5 billion in unused loan authority for renewables that are available. That was a program authorized under the Bush administration. And can you tell us what is up and what we need to do to get that thing going?

Mr. SIMMONS. I know that the loan program is actively looking for projects. I know that they have talked to the Wind Office, for example, about potential. And one area could be offshore wind projects.

Mr. WELCH. So what have we got to do to—

Mr. SIMMONS. They are working on it.

Mr. WELCH. What have we got to do to get those loans authorized?

Mr. SIMMONS. That I don't know. I can say that, as the head of the Loan Program Office said, that LPO is open for business and that they have been actively looking for opportunities.

Mr. WELCH. And so you don't know, basically?

Mr. SIMMONS. I don't know more than what I just said.

Mr. WELCH. Well, yes, I mean, that is frustrating, probably is frustrating for you as well. I mean, you have got that loan authority. You have got a lot of entrepreneurs out there. It is not a red State/blue State deal. A lot of folks who see an opportunity to make some money would be able to do it, if they could get access to the loans and move ahead. So I just urge you to do all you can to implement that program or encourage it to be implemented.

And finally, I want to take a step back and briefly ask about a few other efforts at DOE. What steps is DOE taking to ensure energy efficiency R&D is being conducted at all levels, the early stage, the mid stage, and long-term focus?

Mr. SIMMONS. So we know that the key there is that, as Secretary Perry has said, we are following congressional direction. And so where we have congressional direction to be at early, mid, and late stage, we are trying our best to meet that congressional direction. And you will see that in the next few weeks when the Building Technology Office releases their latest funding opportunity announcement.

Mr. WELCH. Thank you. We will look forward to seeing that.

Mr. RUSH [presiding]. Mr. Secretary, it has been a long morning and I know you have other important work that you have to get done. I want to thank you so very much for your participation here during this first panel, and we want to see you again soon.

[Laughter.]

Mr. SIMMONS. Likewise. Thank you very much, Mr. Rush.

Mr. RUSH. All right. And that concludes panel one.

Now I would like to invite panel two to now take seats at the desk.

Now that we are in set order or sit order, let me introduce the panelists, beginning at my left.

Mr. Andrew deLaski is the executive director of the Appliance Standards Awareness Project of the American Council for an Energy Efficient Economy.

Ms. Katherine Kennedy is the senior director of the Climate and Clean Energy Program at the Natural Resources Defense Council.

Mr. Joseph M. McGuire is the president and CEO of the Association of Home Appliance Manufacturers, AHAM.

Mr. Charles Harak is the senior attorney for energy and utility issues of the National Consumer Law Center.

Mr. Stephen Yurek is president and CEO of the Air-Conditioning, Heating, and Refrigeration Institute, AHRI.

And Mr. David Friedman is the Vice President of Advocacy for Consumer Reports.

And at this time, the Chair will now recognize each witness of the second panel for 5 minutes to provide an opening statement.

Before we begin, I have the task of explaining the lighting system. In front of you is a series of lights. The light will initially be green at the start of your opening statement. The light will turn yellow when you have 1 minute remaining. And please begin to wrap up your testimony at that point. And the light will turn red when your time has expired.

With that, I will now recognize Mr. deLaski for 5 minutes for an opening statement.

STATEMENTS OF ANDREW deLASKI, EXECUTIVE DIRECTOR, APPLIANCE STANDARDS AWARENESS PROJECT, AMERICAN COUNCIL FOR AN ENERGY EFFICIENT ECONOMY; KATHERINE KENNEDY, SENIOR DIRECTOR, CLIMATE AND CLEAN ENERGY PROGRAM, NATURAL RESOURCES DEFENSE COUNCIL; JOSEPH M. McGUIRE, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ASSOCIATION OF HOME APPLIANCE MANUFACTURERS; CHARLES HARAK, STAFF ATTORNEY AND MANAGER, ENERGY UNIT, NATIONAL CONSUMER LAW CENTER; STEPHEN R. YUREK, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AIR-CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE; AND DAVID J. FRIEDMAN, VICE PRESIDENT OF ADVOCACY, CONSUMER REPORTS

STATEMENT OF ANDREW deLASKI

Mr. deLASKI. Chairman Rush, Ranking Member Upton, and distinguished members of the committee, I thank you for the opportunity to testify today.

My name is Andrew deLaski. I am the executive director of the Appliance Standards Awareness Project. ASAP is a coalition project that is lead by a steering committee consisting of efficiency advocacy organizations, State Government representatives, consumer and environmental organizations, and utility companies.

I would like to do two things in my remarks today. First, I want to highlight how the existing National Standards Program benefits the nation. Second, I will describe for you how the current administration has badly mishandled the program.

Appliance, equipment, and lighting efficiency standards are one of the foundations of U.S. energy policy. According to the American Council for an Energy Efficient Economy, they are the number two Federal policy for saving energy. The energy and water savings from appliance standards translate into pocketbook savings for consumers and businesses, create jobs, make our energy systems more resilient and reliable, foster technological innovation, and reduce emissions that harm public health and the environment.

Some data for your consideration. The typical household spends about \$500 less per year on their utility bills than if there had never been any standards. That is equal to a 16 percent utility bill cut. It is hard to think of another policy out there that has done as much to improve the affordability of energy bills. All told, consumers' savings from existing standards for both consumers and for businesses totals \$2 trillion by 2030. It is a Department of Energy number.

Jobs. When consumers and businesses spend their bill savings on other goods and services, research shows that that boosts employment. Standards boosted the number of domestic jobs by about 300,000 jobs in 2016.

Next, saving energy with improved efficiency standards helps make our energy systems more resilient, reliable, and affordable.

Climate change. U.S. carbon dioxide emissions in 2020 will be about 345 million metric tons lower, or about 7 percent lower, because of existing energy efficiency standards.

Unfortunately, over the past two years, the National Appliance Standards Program has been seriously mishandled by DOE. I will summarize five ways.

First, DOE has missed 16 statutory deadlines for determining if current standards should be revised and is on track to miss 12 more, another dozen, by January 2021. Updated standards could add hundreds of billions of dollars in savings for consumers.

Second, the Department has proposed to eliminate light bulb standards slated to take effect next year. Members serving on this committee today from both parties worked hard on that 2007 law that created light bulb standards. You did a good thing. You set initial standards, starting in 2012, that are now saving enormous amounts of energy and money. Despite claims by some, the sky hasn't fallen.

You also required a second stage to take effect in 2020 and created a minimum level for that 2020 standard, 45 lumens per watt. In providing 13 years of advance notice, you sent a clear signal to the market. You helped unleash a torrent of innovation, LED light bulbs use just a smidgen of energy compared to the light bulbs they replace and last 10 to 15 years.

But now, DOE has proposed to eliminate the 2020 light bulb standards by rescinding the 2017 rule that expands the standards to most everyday light bulb and asserting—you heard it today—that the backstop standard does not apply. This action would cost a typical U.S. household about \$115 in lost energy savings by 2025 on an annual basis. Carbon dioxide emissions in 2025 will be about 1 percent higher on a nationwide basis because of this rollback action. Where else can you get a policy that will save the average household over \$100 and also trim U.S. CO₂ emissions by 1 percent? It makes zero sense to eliminate light bulb standards.

Third, DOE has proposed an unnecessary rewrite of its standards development process rule that won't make it just harder to catch up on missed deadlines; it will put the National Standards Program into a deep freeze.

Fourth, DOE has abused its enforcement discretion to issue broad policies that negate duly-promulgated standards. DOE reversed course on one of these when the requesting industry group changed its mind, but the message has been sent. DOE is open to simply not enforcing the law.

Fifth, DOE now contemplates a petition from the gas industry that would, if acted on, eliminate consideration of the single most important technology for saving natural gas, condensing technology. We are very concerned that DOE will do as the gas industry has requested.

These harmful policies represent a sharp break from how this program has been handled across prior administrations, both Republican and Democratic. Instead of building on the foundational energy policy of National Appliance Standards, this administration has taken a wrecking ball to it. The consequences will be higher utility bills for consumers, increased strain on our energy systems, more uncertainty for business, and needlessly higher levels of climate change and other pollution.

Thank you for the opportunity to testify.

[The prepared statement of Mr. deLaski follows:]

**Testimony of Mr. Andrew deLaski,
Executive Director
Appliance Standards Awareness Project (ASAP)**

**Before the U.S. House of Representatives
Committee on Energy and Commerce
Energy Subcommittee**

Hearing on:

**“Wasted Energy: DOE’s Inaction on Efficiency Standards and Its Impact on
Consumers and the Climate”**

March 7, 2019

**The National Appliance Standards Program: A Foundation for US Energy Policy
Threatened by the Trump Administration's Wrecking Ball**

Testimony Summary

The Department of Energy's (DOE) appliance standards program, first created by Congress in the 1970s and repeatedly revised and expanded on a bipartisan basis since, sets a floor for efficiency for everyday products bought by consumers and business. It is among the nation's most effective laws for saving energy, providing an essential foundation for American energy policy. The energy savings from appliance standards translate into pocketbook savings for consumers and businesses, create jobs, make our energy systems more resilient and reliable, foster technological innovation, and reduce emissions that harm public health and the environment.

- The typical household spends about **\$500 less per year on utility bills** than if there had never been any standards. That's equal to 16% of an average household's utility bills.
- For businesses, which also buy and use products covered by standards, annual savings total about **\$23 billion**.
- All told, standards on the books today will have saved consumers and businesses **\$2 trillion by 2030**.
- Research shows that standards **boosted the number of domestic jobs by about 300,000** in 2016.
- Saving energy with improved efficiency standards helps make our **energy systems more resilient, reliable and affordable**.
- US carbon dioxide emissions in 2020 will be **345 million metric tons lower** because of existing energy-saving standards.

Unfortunately, over the past two years the national appliance standards program has been seriously mis-handled by DOE. As a result, forward progress on new standards has come to a standstill. Worsening matters, the Department has moved to eliminate existing standards for light bulbs, which are statutorily required and will save more than any other single standard ever established. At the same time, the Department released a proposal, two years in the making, that re-writes the agency's procedures for developing future standards. While DOE's administration of the program can undoubtedly be improved, the recent proposal makes it much harder to set or upgrade standards and cedes too much control to manufacturers. In addition, the Department has abused its enforcement discretion in attempts to void duly-promulgated standards, and now contemplates a gas industry petition that would eliminate the potential for any meaningful improvements to standards for many appliances that use natural gas. In sum:

- DOE has **missed 16 statutory deadlines** for completing reviews to determine if current standards should be revised and is on track to miss another 12 by January 2021.
- DOE has **proposed to eliminate the 2020 light bulb standards** by rescinding the rule that expanded standards to most everyday light bulbs and asserting that a statutory backstop standard does not apply. Elimination of the 2020 light bulb standards would cost the typical US household about \$115 per year in lost savings.

- DOE has **proposed an unnecessary re-write of its standards development “Process Rule”** that will, at best, make the already-thorough standards development process more drawn out and, at worst, handcuff the agency from pursuing future improvements for many standards.
- DOE has **abused its enforcement discretion** to issue broad policies that negate a duly-promulgated standards for furnace fans.¹
- DOE now contemplates a petition from the gas industry that, reversing policies established during the Bush administration and continued during the Obama administration, **would eliminate consideration of condensing technology, the single-most important opportunity for improving gas appliance efficiency.**

These actions harm consumers, needlessly increase energy waste, and violate the law. They also represent a sharp break from how this program has been handled across prior administrations, both Republican and Democratic. Congress enacted all the major national appliance standards laws on a strong bipartisan basis, and a Republican president signed each into law. Although the program has been beset by missed deadlines in the past, no prior administration has so thoroughly sought to thwart laws enacted by Congress as the current one. **Instead of building on the foundational energy policy of national appliance standards, this administration has taken a wrecking ball to it.** The consequences will be higher utility bills for consumers, increased strain on our energy systems, more uncertainty for business, and needlessly higher levels of climate change and other pollution.

¹ DOE withdrew its non-enforcement policy on furnace fans when the industry group that had requested it changed its mind.

**The National Appliance Standards Program: A Foundation for US Energy Policy
Threatened by the Trump Administration's Wrecking Ball**

Detailed Testimony

I. INTRODUCTION

My name is Andrew deLaski and I am the Executive Director of the Appliance Standards Awareness Project or ASAP. ASAP is a coalition project led by a Steering Committee consisting of representatives of efficiency advocacy organizations, state government, consumer and environmental organizations and utilities. ASAP works to advance and defend new appliance, equipment and lighting standards which deliver large energy and water savings, monetary savings and environmental benefits. I have been the Executive Director of ASAP since its founding in 1999 and have worked extensively on both national and state standards over the past two decades. I have been intensively involved in Department of Energy (DOE) rulemakings under four administrations and contributed to the development of the standards provisions in the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. I have co-authored more than a dozen papers and reports related to appliance, equipment and lighting standards. I also served as co-chair of the Appliance Standards and Rulemaking Federal Advisory Committee or ASRAC, charged with assisting the agency develop new consensus-based standards from 2012 until the end of 2018. At the state level, I have been involved in helping to advance standards in more than a dozen states that have enacted their own laws.

Saving energy has long been an area of bipartisan agreement and a cornerstone of US energy policy over the past several decades. Cost-effective energy-efficiency investments lower utility bills for both households and businesses, boosting the economy, improving U.S. competitiveness and creating jobs. Saving energy also strengthens the reliability and resiliency of our energy systems. For example, when the polar vortex strikes, efficient furnaces moderate the demand for gas, helping to keep the gas distribution system working. On sweltering summer days, more efficient air conditioners mean less strain on our electric grids, reducing the risks of costly power outages. More generally, whether the nation is enjoying a period of energy abundance or during times of energy scarcity, efficiency allows reliance on lower-cost energy resources, contributing to lower wholesale energy prices. Finally, reducing energy waste conserves domestic energy resources, strengthening America's position in global markets both today and in an uncertain future. Using less energy eases America's transition to cleaner energy sources and directly reduces emissions that harm public health and contribute to climate change.

Minimum appliance, equipment and lighting standards are an essential foundational policy for improving energy efficiency. Analysis by the American Council for an Energy-Efficient Economy (ACEEE) shows that minimum standards have done more to save energy than any other federal policy, excepting vehicle fuel economy standards. According to DOE, standards in place today will save about 142 quadrillion Btus ("quads") of energy by 2030 while reducing US consumer and business energy bills by \$2 trillion. For comparison, the entire US economy uses about 100 quads per year.²

² US Department of Energy fact sheet. "Saving Energy and Money with Appliance and Equipment Standards in the

In this testimony, I will first briefly summarize the key features of the national appliance standards program. I will next summarize the benefits of standards currently in place. Third, I will describe how over the past two years DOE has mis-handled this critical program and **has effectively taken a wrecking ball to this foundational energy policy**. The final section addresses the effect of DOE's mishandling of the program on manufacturers.

II. KEY PROGRAM FEATURES

Congress enacted the original national appliance standards law in 1975 and has since updated and revamped it several times to address the nation's evolving national energy policy needs. These major amendments to the law include the 1987 law signed by President Reagan that adopted initial standards for thirteen common household products; the 1992 law signed by President George H.W. Bush that extended the national program to major categories of commercial building equipment, lighting products and plumbing products; and the 2005 and 2007 energy laws signed by President George W. Bush that added about 25 additional product categories. Congress enacted each of these laws on a strong bi-partisan basis.

The trade-off between federal and state authority is a fundamental feature of the national appliance standards law. **Federal standards are broadly preemptive of state standards** for the covered products. This feature provides manufacturers, distributors and retailers a single national standard. In exchange, Congress put the responsibility for keeping standards up-to-date with technological change on DOE. Subject to criteria spelled out by Congress, including impacts on consumers, product utility, manufacturers and utilities, DOE must update standards to reflect the maximum level of efficiency that is "technologically feasible and economically justified" (42 US Code 6295(o)(2)). In sum, Congress preempted the states and, in exchange, imposed a **federal obligation to do the job of keeping standards up-to-date**.

DOE's track record on meeting legal deadlines was poor until 2006, when Congress and the courts intervened. Active Congressional oversight and a consent decree put DOE on track to catch up on 22 missed legal deadlines. In 2007, Congress enacted a sweeping requirement that DOE review all standards and the underlying test procedures periodically. Under the 2007 amendments, DOE must review each standard once every six years. DOE can either conclude that no change is warranted or propose a modified standard. If DOE proposes a modified standard, a final revision is due within an additional two years. Thus, if DOE proposes a new standard, that revision would be in place no later than eight years after the prior change.

Between 2006 and 2017, DOE caught up on the entire backlog of overdue standards (completed by 2013) and met a range of new product specific deadlines established by the 2005 and 2007 energy laws, completing about 50 new or revised standards and many test procedure updates resulting in very large energy and economic savings. DOE had just begun to implement the 2007 law's requirements for regular reviews at the beginning of the current administration. None of the three reviews completed to date under the regular reviews provision have been controversial: one resulted in no change to the standard and the other two changes were broadly supported by manufacturers and others.³

United States." January 2017. Last accessed on 3/3/2019

³ DOE reviewed the standards for direct heating equipment and determined to leave it unchanged. DOE revised the

Another key provision of the national law is **anti-backsliding** (42 US Code 6295 (o)(1)). Under this provision, no new standard can be weaker than the existing standard for that product. The anti-backsliding provision provides regulatory certainty, enabling manufacturers to invest with confidence, and protects consumers. The law does provide for limited waivers and other tools to address specific unexpected difficulties that might arise with a given standard.

III. BENEFITS OF THE NATIONAL STANDARDS PROGRAM

National appliance standards save consumers money, improving the affordability of their monthly utility bills. The pocketbook savings from standards get re-spent and invested by consumers and businesses, providing a boost to local economies, helping with job creation. Reduced demand for electricity and natural gas also makes energy systems more resilient, curbing the need for expensive investments that are ultimately paid for by consumers. Reducing the amount of fossil fuel burned in power plants and directly in appliances such as furnaces puts a dent in the emissions that contribute to climate change as well as other public health problems. Each of these benefits are detailed further below.

A. Affordability

Altogether, according to a recent study by my organization together with ACEEE, a typical U.S. household spends about \$500 less on their utility bills each year than they would have if no appliance standards had been adopted. These savings work out to about 16% of the typical household's utility bill spending.⁴ Perhaps no other policy enacted by Congress has done as much to keep energy bills affordable for the typical US household.

Standards also improve efficiency for a suite of the most common products used in commercial buildings and industry, including lighting, HVAC equipment, motors, and refrigeration products. Altogether, businesses are saving about \$23 billion per year due to existing standards.⁵ These savings improve the competitiveness of American industry, get plowed back into product innovation and help the bottom line. By 2030, cumulative total savings for consumers and businesses from existing standards will reach \$2 trillion.⁶

B. Job Creation

Saving energy boosts employment. When consumers and businesses spend or invest the money saved on utility bills, economic activity increases. An economic study by ACEEE and ASAP published last year estimated that savings from standards resulted in 300,000 more jobs in the U.S. economy in 2016 than would have been the case absent any standards.⁷ As the savings from standards grow, so do the job creation effects. By 2020 the job creation impact of standards will

standards for dehumidifiers through the regular rulemaking process and, for central air conditioners and heat pumps, convened a stakeholder negotiation that developed recommendations that DOE adopted.

⁴ deLaski, A. and J. Mauer. "Energy Saving States of America." ASAP and ACEEE. February 2017. p 1.

⁵ Ibid. p. 6.

⁶ US Department of Energy fact sheet. "Saving Energy and Money with Appliance and Equipment Standards in the United States." January 2017. Last accessed on 3/3/2019.

⁷ Stickles, B., J. Mauer, J. Barrett, A. deLaski. *Jobs Created by Appliance Standards*. ACEEE and ASAP. July 2018. Available at https://appliance-standards.org/sites/default/files/Jobs_Report.pdf

grow to about 400,000 jobs.

C. Energy System Benefits

Saving energy with improved efficiency standards helps make our energy systems more resilient, reliable and affordable. When the polar vortex or an extreme summer heat wave strikes, the efficiency of the installed stock of products such as furnaces and air conditioners matters enormously. By reducing the overall level of demand during extreme weather events, efficiency can make the difference between the energy system holding up or breaking down. Over the longer term, the level of product efficiency affects what investments are needed to ensure electric or gas system reliability. Since these investments are paid for by ratepayers one way or another, by keeping demand levels in check, efficiency standards help moderate energy prices. Consumers, especially the elderly on fixed incomes or low-income families, suffer the most when they cannot afford to keep their thermostats at levels most would consider necessary for basic comfort.

D. Environmental and Public Health Benefits

By reducing the amount of fossil fuel burned in power plants and by furnaces and other products in our homes and businesses, standards are reducing emissions that contribute to climate change. US carbon dioxide (CO₂) emissions in 2020 will be **345 million metric tons lower** because of existing energy-saving standards, an amount equal to the annual emissions of more than 70 million cars.⁸ For perspective, the entire US economy emitted about 5.2 billion metric tons of carbon dioxide in 2018.⁹ Thus, the annual CO₂ savings rate in 2020 equals more than 6% of current year emissions. Few other policies in place today are doing as much to curb climate change emissions.

Over time, the cumulative effect of standards on emissions is enormous. In his exit memo issued upon leaving his post as Secretary of Energy, Ernest Moniz reported that standards set during the Obama administration would reduce US carbon dioxide emissions by three billion metric tons cumulatively by 2030.¹⁰ Counting all standards since 1987, standards will save almost eight billion metric tons of carbon dioxide by 2030 according to DOE.¹¹

Reducing wasteful use of fossil fuel also reduces emissions of other pollutants, including nitrogen oxides, sulfur dioxide, particulates and mercury. These pollutants contribute to a wide range of public health and environmental problems including asthma and other respiratory problems, acid rain, and toxic poisoning of fish and wildlife. While these pollutants are subject to specific regulatory limitations in some cases, by reducing fossil fuel usage, appliance standards help to rein their emissions.

⁸ US Department of Energy fact sheet. "Saving Energy and Money with Appliance and Equipment Standards in the United States." October 2016.

⁹ US Energy Information Administration. "U.S. energy-related CO₂ emissions expected to rise slightly in 2018, remain flat in 2019" February 8, 2019.

¹⁰ Secretary Ernest Moniz. US Department of Energy. Cabinet Exit Memo, January 5, 2017.

¹¹ US Department of Energy fact sheet. "Saving Energy and Money with Appliance and Equipment Standards in the United States." October 2016.

IV. DOE IS MIS-HANDLING THE NATIONAL STANDARDS PROGRAM

In 2019, the national appliance standards program is badly off track. The current administration has mishandled its stewardship of this critical energy policy in five major ways. First, DOE has missed statutory deadlines to review the standards for 16 products and is on track to miss another dozen deadlines by January 2021 (detailed below). The agency even missed more than 20 of its own self-imposed deadlines *just within the past three months*. Second, the administration seeks to eliminate the 2020 national light bulb standards, potentially costing the typical US household about \$115 per year in lost savings. Third, DOE has spent the last two years working on a proposed rework of its “Process Rule,” its guidance on how it develops standards, that will make updating standards far more difficult and that cedes too much control to manufacturers. Fourth, in an abuse of its enforcement discretion, the agency has sought to undo duly-promulgated standards. Finally, the agency is now contemplating a gas industry petition that would effectively prevent future standards that would save meaningful amounts of natural gas.

A. Missing deadlines could put \$65 billion per year in bill savings at risk.

As described above, DOE is legally obligated to review each standard according to a schedule established by Congress. As of today, DOE has missed 16 legal deadlines affecting a range of products including refrigerators, clothes dryers, water heaters and room air conditioners. Appendix A includes the full list of products for which DOE has missed legal deadlines.

DOE publishes a schedule for its work as part of the semi-annual regulatory agenda. The most recent regulatory agenda, published in November 2018, showed more than 20 interim DOE actions scheduled for completion between then and mid-February.¹² DOE failed to complete any of those actions on schedule. By failing to complete these interim steps spelled out by DOE in its own regulatory plan, the agency is not only falling further behind the already-missed statutory deadlines, but also putting itself on track to miss all its upcoming deadlines. The agency likely will miss another dozen statutory deadlines by January 2021.

DOE has also missed more than a dozen legal deadlines for reviewing test procedures used for measuring efficiency.¹³ These test procedures underpin the minimum standards. With good reason, manufacturers have stressed the need to complete test procedure revisions in advance of standards reviews. By delaying test procedure work, a key aspect of the standard-setting process, DOE could be in a position of having to revise standards before test procedures have been adequately reviewed or of having to use old test procedures without addressing useful updates.

Missing these deadlines will impose severe costs measured by lost energy savings and bill reductions. We estimate that standards for which federal law requires review by early 2025 have the potential to reduce consumer and business utility bills by \$43 billion annually by 2035 growing to \$65 billion annually by 2050. Cumulative savings could reach \$1.1 trillion by 2050.¹⁴

¹² These recently missed self-imposed deadlines include 7 related to standards reviews and development and 15 related to test procedure reviews.

¹³ These include the test procedures for exit signs, metal halide light fixtures, small motors, traffic signals, water source heat pumps, room air-conditioners, fluorescent lamp ballasts, commercial ice makers, general service fluorescent lamps and other products.

¹⁴ A. deLaski, J. Mauer et al. “Next Generation Standards: How the National Energy Efficiency Standards Program Can Continue to Drive Energy, Economic, and Environmental Benefits.” Appliance Standards Awareness Project and American Council for an Energy-Efficient Economy. August 2016. p vii.

B. Eliminating the 2020 light bulb standards would cost households \$115 per year.

Spurred in part by the 2007 energy law, the US has led innovation in LED technology. LED light bulbs now cost as little as \$2 apiece, use a fraction of the electricity of old-style light bulbs and are available in virtually all shapes and sizes. The 2007 law ensured that strengthened 2020 standards will apply to the most common light bulb shape, the pear-shaped A-lamp. Congress also directed DOE to determine which other light bulbs shapes and sizes are commonly used to light up our homes and apply the same standards to those products. DOE made this determination in January 2017, extending the 2020 standards to other light bulbs shapes and sizes including cone-shaped reflector light bulbs and candelabra bulbs used in wall sconces and chandeliers. Altogether, there are about 2.7 billion sockets in the United States that use these bulb types, nearly equal to the number with A-lamps.

Last month, DOE proposed to rescind the agency's decision to apply the 2020 light bulb standards to most of the light bulb types commonly used in US homes. DOE has further asserted that the legislative backstop standard, required by Congress in the event DOE did not complete a new standard by 2017 (the agency did not), does not apply. Failure to implement and enforce the backstop standard for the full range of bulbs commonly used in US homes would cost the average US household about \$115 per year in lost bill savings. US electricity use would increase by about 90 billion kilowatt hours per year, roughly the consumption of all the households in Pennsylvania and New Jersey combined.¹⁵

C. DOE's proposed re-write of the "Process Rule" would make it harder to improve standards.

While DOE has been missing one deadline after another, the agency has been spending its time and effort over the past two years on re-writing the agency's "Process Rule." This rule, written in 1996 and supplemented by additional guidance since then, describes how the agency develops new standards. In general, the process for developing standards worked well from 2006 to 2017. The process employed is transparent, data-driven and comports with the law. A high portion of new standards enjoyed consensus support among stakeholders, and very few landed in litigation.

While even a good process can undoubtedly be improved, DOE's two-year effort to re-write the Process Rule has resulted in a proposal that is designed to hamstring agency development of future standards. Problems with the proposed revised Process Rule include several additional steps that will further draw out the already lengthy standards development process (creating new opportunities for litigation), minimum savings thresholds that put new standards for many products off limits, and new limitations on rulemaking processes intended to foster consensus. For example, the agency has until now interpreted its Direct Final Rule authority to allow for negotiators to select different compliance dates or more than one compliance date. Often, given a little more time to comply, manufacturers can support higher efficiency levels. A recent negotiated standard for air conditioners aligned the DOE compliance date with anticipated refrigerant changes. The proposed rule would eliminate the ability to consider alternate compliance dates as part of a negotiated standard.

¹⁵ ASAP and ACEEE. "US Light Bulb Standards Save Billions for Consumers but Manufacturers Seek a Rollback" July 2018.

The proposal also cedes far too much control to manufacturers. Test procedures provide the “rules-of-the-road” for determining compliance with standards. The proposal compels DOE to generally adopt industry test procedures without modification, even if improvements are possible. Manufacturers play a leading role in developing efficiency levels for equipment in ASHRAE 90.1, which is a commercial building energy code. The proposed process would make it exceedingly difficult for DOE to adopt national equipment standards different than those developed by ASHRAE. For example, a new standard for roof-top air conditioners completed in 2016 based on the work of an ASRAC consensus negotiation committee will save 15 quads of energy over thirty years by going significantly above the ASHRAE levels. The proposed revisions to the Process Rule would likely have short-circuited the process that led to that important standard.

The combined effect of the proposed Process Rule revisions will be to, at a minimum, slow the standard-setting process and make it harder to establish new standards. At worst, the revised Process Rule will entirely freeze up the national standards program. (Attachment B provides more details on the proposed Process Rule.)

D. DOE has abused its enforcement discretion to attempt to undo existing standards.

Twice in recent months DOE has issued enforcement policies that undo duly-promulgated standards. These policies are illegal, harm consumers and undermine companies that have invested with the expectation that US law will be enforced.

On November 2nd, the Department granted a request immediately upon receipt from the Air-Conditioning, Heating and Refrigeration Institute (AHRI) that it not enforce standards for furnace fans that take effect on July 3rd of this year. The furnace fan standards, promulgated in 2014 after a multi-year public rulemaking process, will save the typical household about \$70 per year, or about \$670 over the life of a furnace fan.¹⁶ Many manufacturers and component makers have already invested millions of dollars to upgrade product lines to comply. Several major manufacturers (including AHRI members) strongly opposed DOE’s action. Last month, AHRI rescinded its request and, in response, again acting extraordinarily promptly, DOE reversed the policy.¹⁷

On February 8th, DOE announced another enforcement policy that seeks to undermine an existing standard for consumer water heaters, originally promulgated in 2010 and in effect in its current form since late 2016. DOE proposes to temporarily enforce an alternative, significantly weaker standard in place of the minimum requirement established through the law’s rulemaking processes. While we are still evaluating this policy, it also raises concerns about DOE’s use of its enforcement discretion.

DOE’s willingness to use its enforcement discretion in these two cases serves as an open invitation for further enforcement discretion requests from any company that has failed to prepare well for an upcoming standard. Until now, regulatory predictability has been a hallmark of the national appliance standards. Everyone from consumers who expect products to meet minimum standards, to utilities that count on standards in their forecasting, to manufacturers who

¹⁶ See ASAP et al comments at https://appliance-standards.org/sites/default/files/Comments_AFUE2_petition_2019_0.pdf

¹⁷ See <https://www.energy.gov/gc/downloads/furnace-fan-enforcement-policy>

design products and invest in plants and equipment could bank on US standards. DOE's recent abuse of its enforcement discretion has created a new and completely unnecessary uncertainty about whether standards on the books will actually apply.

E. DOE is now contemplating a policy that would effectively foreclose future standards that save natural gas.

Last fall, the gas industry petitioned DOE to rescind two 2016 proposed rules (affecting residential furnaces and commercial water heaters) that would save consumers and businesses \$8 to \$28 billion *and* issue a policy that would make it impossible for DOE to significantly improve the efficiency standards for most natural gas appliances and equipment. The gas industry has requested that products that use condensing technology, which can save 10 – 20% for gas space and water heating appliances, be regulated separately from inefficient products that do not use this technology. For most natural gas-using products covered by national appliance standards, there are few other meaningful improvements for efficiency aside from condensing technology. ASAP and ACEEE have estimated that future standards based on condensing technology efficiency levels could save consumers and business over \$100 billion on their utility bills by 2050.¹⁸

DOE first addressed the question of how to consider condensing technology during the George W. Bush administration and determined that it should be evaluated with a careful consideration of all related costs and benefits, like any other potential technological pathway for improving a product. DOE has repeatedly revisited this finding at the behest of the gas industry, each time reaffirming that condensing technology should be evaluated as a potential basis for improved standards. In some cases, DOE has found that standards at condensing technology performance levels are economically justified (e.g., water heaters over 55 gallons) and in others DOE has rejected condensing-level standards as not economically justified (e.g., residential boilers). If DOE grants the gas industry petition, it will eliminate two important pending standards, both of which are overdue, and effectively eliminate the potential for significant gas savings from future national efficiency standards.

F. Other examples of DOE's mishandling of the program.

DOE's mis-handling of the national appliance standards program is not limited to the five major points described above. Several additional problems merit attention. First, DOE issued five final standards in late 2016 that, due to a required additional review period to identify errors, had not been published in the Federal Register by the beginning of the Trump administration. Subsequently, the Trump administration published one of these five standards (concerning walk-in coolers). The other four cover commercial boilers, portable air conditioners, air compressors and uninterruptible power supplies. These four standards have been caught in limbo. Several states and advocacy groups sued, arguing that DOE has a non-discretionary obligation to publish the final rules since no substantive errors were identified. A district court judge ruled that DOE must publish the standards, but DOE appealed. The Appeals Court should rule soon. Together, these four standards would save \$11 billion according to the DOE analyses for the rulemakings.¹⁹

¹⁸ See ASAP et al comments at https://appliance-standards.org/sites/default/files/Comments_gas_industry_petition_2019_0.pdf

¹⁹ SEE LAWSUIT UPDATE: DOE INACTION COSTS CONSUMERS BILLIONS.

Second, the home appliance manufacturers have requested that DOE withdraw the test procedure for cooking tops, which would make any standard for these products impossible unless and until a new test procedure might be developed. This standard is already overdue; starting over on the test procedure would knock DOE further out of compliance with statutory deadlines. Separately, an advocacy group (Competitive Enterprise Institute) has asked DOE to create a special standard for dishwashers that complete a cycle in less than an hour, even though such dishwashers are widely available today and meet current standards. Both requests would undermine existing standards and divert agency resources from working on its long list of overdue standards and should have been promptly denied. Both are still pending before DOE.

Third, DOE has failed to act on consensus recommendations for pool pump motors and circulator pumps. Consensus-building has been a hallmark of the DOE appliance standards program. I chaired the DOE's Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC) until recently. Since 2012, that committee has established 11 representative working groups that succeeded in developing consensus recommendations for product standards and related policies.²⁰ Among the consensus-based standards, swimming pool pumps stand out for their very large per-unit savings: \$400 - \$550 per year per pool pump. DOE published this standard in late 2016 and the Trump administration provided a final approval in May 2017. However, DOE has not acted to establish a necessary complementary standard for replacement pool pump motors. A broad coalition of swimming pool pump manufacturers, motor manufacturers, consumer groups, energy efficiency advocates, utilities and state governments filed a petition with DOE in 2018. Although DOE published this petition, the agency has not yet indicated if it will act on the joint request. DOE has also failed to act on a consensus recommendation for circulator pumps negotiated in 2016. The standards for these small pumps that are used for circulating heated water in homes and businesses would save considerable energy and money and are strongly supported by a range of stakeholders. Nevertheless, DOE has ignored this recommendation.

V. DOE'S MIS-HANDLING OF THE NATIONAL PROGRAM WILL ALSO HURT MANUFACTURERS.

Most manufacturers that produce products subject to national standards generally support a well-functioning national standards program, even if they do not agree with every decision DOE makes. They generally cite three reasons: preference for a single national standard rather than state-by-state regulation; regulatory predictability; and, through experience, they have learned that business can thrive even as standards increase according to a predictable and reliable schedule. For manufacturers, a predictable and regular cadence of regulatory reviews and, if warranted, updates for standards affecting their products allows for making product changes on a predictable investment cycle along with other product upgrades needed for keeping pace with technological innovation. When DOE falls behind, reviews get bunched together. For example, when DOE fell behind on 22 deadlines by 2005, the resulting litigation and consent decree compressed all the work to catch up on those deadlines into a 5-year period. Today's delays result in tomorrow's ramped up regulatory activity.

²⁰ See <https://www.energy.gov/eere/buildings/appliance-standards-and-rulemaking-federal-advisory-committee>

Similarly, DOE actions that seek to undo duly-promulgated standards invite legal challenges that can significantly shorten lead times for standards investments. When the US Court of Appeals found an attempted rollback of central air conditioner standards illegal in 2004, manufacturers were left with two years to prepare, rather than the five years anticipated by statute. If a court rules that light bulb standard rollbacks are illegal in the months ahead, manufacturers and retailers may have far less time to prepare for compliance. Likewise, failure to enforce existing standards can harm manufacturers that have invested to bring product lines up to date with standards. In sum, manufacturers may pay a high price for uncertainty created by DOE's actions to undermine standards.

Furthermore, when DOE fails to do its job, state policy makers increasingly look to fill the breach. While state preemption inhibits state-level regulation for many products, many states will act where they can when faced with a failing federal program. At least half a dozen state legislatures are considering state standards in 2019. As described above, a fundamental feature of the national standards law is a trade of state preemption for a federal commitment to update standards. With the federal government failing to live up to its side of the bargain embedded in law, pressure will grow to ease or eliminate federal preemption. In sum, a well-functioning national standards program provides a predictable regulatory environment for manufacturers. Recent mishandling of the program creates regulatory uncertainty that increases costs for manufacturers.

CONCLUSION

Appliance, equipment and lighting efficiency standards are a foundational US energy policy that has delivered enormous benefits for consumers, US energy systems and the environment over several decades. The typical US household spends \$500 less on utility bills because of existing standards. Much more can be saved by updating standards to keep pace with technological change. Federal law requires DOE to review and update standards periodically, but the current administration has fallen badly behind. In addition to missing many statutory deadline (16 so far and another 12 likely to be missed), the agency has also proposed to eliminate light bulb standards that will save more than any other single standard, proposed program changes that will make it much harder to update any standards and abused its enforcement discretion to undermine existing law. Furthermore, DOE is now considering a gas industry petition that, if granted, would put standards that could potentially save significant amounts of natural gas out of reach. DOE's actions are like a wrecking ball aimed at this foundational energy saving policy.

MISSED DEADLINES FOR APPLIANCE STANDARDS

Prepared by the Appliance Standards Awareness Project (updated January 2019)

By law, the U.S. Department of Energy (DOE) must review each national appliance standard every six years and publish either a proposed rule to update the standard or a determination that no change is warranted (i.e., a “negative determination”). If DOE publishes a proposed update, a final rule is due two years later. In addition, Congress set unique review schedules for a few products.

As of January 2019, DOE has missed legal deadlines for sixteen product standards.¹ Based on the current rate of progress, DOE likely will miss another dozen deadlines by January 2021, including those for electric motors, distribution transformers, commercial refrigerators and furnace fans.

Missed standards deadlines as of January 2019

Product	Required rulemaking step	Legal deadline
Small electric motors	Proposed rule or neg. determination	March 2016
Pool heaters	Proposed rule or neg. determination	April 2016
Water heaters	Proposed rule or neg. determination	April 2016
Clothes dryers	Proposed rule or neg. determination	April 2017
Room air conditioners	Proposed rule or neg. determination	April 2017
Cooking products	Final rule	June 2017
Refrigerators and freezers	Proposed rule or neg. determination	Sept. 2017
Fluorescent lamp ballasts	Proposed rule or neg. determination	Nov. 2017
Dedicated outdoor air systems	Proposed rule or neg. determination	April 2018
Computer room A/Cs	Proposed rule or neg. determination	April 2018
VRF A/Cs and heat pumps	Proposed rule or neg. determination	April 2018
Commercial water heaters	Final rule	May 2018
Residential clothes washers	Proposed rule or neg. determination	May 2018
Evaporatively-cooled com. ACs	Proposed rule or neg. determination	May 2018
Water-cooled com. ACs	Proposed rule or neg. determination	May 2018
Metal halide lamp fixtures	Final rule	Jan 2019

Savings at stake

Missed deadlines for updating appliance standards result in lost savings for consumers and businesses. A 2016 ASAP/ACEEE report, [Next Generation Standards](#), found that updates to existing appliance standards could save consumers and businesses about \$43 billion each year on their utility bills by 2035.

Test procedures also overdue

DOE has also missed more than a dozen legal deadlines for updating test procedures. Updated test procedures should be completed in advance of the product standards review process.

Sources: *DOE Report to Congress, Dec. 2018*; *DOE's Draft 5-year schedule*; *national appliance standards laws*. For more information contact: Andrew deLaski, adelaski@standardsASAP.org, 617-390-5334.

¹ In addition, a court settlement required DOE's “best efforts” to complete a final standard for furnaces by April 2016.



This NOPR would rescind definitions issued by DOE in 2017 that determine what light bulbs need to meet the efficiency standard for bulbs that will take effect in 2020. It would allow reflector, globe, candelabra and other commonly used bulbs to waste more energy.

A 2007 law set standards for typical pear-shaped screw-in light bulbs that took effect starting in 2012, and set a 2017 deadline for DOE to update the standard. Because DOE has not done so, the statutory backstop standard of 45 lumens per Watt, which can be met by LED and fluorescent bulbs, will apply in January 2020 to covered bulbs (although the NOPR argues the backstop has not yet been triggered).

The 2007 law also required DOE to determine whether additional bulb shapes and types should be covered by the updated standards, and gave DOE broad authority to include other bulbs. The 2017 definitions mean most bulbs commonly used in U.S. homes would need to meet the 2020 standard. The new proposal would reverse this decision.

The proposed rollback would cost consumers billions of dollars

- ▶ Because many fewer bulb types would need to meet standards, consumers would pay at least \$12 billion a year in higher electricity bills by 2025—about \$100 per household each year in lost savings.
- ▶ Almost half the light bulbs in the U.S. are of the affected types—2.7 billion bulbs. There are LED bulbs of each type, with energy savings that typically pay for the added purchase cost in less than a year.
- ▶ Almost 90% of the savings from the 2020 standard would be lost under the rollback since the current bulbs that were added in 2017 are so wasteful. (The rest of the savings may also be lost if DOE fails to enforce the standard for the typical pear-shaped bulbs as well.)

The proposed rollback would likely be illegal, while DOE fails to do legally required work

- ▶ Under the appliance standards law DOE may not change a standard for any product to allow it to use more energy. If DOE finalizes the rollback, efficiency supporters will sue.
- ▶ DOE is not required to modify the 2017 definitions. While developing this harmful and likely illegal rollback, DOE has missed legal deadlines for more than a dozen other standards and as many test procedures.

This rule would add uncertainty for manufacturers and other businesses

- ▶ Manufacturers, retailers, utility efficiency programs, and others are making plans for 2020 and placing orders, but they don't know what the standard will be. Because a rollback would spark litigation, it would extend the uncertainty, likely for years. Those who have invested to meet the 2020 standard would be harmed.

ACEEE
American Council on Energy-Efficient Economy

ASAP

APPLIANCE STANDARDS
AWARENESS PROJECT

Appliance Standards Process Rule

This NOPR would modify the 1996 "Process Rule," and subsequent agency directives that guide how DOE sets appliance efficiency standards (and arguably modify the legal requirements as well).

A lot is at stake. Existing appliance standards will save consumers over \$2 trillion. Future standards (that are technically achievable today) could save consumers another \$1 trillion.

DOE should meet its legal requirements, not overhaul a process that was working

- ▶ DOE has successfully used the current process: during the Obama administration alone it set 50 standards that will save consumers \$550 billion and reduce global warming CO2 emissions by 3 billion metric tons.
- ▶ DOE has now missed legal deadlines for considering updates to 16 standards (13 of them in the last two years). They also have missed legal deadlines for more than a dozen test procedures.
- ▶ Some reforms to the process could be beneficial, but focus should be on improving standards.

Proposed changes will make it hard to update standards

- ▶ Proposed threshold for "significant" savings could have blocked about a third of the standards set in 2009-2016 (updates would have to save at least 0.5 quadrillion Btu, the total energy use of 3 million homes for a year, or 10% of total energy use).
- ▶ The rule would add a new and poorly defined "economically rational consumer" test.
- ▶ The rule would bar using different metrics or compliance dates in direct final rules based on consensus agreements. Removing this flexibility makes it harder to find agreement: it would likely have blocked the largest standard DOE has set, on commercial roof top air conditioners, as well as other consensus-based standards.
- ▶ Making the process mandatory in all cases removes the ability to address problems and invites more lawsuits.
- ▶ More complicated process would take even longer and could make it impossible for DOE to meet legal deadlines:
 - ▷ Setting standards would require an early assessment notice and RFI followed by a determination, then a framework document followed by a preliminary analysis (or an ANOPR), then an economic analysis reflected in a NOPR and draft technical support document, then a supplemental NOPR or RFI if needed, then a final rule.
 - ▷ Test procedures would similarly require a notice and RFI and determination, followed by an RFI, followed by a full rulemaking—all at least 180 days before the NOPR for the standard.
 - ▷ And for a new standard a separate rulemaking on covering the product would have to be completed before any of the above steps could start.

Proposed changes give too much control to manufacturers

- ▶ Generally requires use of industry test procedures without modification, thus blocking improvements (and potentially delaying updates of standards).
- ▶ Bars DOE from going beyond levels for commercial heating and cooling equipment set mostly by manufacturers and architects (under the professional association ASHRAE) except in "extraordinary circumstances" (the consensus roof top air conditioner standards mentioned above went considerably beyond ASHRAE levels).
- ▶ New early assessment relies on submitted data only manufacturers are likely to have, not DOE's own analysis.



**APPLIANCE STANDARDS
AWARENESS PROJECT**

APPENDIX C

EFFECTS ON CONSUMER CHOICES, PRODUCT PERFORMANCE AND PRICES

Manufacturers not only meet efficiency standards, they exceed them. And they do so while providing consumers with expanded choices, improved product performance, and, perhaps most surprisingly, often without raising prices. The finding is counter-intuitive: standards that remove the most inefficient choices from the market enhance available consumer choices. These results are supported by both casual observation as well as rigorous quantitative research.

A visit to the lighting aisle and appliance department at any Home Depot, Lowe's or other lighting or appliance retailer will readily reveal the dizzying array of innovative choices available for consumers. For example, partly due to lighting standards (both those in effect today and those required to take effect in 2020) and partly due to public- and private-sector investments in research and development, lighting products offer some of the best case studies on energy efficiency. The U.S. led the light-emitting diode (LED) lighting revolution, and American consumers now have countless choices of bulbs, fixtures, controls, and "smart" features, all while LED prices have decreased by 94% since 2008.²¹ Likewise, DOE's clothes washer standards, negotiated over several rounds between industry and efficiency supporters, have spurred manufacturers to develop a wide array of very efficient products (including both top- and front-loading) that not only save energy, but according to Consumer Reports, clean clothes better.²² From light bulbs, to clothes washers, to refrigerators, to commercial roof top air conditioners, buyers of products regulated by DOE have more and better choices than ever before.

Research published by Resources for the Future (RFF) found that product performance often improved as new standards took effect. In addition, their research showed that, "product reliability has improved considerably since our case appliances were first covered under federal (standards)..."²³ Similarly, a 2012 study by ASAP and ACEEE examined ten regulated products before and after standards took effect and found that product performance generally stayed the same or improved and new features became available.²⁴

Even as product choices and efficiency have improved, prices have declined. Researchers at the London School of Economics (LSE) reviewed the existing literature finding that, contrary to DOE's predictions, "a number of studies provide empirical evidence showing the correlation between imposing energy efficiency standards and, surprisingly, *declining prices* of durable goods."²⁵ Their own analysis of price data confirmed that prices declined after standards took effect.²⁶ The LSE researchers concluded:

²¹ U.S. DOE. *The Future Arrive for Five Clean Energy Technologies – 2016 Update*. p. 8

²² CONSUMER REPORTS. *THE BEST WASHERS FOR \$800 OR LESS: THESE WORKHORSES OF THE LAUNDRY ROOM HANDLE LOADS FOR LESS*. LAST UPDATED: JULY 12, 2017 12:30 PM

²³ M. Taylor, C.A. Spurlock, H.C. Yang. *Confronting Regulatory Cost and Quality Expectations: An Exploration of Technical Change in Minimum Efficiency Performance Standards*. Resources for the Future. October 2011. p. 70.

²⁴ Maurer et al. *Better Appliances: An Analysis of Performance, Features and Price as Efficiency Has Improved*. ASAP and ACEEE, May 2013.

²⁵ Brucal and Roberts. p. 3

²⁶ Brucal and Robert. p. 24

We find no evidence to suggest that more stringent energy efficiency standards hurt consumers by increasing price or lowering quality. Rather, we find evidence that price declines and quality improvements accelerate with stricter standards, which unambiguously improves consumer welfare, excluding external pollution-related benefits.²⁷

How can improvements in efficiency and quality occur at the same time as price declines? The LSE researchers investigated this question and concluded: “we find evidence supporting policy-induced innovation, wherein firms lower prices of older models as they are forced to introduce new models meeting new, stricter efficiency standards.”²⁸ In other words, as standards take effect the price of older, but still compliant products comes down and manufacturers introduce new, high-end models with new features to capture profits from consumers willing to pay premium prices for the latest thing. In addition, manufacturer innovation, sparked by the need to redesign for a new standard, finds new ways of producing the regulated product that not only improves efficiency, but also other aspects of the product and the process for making it.

Of course, for any product category, there will almost always be some poor-performing products on the market, whether the product is subject to efficiency standards or not. Anecdotes about a particular clothes washer or dishwasher that performs poorly should not be read as an indictment of all appliances in that category. Poorly-performing products, subject to standards or not, will be weeded out by the competitive market. Existing law provides protections against standards that would harm product performance: DOE is not permitted to set a standard at a stringency level which would impair the utility (effectiveness) of the product. The result: even as products have become more efficient due to standards consumers have gained a wider range of choices to meet their needs.

²⁷ Brucal, A. and M. Roberts. *Do energy efficiency standards hurt consumers? Evidence from household appliance sales*. Grantham Research Institute/London School of Economics. March 2017. p. 2.

²⁸ Brucal and Roberts. p. 28.

Mr. RUSH. I thank the gentleman.

The staff is trying to get you some refreshments. We will give them a moment to make sure that they replace the water for you.

Now the Chair recognizes Ms. Kennedy for 5 minutes for the purposes of an opening statement.

STATEMENT OF KATHERINE KENNEDY

Ms. KENNEDY. Chairman Rush, Ranking Member Upton, and distinguished members of the subcommittee, thank you for the opportunity to testify at this important hearing.

My name is Katherine Kennedy, and I am a senior director of the climate and clean energy program at NRDC.

Climate change is the existential threat of our time. 2018 was the fourth warmest year on record. The human tool of climate change is immense, and the economic costs are reaching hundreds of billions of dollars per year. Indeed, nearly 20 percent of the Federal deficit for fiscal year 2018 was in response to devastating wildfires, hurricanes, floods, and other natural disasters around the country.

The impacts of climate change are felt most acutely by low-income communities and communities of color and by the most vulnerable Americans, especially children and the elderly. But, together, we can still avoid the worst impacts of climate change using tools and technologies that are already available, first and foremost, energy efficiency. We know how to solve this problem. The biggest risks are inaction and delay.

As NRDC explained in our recent report “America’s Clean Energy Frontier: The Pathway to a Safer Climate Future,” using energy more efficiently is crucial to America’s efforts to fight climate change. It is our best weapon. Energy efficiency lowers carbon pollution and consumer energy bills, strengthens the electricity grid, and avoids the air and water pollution that threatens our health and that of our communities. Energy efficiency is the most equitable and affordable climate solution because, as it lowers carbon pollution, it also lowers the energy burden on low-income Americans.

DOE’s Appliance Standards Program has a strong bipartisan track record. It was created in 1987 under a Republican President, a Republican Senate, and a Democratic House. For four decades, it has enjoyed support, not only from groups like NRDC, but from consumer and low-income advocates, utilities, State officials, and many manufacturers.

Our National Standards Program has already produced enormous carbon energy and dollar savings, but the best is still to come. As we energy wonks like to say, energy efficiency is the low-hanging fruit that keeps growing back. Opportunities for further energy efficiency keep growing as technology and innovation continue to advance.

Now is the time to dramatically scale up our energy efficiency program. Appliances and equipment have long lifetimes. Each inefficient piece of equipment installed today in our homes, businesses, and factories helps to lock in a higher level of global warming. The more we delay, the harder it will be to reverse course.

We should continue the tradition of bipartisan support for energy efficiency standards, but the current administration has brought the DOE efficiency standards program to a grinding halt and is trying to put it in reverse. The agency has not issued one new or updated energy efficiency standard, or even proposed any standards, under this administration other than those issued by the Obama administration or put in place by Congress.

There is no room for excuses. DOE has clear legal deadlines to meet, and time and time again, this administration has failed to meet them. Instead, DOE is focused on unnecessary changes that will undermine the program and its impact. DOE is even attempting to gut lighting standards signed into law by President George W. Bush.

Congress should be gravely concerned that DOE's illegal delays will have consequences stretching far beyond this administration. Fighting climate change without a robust energy efficiency standards program is like trying to finish a puzzle with missing pieces. It is harder, it takes longer, and in the end, it is impossible. That is not a risk we can afford to take.

Instead of irresponsible and illegal delays and rollbacks, DOE should update energy efficiency standards on time and should act to expand the program's energy and carbon savings. This will benefit all Americans, our economy, and our environment, and will protect our children's future.

Thank you, and I will be happy to respond to any questions.¹

Mr. RUSH. Thank you.

The Chair now recognizes Mr. McGuire for 5 minutes.

STATEMENT OF JOSEPH M. MCGUIRE

Mr. MCGUIRE. Chairman Rush, Ranking Member Upton, and members of the subcommittee, thank you for the opportunity to testify this morning on behalf of the home appliance industry.

Our industry is a strong supporter of, and participant in, the appliance standards program since its creation. We strongly support a system of Federal standards and State preemption, and we do not support a rollback of any standards.

The energy efficiency gains across major appliance categories are dramatic and undeniable. Modern refrigerators use the same amount of electricity as a 50-watt light bulb. A new clothes washer uses 73 percent less energy than it did in 1990 but can hold 20 percent more laundry. Today's average dishwasher uses 50 percent less water than in 2001.

While the appliance program is successful, it is in need of modernization. Over the years, regardless of the administration, concerns have arisen when DOE has failed to move in an efficacious manner, too slowly, too quickly, and with no real prioritization.

In 2005, DOE was directed by Congress to issue a standard for battery chargers by 2008. That did not happen. In 2007, a new law compelled DOE to act no later than July 1st, 2011. DOE did not issue the final rule until 2016.

¹The prepared statement of Ms. Kennedy has been retained in committee files and also is available at <https://docs.house.gov/meetings/IF/IF03/20190307/109029/HHRG-116-IF03-Wstate-KennedyK-20190307.pdf>.

And DOE has moved too quickly to publish a standard. The most alarming example of this was the 2015 proposed dishwasher rule. Manufacturer tests show that dishwashers could not clean dishes with such a small amount of water allowed by the standard. The economic analysis to support the proposed rule also showed the economic payback to the consumer was longer than the useful life of the product. To its credit, DOE did not dispute the test results provided by our Members and pulled the proposed standard back.

The overarching historical problem is that DOE's work and resources are based on arbitrary timelines set forth under EPCA. DOE's resources should be used efficiently to manage energy savings, not maximize rulemakings.

In the last two Congresses, AHAM has advocated amendments to achieve these modernizations. We would welcome action on such legislation by this committee and the 116th Congress in a bipartisan manner.

Short of achieving such legislative reforms, we have urged DOE to adopt some of these reforms administratively. We are pleased that DOE has proposed important, but modest reforms in the past few weeks, and we look forward to studying them further and hope that the Department will implement them.

To be clear, much of the current process rule stays intact under the latest reforms proposed by DOE. We support a few common-sense principles in the proposal. The first is that the agency should be required to follow the process it establishes to govern the regulatory program. Second, requirements in how to test a product should be final before a standard is proposed. Third, provide DOE the ability to better prioritize its regulatory work and to focus its resources on those products that offer the greatest opportunity for energy savings.

And let me add a word about test procedures for home appliances. Virtually all Federal appliance efficiency test procedures were initially built on industry-developed test standards. The new process rule requires DOE to rely on these voluntary accredited standards consistent with OMB directives, where appropriate. DOE always had, and will continue to have, the ultimate says on Federal test procedure construction.

Our objective is to improve the regulatory environment in measurable ways that foster a fair, more predictable, more open, and more efficient regulatory landscape. We will continue to live up to our responsibility to provide consumers with life-enhancing products that deliver superior performance and energy and environmental benefits.

Mr. Chairman, and members of the subcommittee, in summary, we call on Congress to modernize EPCA, so that DOE can better prioritize its work based on potential energy savings, improved transparency, and stakeholder engagement, and a logical sequence to proposing test procedures and standards.

Thank you for the opportunity to testify, and I would be happy to answer any questions.

[The prepared statement of Mr. McGuire follows:]



Leadership ▶ Knowledge ▶ Innovation

**Testimony
of
Joseph M. McGuire
President and Chief Executive Officer
Association of Home Appliance Manufacturers**

**Before the
Energy & Commerce Subcommittee on Energy
U.S. House of Representatives**

**Hearing on
Wasted Energy: DOE's Inaction On Efficiency Standards And Its
Impact On Consumers And The Climate**

March 7, 2019

Leadership ▶ Knowledge ▶ Innovation

Chairman Rush, Ranking Member Upton and members of the Subcommittee, thank you for the opportunity to testify on behalf of the Association of Home Appliance Manufacturers (AHAM) regarding the Department of Energy (DOE) Appliance Standards Program. We appreciate the Subcommittee reviewing this program, which we fully support. It significantly impacts appliance manufacturers, their employees and the consumers that use home appliances every day to make their lives easier, safer and more enjoyable. It is our hope that today's hearing can provide some insights and momentum to strengthen and improve the appliance program, which requires changes to the underlying law, the Energy Policy and Conservation Act of 1975, as amended (EPCA).

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes more than 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people. AHAM members produce more than 95% of the household appliances shipped for sale in the U.S. and Canada. The factory shipment value of these products is more than \$38 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

AHAM is a major stakeholder in the Appliance Standards program and the ENERGY STAR program, which builds from the minimum standards program. Our member companies make this program work through their investments and innovations. We have been involved in virtually all legislative efforts that have culminated into what is today's Appliance Standards program, including the National Appliance Energy Conservation Act of 1987. We strongly support a system of federal standards and state preemption, and we do not support a rollback of any standards. One set of nation-wide standards is critical to a thriving domestic industry, its employees, and to ensure that consumers have fully featured, moderately priced products.

AHAM and its members are committed to providing energy efficient home appliances that have a direct, positive impact on the lives of consumers. The energy efficiency gains across all of the core major appliance categories are dramatic and undeniable. For example, the most commonly purchased modern refrigerator uses the same amount of electricity in one year as a 50 Watt light bulb.

There have also been numerous test procedure revisions accompanying these standards revisions. In many cases, we have supported specific standards in legislation or as part of regulatory negotiations. The reality is that for many home appliance product categories, the energy savings have a diminishing return. For example, an average refrigerator uses about 450 kWh/year. Trying to squeeze another 10 percent energy savings out of the product would be costly and only save 45 kWh/year of energy to a household. The Energy Information Agency estimates the average residential energy cost in the U.S. is 12.95 cents/kWh, so a household would save a mere \$5.83/year in their utility bill or less than 50 cents/month. In addition, there are basic laws of

thermodynamics that exist requiring a certain amount of energy to remove heat and ensure the food stays cold.

Similarly, we have engaged with ENERGY STAR in all its forms and through its various reorganizations. It has been a successful program in which our companies have been integrally involved. It builds from the Appliance Standards program. The ENERGY STAR program for home appliances was always managed by DOE until in 2009 it was administratively moved to EPA. This has caused a wealth of redundancies that are unavoidable when two federal agencies regulate the same products. AHAM continues to support moving the management of the ENERGY STAR program for home appliances back to DOE, where the product expertise lies and government efficiencies can be realized by one agency regulating industry products.

The title of this hearing is "DOE's Inaction on Efficiency Standards" and I would like to comment on this topic directly. DOE's actions on standards and whether they are "late" or "early" are sometimes based on a never-ending statutory timeframe under EPCA that simply did not anticipate the efficiency gains achieved and the numerous additional products added to the program since the 1970s and 1980s. DOE, regardless of who is the President or Secretary of Energy, has little ability to prioritize the standards work based on energy savings and resources. Under EPCA, DOE must review a standard every six years and test procedures every seven years. In practice, the laws have been interpreted to require DOE to engage in a full rulemaking regardless of the merits.

Attached to this testimony is a chart of the 30 standards for 10 products that have been promulgated since 1986, including many multiple standards for the same product. We negotiated most of our products' standards with the efficiency advocates, the latest being in 2010. Negotiating these standards is a broadly supported process and is even newly placed in DOE's proposed Process Rule changes. However, DOE took up to three years to finalize some of the products in the agreement so even when they are negotiated it can take DOE some time to finalize the standards. Further complicating the matter is that test procedures have a different arbitrary timeline than standards for regulatory look back, and I think we all agree that the test procedure needs to be done before the standard otherwise we have a Tower of Babel in understanding possible standard levels. This principle was in the bipartisan Senate Energy bill in the previous two Congressional sessions. The current statutory mandate hamstring DOE and prevents "on time" compliance. For example, for clothes dryers, under EPCA, the test procedure work at DOE needs to be done by August 2020, but the standards under EPCA need to be completed by April 2017, three years after the test procedure.

Manufacturers need certainty and stability. We want a data-driven appliance standards program, and by and large DOE has shown that they want the program to be data-driven. Over the years, regardless of the Administration, concerns have arisen when the DOE has failed to move in a methodical manner – too slowly or too quickly. For example, under the Energy Policy Act of 2005, DOE was directed to issue a final rule for energy conservation standards for battery chargers by 2008. That did not happen. In 2007, the Energy Independence and Security Act (EISA) attempted to compel DOE to act, stating that "Not later than July 1, 2011, the Secretary shall issue a final rule that prescribes energy conservation standards for battery chargers or determine that no energy conservation standard is technically feasible and economically

justified.” AHAM supported DOE compliance with this statutory deadline, and still, DOE issued the final rule only in 2016 – nine years after EISA 2007 was enacted into law and mandated publication of the standard.

And DOE has at times moved too quickly to publish a standard. For example, a dishwasher negotiated standard was to be effective in 2013. In 2014, just one year after the negotiated change took effect, DOE published a proposed rule that would have severely impacted the ability of the dishwasher to clean the dishes. It took the industry two years to convince DOE of this problem.

The overarching and historical problem is that DOE’s work and resources are based on arbitrary timelines set forth under EPCA that are not relevant to the program’s experience over the past thirty five years. As a result, when the DOE attempts regulatory expediency or experiences a delay in setting a standard, serious problems arise for industry. It should be common sense to assume that DOE should spend less time regulating a product that might save 0.01 Quads than it would for a product that saves 1 Quad.

EPCA needs to be amended and the program needs to be reformed. AHAM would like to work with the committee and other stakeholders to reform EPCA.

Process Rule

AHAM commends the Department of Energy on the recent release of the Notice of Proposed Rulemaking (NOPR) to modernize its Process Rule for developing appliance efficiency standards and related test procedures. This has been time well spent to modernize the program, recognize its achievements and lay out a process that drives prioritization related to energy savings. Importantly, the proposed rule that was released requires that the Department of Energy to consistently adhere to its process requirements. It also will allow DOE to better prioritize its resources based on energy savings – the core goal of the program. For updates to current standards, DOE will undertake an early, fact-based assessment of the need for further updates before the normal multi-year process to analyze all other impacts of a standards update. This assessment will be subject to public comments and will aid in prioritization of appliance standards rulemakings based on energy savings potential, not by an arbitrary six-year lookback period. It also adds a new provision to the Process Rule that ensures DOE will use the negotiated rulemaking process in an attempt to develop a consensus proposal before issuing a proposed rule.

Last year, AHAM along with a group of similarly situated organizations submitted very detailed (more than 36 pages) joint comments to DOE in response to its RFI on the Process Rule. We would be happy to share those comments with the Subcommittee. That rule, which was adopted in 1996 through a joint stakeholder effort, has been an important roadmap for DOE rulemaking that, until recently, served to ensure the transparent, consistent, data-driven development of rules with early and frequent input from experts and stakeholders. Since the initial development of the rule, however, much has changed. The Appliance Standards program itself and the individual product test procedures and standards have matured and an enormous amount of energy savings have been achieved.

It is time that DOE modernize the Process Rule to continue to allow transparent, consistent, data-driven rule development with early and frequent input from stakeholders, which was the intent of the original rule. AHAM agrees that amended standards should be periodically reviewed. In a modernized rule, DOE should adopt policies and analyses that reduce burdens in the rulemaking process and lead to less burdensome rules supported by sound data. Specifically, the joint commenters recommended that a modernized Process Rule do the following:

- Be binding on DOE and apply to both consumer products and commercial equipment;
- Require a quick assessment during the initial phase of a rulemaking in order to determine whether amended standards may be or are not justified;
- Increase transparency and public engagement before DOE proposes an energy conservation standard;
- Ensure proper development, application, and sequencing of test procedures;
- Include a strong preference for negotiated rulemakings and rely on direct final rules when appropriate;
- Meaningfully consider cumulative regulatory burden in the rulemaking analyses; and
- Update DOE's economic analysis.

EPCA Reform

EPCA was originally signed into law more than 40 years ago in response to the 1973 energy crisis, creating the first comprehensive approach to federal energy policy. The primary goals of EPCA were to:

- Increase energy production and supply
- Reduce energy demand
- Increase energy efficiency, and
- Help the Executive Branch respond to supply disruptions.

EPCA established the Energy Conservation Program for Consumer Products Other Than Automobiles (Energy Conservation Program), which was designed to improve energy efficiency for consumer products, including home appliances, and certain commercial and industrial equipment. EPCA also allows the Secretary of Energy to classify additional types of consumer products as covered products. The Energy Conservation Program consists of four parts: testing, labeling, minimum energy conservation standards, and certification and enforcement procedures.

For home appliances, EPCA requires that, six years after the issuance of every final rule establishing or amending standards, DOE either publish a determination that no amendment to the standard is justified or publish a proposed rule to amend the standard. This is commonly referred to as the "six year lookback." AHAM supported this provision as part of a legislative compromise. But, after decades, it is reasonable to reconsider its continued application. The lookback requirement is unending and has proven to be a prescription for a huge regulatory edifice built around churning out dozens of rulemakings each year regardless of their significance or justification.

Since the law was enacted in 1975, the U.S. has made great strides in reducing energy use. Home appliance manufacturers have played a significant role in that success by innovating to

create products that save time, effort, water and energy, as well as enhance style, convenience, and ease of use. Specific examples include appliances that take less time to set/start, refrigerators with more internal volume using the same footprint, appliances that can monitor and diagnose themselves, and smart grid enabled appliances. Appliances today are thinner, lighter, longer lasting and have greater capacities without increases in size. What's more, at end of life, more than 90 percent of white goods are recycled, pointing to sustainability of products.

Let me address one concern that we have heard expressed with our support for eliminating the EPCA statutory requirement to review standards every six years and test procedures every seven years. The nature of regulatory activity and the purpose of the federal regulatory agencies is to properly balance stakeholder comments with the needs of the country based on the policies of the Administration. Virtually every other, if not all, agencies that promulgate regulations outside of the DOE Appliance Standards program are amended or updated based on changes in events, innovation or new information. Under our proposal, DOE would have more decision-making control and flexibility to prioritize and administer the program more efficiently. It would not prevent any action nor would it eliminate any standards under the program. A modernized program should limit unnecessary, lengthy, unending rulemakings and focus on priorities, return to properly sequencing test procedures and standards, and evaluate cumulative regulatory burden while improving transparency and stakeholder engagement. The current Process Rule already has "*Factors for Priority-Setting.*" The factors to be considered by DOE in developing priorities and establishing schedules for conducting rulemakings include:

- Potential energy savings.
- Potential economic benefits.
- Potential environmental or energy security benefits.
- Applicable deadlines for rulemakings.
- Incremental DOE resources required to complete rulemaking process.
- Other relevant regulatory actions affecting products.
- Stakeholder recommendations.
- Evidence of energy efficiency gains in the market absent new or revised standards.
- Status of required changes to test procedures.
- Other relevant factors.

If a stakeholder believes that DOE is not acting when they should, a petition can be filed by anyone to DOE.

Federal Standards

AHAM supports federal efficiency standards in lieu of state standards and has been involved with and supported appliance related energy legislation for 30 years. A single, uniform standard throughout the U.S. is vastly preferable to a patchwork of 50 disconnected state-by-state standards. Federal appliance standards based on industry input and stakeholder agreement is a path towards more reasonable regulation and protection of consumer interest in a full diversity of products by manufacturer, brand, features and price points. Rational, definite standards with sufficient lead-time, when coupled with incentive programs, can also minimize the damage to U.S. employment.

Home appliances are an energy efficiency success story. Accordingly, energy consumption of home appliances has steadily decreased according to AHAM's 2014 Energy Efficiency and Consumption Trends data. The energy efficiency gains across all of the core major appliance categories are dramatic and undeniable. Refrigerators are being produced at larger capacities, and are 50 percent more efficient than 20 years ago. Refrigerators, refrigerator-freezers, and freezers with an added ENERGY STAR designation are at least 10 percent more efficient than the federal standard. The most commonly purchased modern refrigerator uses the same amount of electricity as a 50-Watt light bulb. Clothes washers are another example of energy efficiency success, with tub capacities growing larger and energy consumption declining. A new clothes washer uses 76 percent less energy than it did in 2000. In fact, replacing an 8-year old washer with one of average efficiency will save the American consumer \$130 per year in utility bills, and more than 5,000 gallons of water per year.

Diminishing Returns

For products that have already been subject to two or three rounds of standards regulation, as many of the products under AHAM's scope have, EPCA's required serial rulemaking process, driven by the mandatory six year lookback, is beginning to result not only in significant cumulative regulatory burden on manufacturers, but also in diminishing returns for consumers and the environment. Most regulated home appliances have been through at least three rounds of standards revisions. The chart in Appendix A shows the many standards for our products and how far into the future standards are already in the queue to be revised or implemented for the first time.

For many home appliances, the opportunities for additional savings beyond the significant savings already achieved are severely diminished as they are nearing maximum efficiency under available technology. For those products, further amended standards will likely result in insignificant energy savings and increased cost to consumers and manufacturers beyond an acceptable level. Moreover, for some products more stringent energy conservation standards will likely result in degraded performance and functionality.

With regard to product performance, AHAM members performed investigative testing to demonstrate the impact DOE's proposed standards would have on dishwashers' ability to remove adhered soils and grease. AHAM members then conducted consumer surveys regarding the performance test results and consumers commented that, for example, the dishes from a dishwasher under the proposed standards level were "yucky," "unsanitary," "unappetizing," "filthy," and "nasty." In fact, according to one survey, 70 percent of the consumers surveyed were somewhat, very, or extremely likely to serve family and friends from the dishwasher at the current standard level. Not one person would serve dishes to family or friends from the dishwasher at the proposed levels. Moreover, AHAM pointed out that if dissatisfied with product performance, consumers are likely to pre-rinse dishes, which increases water use. Product performance is at the very essence of the bargain in EPCA between obtaining energy efficiency improvements while protecting consumers from being deprived of products that work well and perform the desired function. This is not only meaningful to any understanding of technical feasibility, but is also explicitly a requirement for economic justification under the "safe harbor" provision in 42 U.S.C. § 6295(o)(2)(B)(IV).

Demonstrating diminishing returns, recent standards have resulted in minimal energy savings and it is reasonable to think that trend will continue. The 2013 dishwasher standard, per DOE's analysis saved only 0.07 quad and the 2014 room air conditioner standard and 2019 dehumidifier standards each saved under a quad—about 0.3 quad each. And, as shown in the table below, the percentage of consumers experiencing a net cost (i.e., those for whom the lifecycle cost of the product will be greater than the savings at the new efficiency level) per DOE's own analysis (which AHAM has consistently shown is overly optimistic), is high.

Appliance Standard	Percent of Consumers Experiencing Net Cost Per DOE's Analysis
2015 Clothes Dryer	Up to 32
2019 Dehumidifier	Up to 28.7
2013 Dishwasher	19 for standard size
Proposed Dishwasher	53 for standard size
Proposed Portable Air Conditioner	13 for residential consumers
2014 Room Air Conditioner	Up to 33.6
2014 Refrigerator/Freezer	Up to 45.7

Not only are consumers experiencing a net cost to achieve minimal savings, but the payback periods for those who will experience a benefit are long. The payback period—the time it takes consumers to recover the increased purchase cost of a more-efficient product through lower operating costs—for the current dishwasher standard (effective May 30, 2013), per DOE's analysis is 11.8 years for a standard size product. And, per AHAM's analysis the proposed dishwasher standard would have a 20 year payback period for a standard size product (DOE's analysis indicates a 9 year payback period). These payback periods are compared to the 13 year lifetime of the product. Similarly, the last refrigerator/freezer standards (effective September 15, 2014) had a median payback period, per DOE's analysis, of 9.5 years for top mount refrigerators. And the last room air conditioner standard (effective June 1, 2014) had payback periods of up to 10 years for one product class according to DOE's analysis. Per DOE, the clothes dryer standard (effective January 1, 2015) had consumer a payback period of 11.7 years for gas clothes dryers.

The same is true for ENERGY STAR specifications. For example, according to EPA's analysis the expected consumer savings for the latest dishwasher specification were only about \$6 per year. And the 2014 refrigerator, refrigerator-freezer, and freezer ENERGY STAR specification saves a consumer only about \$5-7 per year compared to a product that meets the 2014 DOE standard for those products. According to EPA's analysis, the ENERGY STAR specification for compact refrigerators would save consumers only \$3.65 per year.

To achieve these minimal energy savings, impacts on manufacturers have also been significant. The table below shows the loss in the industry's value that the DOE's own analysis predicted for several recent home appliance rulemakings.

Appliance Standard	Loss in Industry Net Present Value (%)
2015 Clothes Washer	33
2013 Dishwasher	13.3

Proposed Dishwasher	17.7-34.7
2019 Dehumidifier	20.9
Proposed Portable Air Conditioner	30.6
2014 Room Air Conditioner	18.6
2014 Refrigerator/Freezer	21.7 for standard size refrigerator-freezers

For manufacturers, there is always a flurry of activity leading up to the compliance date of a new or amended standard. This includes adding new capital equipment, sourcing new and sometimes more costly materials, redesigning products, retooling factories, etc. Home appliances are now in an endless cycle of regulation, where as soon as one compliance effort ends or is near completion, another round of regulation to change the standard again begins. There is no time for manufacturers to catch their breath.

Just as importantly, there is no time for DOE, manufacturers or efficiency advocates to assess the success of standards or review their impacts on consumers and manufacturers. It would seem that, as part of its retrospective review, DOE should not be so driven to issue standards that it does not take into account whether an amended standard is justified. Without DOE fully reviewing the success/impact of past rules, consumers are at risk of increased product cost and the simultaneous loss of functionality, features and choice. Among other effects, certain product models could be at risk, with disparate impact on low and fixed income consumers.

Finally, a complete analysis of cumulative regulatory burden must consider the sheer number of products the regulated manufacturers make, in addition to the one being regulated in a particular rule, that are subject to proposals to amend standards or to promulgate standards for the first time. The time and resources needed to evaluate and respond to DOE's proposed test procedures and energy conservation standards for all of these products should not be discounted. When these rulemakings occur simultaneously, the cumulative burden increases dramatically.

The same is true when compliance dates are clumped together for all of these products, as it was with the last major round of standards for products in AHAM's scope, as shown in the table below. The ENERGY STAR specification also changed on these dates and new EnergyGuide labels were required. For many AHAM members, this meant a revamp of product lineups for several of the major product categories in less than a year, bookended by changes to commercial clothes washers in January 2013, residential dishwashers in May 2013, and microwave ovens in June 2016.

June 2014	September 2014	January 2015	March 2015
Room Air Conditioners	Refrigerator/Freezers	Clothes Dryers	Clothes Washers

DOE should be required to take this into account in its analysis as well as in its planning.

Going fast just to hit an arbitrary, recurring statutory deadline is not the way to run a regulatory program. It has caused DOE to short-circuit the rulemaking process by forgoing such critical pre-proposal steps as public data availability, stakeholder input, and company interviews. These steps should not be overlooked—they provide DOE with a better understanding of the realities of

the current market and product mix and could have prevented many analytical errors. In addition, the pre-proposal steps allow stakeholders time to prepare much more useful comments for DOE's consideration. Indeed, the Process Rule was originally developed in large part because DOE was conducting nontransparent analyses and in isolation from real-world data, which resulted in the need for much more engagement among government, DOE contractors, and industry stakeholders.

Similarly, EPA's process for changing and developing ENERGY STAR specifications is not consistent. Although EPA provides opportunity for public comment, there is no formalized notice and comment process for specification levels and test procedures. While the ENERGY STAR Guiding Principles provide factors EPA often reviews in developing new or revised specifications, the principles do not mandate that all of the factors be reviewed every time, nor do they provide sufficient insight into when EPA will review each of the factors. Because the ENERGY STAR program has been so successful, it has become essentially mandatory in the marketplace. As such, a more formalized process that provides consistency and certainty as well as requires a fuller technical analysis is necessary, hence our call for ENERGY STAR to be subject to the requirements more akin to the Administrative Procedure Act.

Conclusion

Our ultimate objective is to improve the U.S. regulatory environment in measureable ways that foster a fairer, more predictable, more open and more efficient regulatory landscape. Manufacturers are eager for certainty and stability. Accordingly, we hope this Subcommittee will support modernizing EPCA so that DOE can prioritize its work on the Appliance Standards program, maximize energy savings, and improve transparency and stakeholder engagement. This is the best way to preserve the national standards program and build upon its successes while still recognizing the realities of limited opportunities for further energy savings that are economically justified, technologically feasible, and do not negatively impact product performance.

APPENDIX A: Home Appliance Standards and Revisions Since Inception of the Appliance Standards Program

Appliance	Effective Year of Standard																
	1988	1990	1993	1994	2000	2001	2004	2007	2010	2011	2012	2013	2014	2015	2016	2018	2019
Refrigerator/Freezer	Original	1st Update				2nd Update							3rd Update				
Room Air Conditioner	Original			1st Update									2nd Update				
Clothes Dryer	Original		1st Update	Reviewed										2nd Update			
Clothes Washer	Original		1st Update			2nd Update	3rd Update		4th Update					5th Update		6th Update	
Dishwasher	Original		1st Update					2nd Update				3rd Update					
Kitchen Ranges and Ovens	Original										Reviewed						
Dehumidifiers							Original			1st Update							2nd Update
Microwave Ovens														Original			
Portable Air Conditioners																	Original
Wine Chillers																	Original

Mr. RUSH. Thank you.
The Chair now recognizes Mr. Harak for 5 minutes.

STATEMENT OF CHARLES HARAK

Mr. HARAK. Thank you, Chairman Rush, Ranking Member Upton, and members of the committee. I thank you for the opportunity for allowing the National Consumer Law Center to offer testimony. It is truly a privilege to have the opportunity to provide NCLC's perspective on why regularly updated appliance standards are so important for low-income consumers.

Appliance standards make home energy more affordable. For low-income consumers, this means fewer terminations of utility service and homes that are more comfortable and healthier to live in. Even from a narrow Federal budget perspective, appliance standards help stretch Federal fuel assistance dollars, the program referenced by the Congresswoman from Delaware, by lowering the household's heating and cooling bills.

To provide some context for my comments, I will share some calls I had with a low-income consumer recently. The woman—I will call her Susan—had been living without heat for three weeks because her landlady had done nothing to fix her heating system after it had stopped working. Susan is a working single mom with a school-age child. While her heat was out, Boston had temperatures below 10 degrees, at the same time that the Midwest was experiencing record cold temperatures. Her apartment was so cold that her son had a hard time getting up and going to school, as he was anxious and lethargic. While the local board of health eventually cited the owner for serious sanitary code infractions, Susan had to tell the owner she would be going to court in order to get the heating system working again.

For those of us who work with low-income households, experience teaches that, when owners replace failed equipment like the heating systems in Susan's home, they often go out and buy the lowest-cost and least-efficient unit that will replace the failed appliance. This leaves the tenants with higher energy bills.

This is why imposing minimum appliance efficiency standards is so important for low-income people, in particular. They are disproportionately renters. While the homeownership rate for the country as a whole is around 64 percent, homeownership rates among low-income households are around 30 percent.

The major appliances which contribute most to energy bills, heating systems, air conditioners, water heaters, are almost always purchased by the owner. In the absence of good standards, low-income renters will become saddled with inefficient equipment and needlessly high bills for years.

While some critics voice concerns about the cost of adopting efficiency standards, the Department of Energy operates under statutory mandates that require it to ensure that standards adopted provide net benefits to consumers. The statutory language which the Assistant Secretary referenced, I will quote it. "Any new or amended energy conservation standard shall be designed to achieve the maximum improvement in efficiency which the Secretary determines is technologically feasible and economically justified."

Historically, the Department has taken quite seriously those last five words, “technologically feasible and economically justified”. My office, the National Consumer Law Center, has been in several Department standards dockets. They do take years to complete, involve extensive analysis of the economic impacts on consumers, on manufacturers, and on the economy, and allow for all stakeholders to be heard.

The Department’s own web page says, “DOE regulations governing covered appliances...are established through a rulemaking process that provides opportunities for public review and comment. Manufacturers, distributors, energy suppliers, efficiency and environmental advocates, and other members of the public are encouraged to participate in rulemakings.” And, in fact, they do.

If NCLC would make any criticism of the Department’s process, we would note that it has consistently erred on the side of overestimating the cost of manufacturers complying with the standards. Products sold after the standards go into effect often cost less than estimated, and consumer benefits have, therefore, been even greater than predicted.

The net benefits to consumers of appliance standards are impressive. The Department estimates—again, I am quoting their website—“standards saved American consumers \$63 billion on their utility bills in 2015”. Energy efficiency groups agree that standards have saved consumers billions of dollars in the near term and much more in the long term.

Consumers, thus, face significant harm when the Department unreasonably misses deadlines for updating appliance standards. The failure to promptly revise standards leaves consumers worse off, as the sale of less efficient products leads to higher energy for the life of the product purchased. For major residential products, heating systems, air conditioners, water heaters, the aggregate loss to consumers can easily reach hundreds of millions of dollars, depending on how late the Department is in finally revising that standard. Moreover, because the more efficient products will result in lower energy bills, failure to revise standards can affect consumer health as well, since higher energy bills lead directly to terminations.

In conclusion, we applaud the committee for holding this important hearing and hope the committee will succeed in getting the Department to meet all deadlines.

Thank you.

[The prepared statement of Mr. Harak follows:]

**TESTIMONY OF CHARLES HARAK, ESQ.¹
NATIONAL CONSUMER LAW CENTER
7 WINTHROP SQUARE
BOSTON, MA 02110**

**BEFORE THE ENERGY SUBCOMMITTEE OF THE HOUSE ENERGY &
COMMERCE COMMITTEE**

**Hearing on “DOE Energy Efficiency and Renewable Energy Office: Impacts
of Missed Deadlines for DOE Efficiency Standards on Consumers”**

March 7, 2019

Chairman Rush, Committee members, thank you for inviting the National Consumer Law Center (NLCLC) to offer testimony at this hearing. It is truly a privilege to have the opportunity to provide NCLC’s perspective on why strong and regularly-updated appliance efficiency standards are so important for low-income consumers. To put my testimony in a nutshell: appliance standards make home energy more affordable. For low-income consumers, this means fewer terminations of their utility service, and homes that are more comfortable and healthy to live in. Even from a narrow federal budget perspective, appliance standards help stretch federal fuel assistance² dollars by lowering the household’s heating and cooling bills.

To provide some real-consumer context to my comments, I will share a series of calls I had with a low-income consumer about a month ago. The woman, whom I’ll call Susan, had been living without heat for three weeks because her landlord had done nothing to fix her heating system after it failed. The heating system was behind a locked door, so Susan couldn’t begin to determine what the problem was, even if she had the skills to do so or called in a heating contractor herself.

Susan is a working, single mom, with a young, school age child. During this period of time, Boston experienced two days of temperatures below 10 degrees – the same time that Chicago and much of the Midwest was experiencing dangerous, record-cold temperatures. Her apartment was so cold that she had a hard time getting her son up in the morning and out the door to school, as he was distressed

¹ Charles Harak is the managing attorney of the National Consumer Law Center’s energy and utilities unit. He can be reached at charak@nclc.org, or 617 542-8010.

² Formally, the Low-Income Home Energy Assistance Program (LIHEAP), authorized at 42 U.S.C. §§ 8621-8630.

and lethargic. While the local Board of Health eventually cited the owner for serious Sanitary Code infractions, Susan let the owner know she would go to court if the heating system was not fixed promptly – which in fact succeeded in getting the heating system up and running.

I share this story for two reasons. First, it illustrates the extent to which low-income households rely on their major appliances to be in good operating condition. Second, experience teaches that in situations like Susan's, the owner – after receiving an order to replace the failed heating system – will often go out and buy the lowest cost – and least efficient – system that will restore heat. This is why imposing minimum appliance efficiency standards is so important for low-income people. They are disproportionately renters, by far. While the homeownership rate for the country as a whole is around 64% (2018),³ only 50% of households with income at or below median income are homeowners, and homeownership rates among low-income households (the poorest 20% of households) are around 30%. The major appliances which contribute most to their energy bills – heating systems, air conditioners, water heaters – are almost always purchased by the owner. In the absence of standards, low-income renters will be saddled with inefficient equipment and needlessly high bills for years.

While some critics voice concerns about the costs of adopting efficiency standards, the Department of Energy, in adopting or revising standards, operates under statutory mandates that require it to ensure that, overall and across all consumers, any standard adopted provides net benefits. The relevant statutory language reads:

“Any new or amended energy conservation standard prescribed by the Secretary under this section for any type (or class) of covered product shall be designed to achieve the maximum improvement in energy efficiency, or, in the case of showerheads, faucets, water closets, or urinals, water efficiency, which the Secretary determines is technologically feasible and economically justified.”⁴

Historically, the Department has taken quite seriously those last five words, “technologically feasible and economically justified.” NCLC has been in several Department appliance standards dockets. They usually take years to complete; involve experts conducting extensive analysis of the relevant equipment and of the

³ <https://www.census.gov/housing/hvs/files/currenthvspress.pdf>.

⁴ 42 U.S.C. § 6295(o)(2)(A).

economic impacts on consumers, manufacturers, and the economy as a whole; and allow for all stakeholders to be heard. The Department's own web page states:

“DOE regulations governing covered appliances and equipment are established through a rulemaking process that provides opportunities for public review and comment. Manufacturers, product importers and distributors, energy suppliers, efficiency and environmental advocates, and other members of the public are encouraged to participate in rulemakings.”⁵

If we at NCLC would make any criticism of the Department's process, we would note that the Department has fairly consistently erred on the side of overestimating the costs of manufacturers complying with new or revised standards. As a result, products sold after the standards go into effect often cost less than was estimated, and consumer benefits have therefore been even larger than predicted.

The net benefits to consumers of the Department's standard setting efforts are quite impressive. The Department estimates that “standards saved American consumers \$63 billion on their utility bills in 2015, and cumulatively, have helped the United States avoid 2.6 billion tons of carbon dioxide emissions.”⁶ Non-profit groups that monitor the standards program agree that it has saved consumers tens of billions of dollars in the near-term, and much more in the long term.⁷

Therefore, consumers face significant harm when the Department unreasonably misses deadlines for updating appliance standards, something that Congress has clearly mandated.⁸ The failure to promptly revise standards leaves consumers worse off, as the purchase of less efficient products leads to higher energy and water costs for the life of the products purchased. For residential products that are widely used around the country – such as heating systems, air conditions, and water heaters – the aggregate loss to consumer can easily reach hundreds of millions of dollars, depending on how late the Department is in finally revising the standard. Moreover, because the more efficient products result in

⁵ <https://www.energy.gov/eere/buildings/about-appliance-and-equipment-standards-program>.

⁶ <https://www.energy.gov/eere/buildings/about-appliance-and-equipment-standards-program>.

⁷ The American Council for an Energy-Efficient Economy estimates that “national appliance efficiency standards in place today will save consumers more than \$1 trillion” in the long-term.

⁸ See, for example, 42 U.S.C. § 6295(m): “(1) In general - Not later than 6 years after issuance of any final rule establishing or amending a standard, as required for a product under this part, the Secretary shall publish—
(A) a notice of the determination of the Secretary that standards for the product do not need to be amended, based on the criteria established under subsection (n)(2); or
(B) a notice of proposed rulemaking including new proposed standards based on the criteria established under subsection (o) and the procedures established under subsection (p).”

lower energy bills, failure to revise standards can affect consumer health as well, since higher energy bills directly lead to more terminations for low-income households.

I will close with some broader context comments about the importance of appliance standards and energy efficiency not only for low-income households, but for all Americans. First, appliance efficiency standards have been one of the key tools in bending the curve of growth in energy consumption. In the state in which I live – Massachusetts – energy consumption (kWh) has been essentially flat for the past 25 years and greenhouse gas emissions are down over 20% over the 1990 baseline, yet our Gross State Product is up 21% (inflation-adjusted) just in the past decade.⁹ Using energy more efficiently and wisely is completely compatible with strong economic growth. It leaves more money in household budgets for other expenses, and allows business to invest more in growth. Second, implementation of appliance standards improves public health. The less we burn of fossil fuels, the fewer emissions of soot, particulates, mercury, lead and other unhealthful combustion by-products. All citizens benefit. Third, by reducing inefficient energy consumption, appliance standards help address the problems that climate change is already causing. Make no mistake, low-income households tend to suffer the most when hurricanes (such as Hurricanes Katrina, Irma, Harvey, Maria) or wildfires (such as hit Paradise, California) destroy homes and communities. They are less likely to have insurance that covers losses, less likely to have friends or relatives who can take them in, less able to relocate. Appliance standards not only save energy, they can help to save lives.

In conclusion, NCLC applauds the Committee for holding this important hearing. We hope the Committee will succeed in getting the Department to meet all required deadlines.

⁹ “Global Warming Solutions Act, 10 Year Progress Report”, presented to the Massachusetts Energy Efficiency Advisory Council (January 23, 2019); available at: <http://ma-eeac.org/wordpress/wp-content/uploads/EEAC-Jan-23-GWSA-10-Year-Progress-Report.pdf>.

Mr. RUSH. I want to thank the witness.
And now, the Chair recognizes Mr. Yurek for 5 minutes.

STATEMENT OF STEPHEN R. YUREK

Mr. YUREK. Mr. Chairman, Ranking Member Upton, and members of the subcommittee, I thank you for inviting me to testify this morning on the topic, or this afternoon.

Thank you, Chairman Rush, Ranking Member Upton.

AHRI has 320 member companies that manufacture air conditioning, space heating, water heating, and commercial refrigeration equipment that supports over 100,000 U.S. manufacturing jobs and more than 1.3 million American jobs throughout its supply and distribution chain. And I want to make it very clear that our industry has a long and proven record of leadership when it comes to innovation and energy efficiency.

I am here today to discuss three main points.

First, we agree that the Department of Energy should do all it can to promulgate regulations in a timely manner while adhering to the requirements that energy standards be technically feasible and economically justified. Our industry is unequivocally opposed to delays in rulemakings, as we always have been. In fact, in 2005, we joined a lawsuit against DOE to require them to issue rules in a timely manner.

However, the amendments enacted in EPACT 2007 actually increases the burden on DOE by mandating a six-year review of all efficiency standards and a seven-year review of all test procedures. AHRI and its members' companies are best served when the proper amount of time is devoted to each rulemaking, rather than cut short because of the need to catch up to meet a standard.

The history of feast-or-famine rulemaking by DOE negatively impacts consumers and manufacturers. For consumers, it increases the cost of products they rely on for their comfort, health, and safety. For manufacturers, it increases uncertainty and hampers planning for future research, development, testing, and production of the next generation of equipment. Therefore, we join the subcommittee in its call for DOE to do everything it can to complete rulemakings in a timely manner.

Second, we applaud DOE for recently issuing a proposed rule updating the process rule. While we will submit comments with suggestions on ways that the proposed rule might be improved, we are pleased that DOE intends for the rule to be binding on the Department, rather than mere guidance, as claimed by DOE in the past. When all parties are aware of the process, rulemakings are more transparent, economical, and predictable.

Finally, we believe that the above two points make the case for a bipartisan congressional action to reauthorize and reform the nearly 45-year-old EPCA to bring it into the 21st century. While EPCA was a bipartisan response to the energy crisis of the mid-1970s, and it has been extremely successful, the fact remains, it is nearly 45 years old, and a tremendous amount has changed since then.

EPCA reform should stress flexibility, enhance technical and economic justification. Given short shrift to such analysis in order to meet arbitrary statutory deadlines results in poorly-constructed

rules that place undue burdens on small businesses with wide-ranging ramifications for our industry and the 1.3 million employees who depend on it.

Under current law, before a standard is even in effect, DOE must announce the commencement of its work on the next version of that standard, all to comply with the six-year mandated rule-making cycle. We are not suggesting no additional rulemakings, nor would we ever suggest rolling back efficiency standards for any product category. Manufacturers in the market are simply not given enough time to adjust to new regulatory requirements. Our equipment is designed to remain in service for more than a decade. So the market for new products must be viewed in the long term, not in six-year increments.

A reformed EPCA would require the new rulemakings to include a look-back to determine the effectiveness of the previous rule as it pertains to actual energy savings and associated costs. Every time DOE issues a new rule, it issues a press release that extols its estimates of the rule's benefits and cost savings for consumers and energy savings for the nation. But DOE has never looked back to see what the energy savings were or if consumers ever recovered the additional money it costs them upfront for the more efficient equipment. This needs to change.

Mr. Chairman, and members of the subcommittee, many people believe that a divided Government such as we have today makes it less likely for progress to be achieved on important issues. We do not see it that way. Rather, we see this as an opportunity for people of good will to meet in a spirit of cooperation and compromise to bring about necessary change. Therefore, the opportune time for updating EPCA is now.

AHRI and our Members are committed to openness and cooperation with Congress, allied trade associations, efficiency advocates, and the DOE on ways we can all work together to improve this nearly 45-year-old law. We invite all stakeholders to join us and work together to craft an updated regulatory scheme that meets the needs of the current and future market while achieving the nation's energy goals.

Thank you very much.

[The prepared statement of Mr. Yurek follows:]

**Testimony of Stephen R. Yurek
President and CEO**

**Air-Conditioning, Heating and Refrigeration Institute
("AHRI")**

**Before the
Subcommittee on Energy
Committee on Energy & Commerce
U.S. House of Representatives**

**Hearing on
"Wasted Energy: DOE's Inaction on Efficiency Standards
and Its Impact on Consumers and the Climate."
March 7, 2019**

Summary

The Issues:

The Department of Energy must do all it can to complete its scheduled efficiency standards rulemakings in a timely manner.

The Energy Policy and Conservation Act, or EPCA -- is almost 45 years old and does not reflect new technologies and economic realities. An endless cycle of efficiency rulemakings continues to have an adverse impact on our global competitiveness and the American jobs we create. Consumers are being asked to pay more than they can afford for heating, cooling, and water heating equipment, which can lead to use of alternatives, some of which compromise consumer comfort and safety, while saving less energy or in some cases using more energy.

Our Proposed Solution:

Congress should:

- Ensure that new efficiency standards are justified by requiring regulators to analyze the current standard to determine its effectiveness with respect to costs and energy savings.
- Institute a more realistic standards revision schedule to allow time for manufacturers and the market to adjust to new standards and regulators to use a more inclusive rulemaking process.
- Convene all stakeholders for the purpose of creating a new regulatory framework for federal energy efficiency rulemakings, while not impacting those currently in place or in the pipeline.

Introduction

Chairman Rush, Ranking Member Upton, and Members of the Subcommittee, good morning and thank you for inviting me to testify on this important topic. My name is Stephen Yurek and I am the President and CEO of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI).

AHRI has 320 member companies that manufacture quality, safe, efficient, and innovative residential, commercial, and industrial air conditioning, space heating, water heating, and commercial refrigeration equipment and components for sale in North America and around the world. AHRI's member companies represent more than 90 percent of the HVACR and water heating equipment manufactured and sold in North America and employ over 100,000 people in manufacturing plants around the United States. That number increases to more than 1.3 million American jobs when you include those involved in distribution, installation, and maintenance of the equipment our members manufacture.

I want to make it clear that our industry has a long and proven record of leadership when it comes to innovation and energy efficiency. In fact, the products and equipment our members produce are 50 percent more efficient than they were just 20 years ago. But even as we innovate and develop the next generation of highly efficient equipment, we always have in mind the needs of our customers who are, after all, the people who buy and use our equipment to cool their data centers and hospitals, heat their schools and homes, and keep our food supply fresh and safe. It is the goal of every business to provide what the customer needs, and in our case, that means offering products in a wide range of price points with a wide range of features. In short, we recognize that not all of

our customers can afford the top-of-the-line, highest efficiency equipment – a fact that needs to be considered when government promulgates regulations that increase equipment costs for consumers. Those who cannot afford equipment at efficiency levels set at unreasonable levels often repair the lesser efficiency equipment they already have, negating energy savings that might have been realized at more reasonable minimum standards.

I am here today to discuss three main points:

One, we agree that it is imperative that the Department of Energy do all in its power to promulgate regulations in a timely manner while adhering to the requirements that any standard be technically feasible and economically justified.

Our industry is unequivocally opposed to avoidable delays in rulemakings, as we have always been. In fact, in 2006, we joined a lawsuit against the Department of Energy seeking to eliminate the backlog of rules in the pipeline at the time.

Two, we applaud DOE for recently issuing a proposed rule updating the Process Rule to make improvements in the regulatory process for appliance efficiency standards that is more transparent, economical, and predictable.

Three, we believe that the above two points make the case for bi-partisan Congressional action to reauthorize and reform the nearly 45-year-old Energy Policy and Conservation Act to bring it into the modern era.

Mr. Chairman, AHRI and its member companies that have regulated products are best served when an efficiency standard rulemaking is thorough, with solid economic and technical analyses and stakeholder input. This can best be done when the full regulatory schedule is available, rather than cut short because of the need to catch up to meet mandated statutory deadlines. The history of “feast or famine” rulemaking schedules by DOE negatively impacts consumers and manufacturers. For consumers, it increases the cost of products they rely on for their comfort, health, and safety. When products cost more than consumers can afford, they find alternatives, some of which compromise their comfort and safety, while saving less energy or none at all, and in some cases using even more energy. For manufacturers, it increases uncertainty and hampers planning for future research, development, test, and production of the next generation of air conditioning, heating, commercial refrigeration, and water heating equipment. Predictability and certainty make for economical and efficient manufacturing, which creates and sustains jobs and helps avoid unnecessary impacts on consumers.

So, we join the subcommittee in its call for the Department of Energy to do everything in its power to complete rulemakings in a timely manner. One thing we do not want is a rulemaking backlog such as occurred in the early 2000s that resulted in a flood of hastily created rules that might not have been created with proper stakeholder collaboration and solid technical input.

To that end, we are pleased that the Department just last week issued its proposed Process Rule by which it intends to administer the Congressionally-mandated energy efficiency standards program going forward. While we will submit comments with suggestions on ways that proposed rule

might be improved, we are pleased that DOE intends for the rule to be binding on the Department, rather than mere “guidance,” as claimed by DOE in the past. When all parties are aware of the process, rulemakings are more transparent, economical, and predictable.

We are particularly happy that this Department of Energy intends to do what no previous Department has done, namely put a value on what amount of energy saved, combined with the estimated costs of compliance, constitutes an “economically justified” rule. In the past, the justification was based on little more than a gut feeling or, in some cases, whether a rule was projected to save any energy at all.

In a particularly egregious example, DOE in 2016 proposed a new rule setting standards for commercial packaged boilers¹ that would save just eight tenths of a percent more energy than the existing standard, but would cost manufacturers between 13.1 and 23.8 *million dollars* to produce a new line of equipment. This is why we support defining economic justification.

Finally, we are pleased that the Department intends to henceforth issue test procedures prior to issuing rules, which means that manufacturers will have a way to measure whether their products meet the specified efficiency levels. It might seem like common sense to most people – and it is indeed common sense – but that does not mean that process has always been followed in the past. This provision alone would make this rule worth the effort to update it, in our view.

¹ Energy Conservation Program: Energy Conservation Standards for Commercial Packaged Boilers; Proposed Rule, 81 Fed. Reg. 15,836 (March 24, 2016).

In sum, Mr. Chairman and members of the Subcommittee, we believe that this moment in time is an excellent one to take a fresh look at the Energy Policy and Conservation Act, or EPCA, which is the law that governs all that we're discussing here today.

While EPCA was a bipartisan response to the energy crisis of the mid-1970s and has, by all accounts, worked well for its original intent, the fact remains that it is nearly 45 years old. A tremendous amount has changed since then. For example, in 1975, *after* a 10 percent increase, the price of OPEC oil skyrocketed to...\$13 a barrel! It also is the year that Jimmy Hoffa disappeared, but I assure you I am not here to open up that can of worms.

What I would like to do for the next few moments, is to summarize ways in which EPCA is no longer appropriate for today and to offer our commitment to work together in a bipartisan manner with all stakeholders and both sides of the aisle to make some consensus changes to this law so that it can work for all of us as we approach the half century mark.

A fair and accurate reading of the law will indicate that the current 6-year, endless cycle of rulemakings was never envisioned under the original Act. In fact, it was intended for each product class to undergo at the most two rulemakings and then base future rulemakings on a finding of the potential for "significant energy savings" rather than a mandatory six-year review cycle that was added in 2005.

Standards for central air conditioners are, for example, on their fourth iteration, with no end in sight. In contrast, residential gas furnaces have, for a number of reasons, not undergone a successful rulemaking since Ronald Reagan, who last week would have celebrated his 108th birthday, was President.

Despite that, however, shipments of the highest efficiency gas furnaces have steadily increased in the coldest states and regions, which is a strong indication that when higher efficiency makes financial sense for consumers, they choose it. On the other hand, we have found that when new products and equipment cost more than consumers can afford, they find alternatives, some of which compromise their comfort and safety, while saving less energy or none at all, and in some cases using even more energy.

We are not suggesting no additional rulemakings, nor would we ever suggest rolling back efficiency standards for any product category. We do, however, believe that the efficiency standards program has drifted out of step with technology and the marketplace and is in need of updating.

Accordingly, I would like to briefly outline several reforms we believe would make this law much more meaningful and successful in today's economy and technological state.

First, EPCA reform should stress flexibility and enhanced technical and economic justification. As rules are adopted, it is important that they be subjected to appropriate scrutiny, robust cost benefit analyses, and careful debate. Giving short shrift to such analysis in order to meet statutory

deadlines may result in poorly constructed rules that place an undue burden on small businesses with wide-ranging ramifications for our industry and the more than 1.3 million employees who depend on it.

Such a robust process of justification and analysis was envisioned by the Obama Administration's Executive Order 13563, which was designed to improve regulation and regulatory review across the federal government. The order compelled each federal agency to make a "reasoned determination" that a regulation's benefits justify its costs. It further required that regulations be tailored to "impose the *least burden* on society," while also taking into account "the cost of cumulative regulations." President Obama at the time also issued a memorandum concerning small businesses that directed agencies to comply with the Regulatory Flexibility Act, or RFA. The RFA directs agencies to examine the impact of regulations on small businesses and to consider more flexibility to minimize costs. While these declarations are an important starting point for assessing the true costs and benefits of EPCA-mandated efficiency standards, their application must be expanded if EPCA is to be appropriately tailored to the needs of a modern economy.

Specifically, these principles should be expanded as they apply to EPCA's requirement for mandatory, serial rulemakings. The Executive Order contemplates "flexible approaches" to regulatory activity and encourages the pursuit of "alternative regulatory approaches." Small businesses, in particular, feel the burden of expending resources --- including research and development, engineering, testing, supply chain and manufacturing work, and legal effort --- to come into compliance with ever- changing DOE-promulgated efficiency standards.

But rather than encouraging a process by which standards once set are given time to work (or not), before a standard is even in effect, DOE announces the commencement of its work on the next version of that standard, all to comply with the 6-year rulemaking cycle..

Manufacturers and the market are simply not given enough time to adjust to new regulatory requirements. Heating, cooling, water heating, and refrigeration equipment is designed to remain in service for more than a decade, so the market for new products must be viewed in the long-term, not in six-year increments.

Serial rulemaking must end, especially for products that have been through at least 2 full rulemakings. Furthermore, new, more onerous requirements need to be justified by more than trivial projected energy savings, and as much as we appreciate DOE proposing to finally define “significant energy savings,” we believe it should be defined as a minimum of 1 quadrillion BTUs, or quad of energy savings. Anything less is not worth the time and effort and funding it takes to promulgate the rulemaking and develop, manufacture, and ship the new mandated products.

Second, a reformed EPCA could require that new rulemakings be undertaken only after a “look back” to determine the effectiveness of the previous rule as it pertains to actual energy savings and associated costs. The “look back” could also determine the extent to which DOE utilized actual market data to reflect the implementation and impact of the prior rule. This examination process would result in well-constructed rules that have real-world, as opposed to theoretical, energy savings, while bringing to light and helping to reform poorly-constructed rules.

Why do we support look back rules? Because every time DOE issues a new rule, it issues a press release that extols its estimate of the rule's benefits in cost savings for consumers and energy savings for the nation. But at no time has DOE ever looked back to see what the energy savings actually were or if consumers actually ever recovered the additional money it cost them up-front for the more efficient equipment. That needs to change.

Third, the EPCA processes should be reformed to maximize transparency and stakeholder engagement. Transparency and accountability are not just abstract ideals, but are meaningful *processes* that help to facilitate sound regulations, policies, and decisions. Accordingly, a reformed EPCA could require that DOE increase utilization of negotiated rulemakings. Such a requirement would facilitate dialogue and engagement and would ultimately result in more sound regulations. Negotiated rulemakings are a more cost-effective, expeditious, and open process with which to develop rules. Experience dictates that this has the potential to address numerous concerns relating to transparency, accountability, and the responsiveness to stakeholders. Policies that appropriately balance competing political and policy preferences emerge when industry, consumers, other stakeholders, and government work to create standards driven by consensus.

Conclusion

Mr. Chairman and Members of the Subcommittee, many people believe that divided government such as we have today makes it less likely for progress to be achieved on important issues. AHRI does not see it that way. Rather, we see an opportunity for people of good will to meet in a spirit of cooperation and compromise to bring about necessary change. We do not pretend to have a

monopoly on good ideas and we do not believe that if we do not get everything we want, we will sit back and wait for a more opportune time. The opportune time is now.

In our view, divided government is the perfect incubator for consensus changes and progress on important issues. Displays of raw power based on numbers are impossible in such an atmosphere, leading instead, we hope, to a spirit of compromise and progress. AHRI and our members are committed to openness and cooperation with Congress, allied trade associations, efficiency advocates, and the Department of Energy on ways we can all work together to improve this nearly 45-year-old law. We invite all stakeholders to join us and work together to craft an updated regulatory scheme that meets the needs of the current and future market while achieving the nation's efficiency goals.

I appreciate the chance to appear today, and I am happy to answer any questions you might have.

Mr. RUSH. That concludes the opening statements.
Oh, I'm sorry. Mr. Friedman, please accept my apology. You are recognized for 5 minutes.

STATEMENT OF DAVID J. FRIEDMAN

Mr. FRIEDMAN. I apologize. Dealing with technical difficulties.

Mr. UPTON. You just feel like the President; you get three mikes, right?

[Laughter.]

Mr. FRIEDMAN. There you go. There you go. I just want to be closer to the middle, I guess.

Well, Chairman Rush, Ranking Member Upton, and members of the committee, thank you for the opportunity to testify on behalf of Consumer Reports, our more than 6 million members, and Americans, who together spend nearly \$325 billion a year on their household energy bills.

Now, as a nation, we have known for more than 240 years that some truths are self-evident. So with tongue partly in cheek, I would point to the self-evident truth that the cheapest energy is the energy you never use, and it is energy efficiency standards that deliver just that. Or, to use the Assistant Secretary's frame, the most affordable energy is the energy you never use.

Now I saw that self-evident truth firsthand when I sat in the same chair as the Assistant Secretary a few years ago. When the Department of Energy is active on energy efficiency standards, the benefits truly add up. In fact, they have delivered a 5-to-1 return on investment for every American that should be the envy of Wall Street.

And here, investment is truly a keyword. These standards are an investment in American ingenuity. Our top companies look to these standards both for market certainty and to continue driving innovations into the market. They create a series of good, better, and best models of a product and count on DOE staff to survey that progress as they set the next standard. These companies see their R&D dollars pay off and create new jobs as the market changes while consumers save a lot of money from this virtuous cycle.

The only other option, frankly, is a race to the bottom, which is what will happen if we buy into those here who seem to think that American ingenuity is nearly tapped out. Plenty of company's overseas are happy to keep the bar low, dumping their barely compliant products on our markets while other countries get the latest technology.

Now, in contrast, as I think you have already heard today, lighting shows what happens when you invest in innovation. You can walk through any hardware store now and you can choose LEDs that have daylight, soft white, dimmable bulbs, programmable bulbs, floodlights, candelabra lights, bulb lights, Christmas lights. I even saw some menorah lights. You can get anything you need, and all those amazing choices are thanks to a mix of efficiency standards set by Congress in this case and other investments in innovation.

Now, building on this success story, near the end of my time at DOE, staff put forward a well-reasoned plan to expand the definition of general service lamps, so more choices and savings could be

available for more Americans. This administration's rollback will reduce consumer choice and make utility bills less affordable.

Now, from reading the proposal, the decision was clearly not about consumers or affordable energy. Instead, they appeared to rely on legal gymnastics to argue that what was perfectly legal in 2016 was no longer allowed just a few years later. Of course, the law didn't change.

Adding insult to injury, the Department's process rule update is filled with red tape. And frankly, I find it shocking that, when Congress puts down deadlines or creates process, it is called arbitrary; it is called optional. And yet, when we have new administration process, it is called necessary and must be binding. I don't think that is the way the Constitution works.

DOE should be focused on helping Americans, not adding new red tape that further slows down the process and appears designed to help companies tie up these standards in courts. Making matters worse, the proposal sets an arbitrary threshold for whether or not some household products can ever get a new or stronger standard.

This retrospective-based threshold is completely out of step with modern life, where we rely on consumer electronics and other gadgets that don't use a ton of energy individually, but together account for nearly 40 percent of home electricity use. That shouldn't be off limits.

Now, sadly, administration decisions that leave American consumers footing the bill are all too common these days. From rollbacks on fuel economy standards that will cost consumers more than \$400 billion to rollbacks on predatory loan protections and net neutrality, the scales are being tipped further and further away from everyday Americans. The solution is for all of us, consumers, Government, and leading businesses, to ensure that innovation and technological progress serve the interests of the American people again. And that means being guided by self-evident truths.

In closing, developing standards that allow the talented Federal staff to get back to work on timely, transparent, data-driven standards that will save consumers money and help put the marketplace back in balance. And I hope that is what we can deliver together.

Thank you.

[The prepared statement of Mr. Friedman follows:]



**Testimony of David J. Friedman
Vice President, Advocacy
Consumer Reports**

**Before the U.S. House of Representatives
Committee on Energy and Commerce
Energy Subcommittee**

Hearing on:

**“Wasted Energy: DOE’s Inaction on Efficiency Standards and
Its Impact on Consumers and the Climate”**

**March 7, 2019
10:00 am
2123 Rayburn House Office Building**

Introduction

Chairman Rush, Ranking Member Upton, and Committee members, thank you for inviting Consumer Reports to provide testimony at this hearing. I am David Friedman and I am the Vice President of Advocacy for Consumer Reports. I formerly served as Principal Deputy Assistant Secretary (2015-2016) and Acting Assistant Secretary (2016 - January 2017) for the Department of Energy's Office of Energy Efficiency and Renewable Energy. During my time as Principal Deputy and Acting Assistant Secretary, I was engaged with the department's work on appliance and equipment standards.

Consumer Reports is an independent, nonprofit member organization that works side by side with consumers for truth, transparency, and fairness in the marketplace. We use our rigorous research, consumer insights, journalism, and policy expertise to inform purchase decisions, improve the products and services that businesses deliver, and drive regulatory and fair competitive practices. Consumer Reports has 63 state of the art labs in our consumer product and service testing center, in Westchester, New York, which is the largest nonprofit educational and consumer product testing center in the world. Consumer Reports spends \$27 million on testing, rating and reviewing products.

We buy and test thousands of products every year, including those subject to Department of Energy standards such as dishwashers, clothes washers and dryers, microwaves, stove ranges, air conditioners, and refrigerators and then generate reviews and ratings to help consumers, support our investigative journalism and trusted consumer guidance, and advocate for consumer-friendly marketplace practices. We used to test lightbulbs, but there was so much improvement in the lighting market with the onset of widely available and affordable LEDs, that it was no longer feasible or cost-effective to test them over their lengthy lifetime.

The comfort, safety and affordability of Americans' homes play a large role in their quality of life. Consumer Reports recognizes the importance of home appliances in making daily lives better and easier, which is why providing consumers honest and data-driven information on these products during their purchasing decisions is a large part of our testing and rating program. As discussed below, appliance and equipment standards have been instrumental in cutting Americans' energy use and energy bills, even as home appliances have expanded their features and improved their performance.

The Appliance and Equipment Standards Program run by the DOE has been highly successful and saved billions of dollars for American consumers and businesses

A. Appliance and equipment standards save Americans money.

Home energy and water use are significant expenses, especially for low-income households. Average annual household home energy (electricity, natural gas, and home heating oil) and water spending totaled \$2,481 in 2017.¹ Cooling was the biggest energy draw,² with water heating and lighting being the next most significant costs, followed by refrigeration and space heating.³

The burden of energy costs falls heaviest on low-income households. When compared to the average, Americans in the lowest quintile spend four times as much of their income on electricity and three times as much on electricity, water, and natural gas combined.⁴ And, according to the most recent results from EIA's *Residential Energy Consumption Survey* (RECS) "nearly one-third of U.S. households (31%) reported facing a challenge in paying energy bills or sustaining adequate heating and cooling in their homes in 2015, about one in five households reported reducing or forgoing necessities such as food and medicine to pay an energy bill, and 14% reported receiving a disconnection notice for energy service."⁵

The 60+ products covered by appliance and equipment standards represent about 90% of home energy use, and as a result of these standards, American consumers saved \$63 billion on their utility bills in 2015, and by 2030, cumulative utility bill savings from all standards in effect since 1987 will reach nearly \$2 trillion, according to DOE's analysis.⁶ This means that a typical household saves about \$321 per year off their energy bills as a result of standards.⁷ Since 1990, additional efficiency gains in household appliances include the following: 1) new clothes washers

¹ Source: Consumer Expenditure Survey, U.S. Bureau of Labor Statistics, (September, 2018) at <https://www.bls.gov/cex/2017/standard/multivr.pdf>. Energy totaled \$1,898, while water was \$583.

² U.S. EIA's *Annual Energy Outlook 2018*, Table 4, (February, 2018) at https://www.eia.gov/energyexplained/index.php?page=electricity_use.

³ U.S. EIA's *Annual Energy Outlook 2018*, Table 4, (February, 2018) at https://www.eia.gov/energyexplained/index.php?page=electricity_use.

⁴ Americans in the lowest quintile spend 8.4% of their income on electricity and 13.1% on electricity, water and natural gas combined. Source: Consumer Expenditure Survey, U.S. Bureau of Labor Statistics (September, 2018) at <https://www.bls.gov/cex/tables.htm#annual>.

⁵ U.S. EIA's *Residential Energy Consumption Survey 2015*, Chip Berry, Carolyn Hronis, Maggie Woodward [https://www.eia.gov/todayinenergy/detail.php?id=37072&src=%E2%80%B9%20Consumption%20%20%20%20Residential%20Energy%20Consumption%20Survey%20\(RECS\)-b2](https://www.eia.gov/todayinenergy/detail.php?id=37072&src=%E2%80%B9%20Consumption%20%20%20%20Residential%20Energy%20Consumption%20Survey%20(RECS)-b2)

⁶ Source: Department of Energy, "Appliance and Equipment Standards Program" (Jan, 2017) <https://www.energy.gov/eere/buildings/appliance-and-equipment-standards-program>

⁷ Department of Energy, "Saving Energy and Money with Appliance and Equipment Standards in the United States" https://www.energy.gov/sites/prod/files/2017/01/f34/Appliance%20and%20Equipment%20Standards%20Fact%20Sheet-011917_0.pdf (January 2017)

use 70% less energy, 2) new dishwashers use more than 40% less energy, new air conditioners use about 50% less energy, and new furnaces use about 10% less energy.⁸ As Americans replace their appliances with newer models, they can expect to save over \$529 annually by 2030.⁹ And lighting efficiency is already saving \$5 billion annually, and is projected to save a cumulative total of \$665 billion by 2050.¹⁰

When examining the full range of benefits, including consumer, commercial, and industrial savings, independent analyses confirm the tremendous past and future savings of the standards in the range of trillions of dollars. A Lawrence Berkeley National Lab study found: “The estimated cumulative energy savings over the period 1990-2090 amount to 216.9 quads. Accounting for the increased upfront costs of more-efficient products and the operating cost (energy and water) savings over the products’ lifetime, the standards have a **cumulative net present value (NPV) of consumer benefit of between \$1,627 billion and \$1,887 billion**, using 7 percent and 3 percent discount rates, respectively.”¹¹ The same study found that the energy savings in 2015 attributable to efficiency standards accounted for a 5% reduction in total US energy consumption.¹² The Consumer Federation of America calculated, “Combining benefits of past and present standards, we see over **\$1.5 trillion in benefits with less than \$300 million in costs**, for a benefit cost ratio of about 6-to-1.”¹³ “Future benefits that could be achieved under the current law and administrative approach have been estimated to be over \$720 billion in consumer pocketbook savings at a cost of less than \$240 billion. We add to this indirect, macroeconomic benefits of almost \$500 billion, for a total of over \$1.2 trillion and a benefit-cost ratio of 5-to-1.”¹⁴

⁸ Department of Energy, “Saving Energy and Money with Appliance and Equipment Standards in the United States”
https://www.energy.gov/sites/prod/files/2017/01/f34/Appliance%20and%20Equipment%20Standards%20Fact%20Sheet-011917_0.pdf (January 2017)

⁹ Department of Energy, “Saving Energy and Money with Appliance and Equipment Standards in the United States”
https://www.energy.gov/sites/prod/files/2017/01/f34/Appliance%20and%20Equipment%20Standards%20Fact%20Sheet-011917_0.pdf (January 2017)

¹⁰ ACEEE, “US Light Bulb Standards Save Billions for Consumers But Manufacturers Seek a Rollback”
<https://aceee.org/sites/default/files/bulb-standards-0803-2.pdf> (July, 2018)

¹¹ Stephen Meyers, Alison Williams, Peter Chan, and Sarah Price of the Environmental Energy Technologies Division of Berkeley Lab, “Energy and Economic Impacts of U.S. Federal Energy and Water Conservation Standards Adopted From 1987 Through 2015” (March, 2016).
<https://eta.lbl.gov/sites/all/files/publications/lbnl-1004328.pdf>

¹² Stephen Meyers, Alison Williams, Peter Chan, and Sarah Price of the Environmental Energy Technologies Division of Berkeley Lab, “Energy and Economic Impacts of U.S. Federal Energy and Water Conservation Standards Adopted From 1987 Through 2015” (March, 2016).
<https://eta.lbl.gov/sites/all/files/publications/lbnl-1004328.pdf>

¹³ Cooper, Mark, Consumer Federation of America, “Pocketbook savings, macroeconomic growth and other public benefits of Energy Efficiency Appliance Standards” (July, 2017)
<https://consumerfed.org/wp-content/uploads/2017/07/benefits-of-energy-efficiency-appliance-standards.pdf>

¹⁴ Cooper, Mark, Consumer Federation of America, “Pocketbook savings, macroeconomic growth and other public benefits of Energy Efficiency Appliance Standards” (July, 2017)
<https://consumerfed.org/wp-content/uploads/2017/07/benefits-of-energy-efficiency-appliance-standards.pdf>

B. Efficiency and performance have both improved for covered products.

Importantly, the energy savings have occurred in tandem with improvements to the features and performance of appliances. By statute, DOE is expressly required to consider the “any lessening of the utility or the performance of the covered products likely to result from the imposition of the standard”¹⁵ when it is considering amending a standard so that the new standard is “technologically feasible and economically justified.”¹⁶

Some standout examples of improvement include refrigerators, dishwashers and clothes washers. A typical new refrigerator uses one-quarter the energy than in 1973, while offering 20% more storage capacity and being available at half the retail cost.¹⁷ An ASAP and ACEEE study used Consumer Reports’ ratings to conduct an analysis of performance and features and found that product performance stayed the same or improved as appliance and equipment standards tightened.¹⁸ For example, refrigerators’ temperature performance improved and noise levels decreased, while features and average volumes increased.¹⁹ Similarly, dishwasher performance stayed steady while energy and water use decreased substantially and more features were added (delayed start, soil sensors, automatic bulk detergent dispensers).²⁰ Clothes washer performance has also improved, showing better washing performance, becoming gentler on clothes, and having higher capacity.²¹ In fact, Consumer Reports had to increase difficulty of washing performance tests in 2011 to differentiate products.²²

C. Affordability has been maintained or improved as standards improved.

The same ASAP/ACEEE study found that, between 1987 and 2010, the real average retail prices for refrigerators decreased by 35% while energy use decreased by over 50% and average volume

¹⁵ 42 U.S. Code § 6295 (o)(2)(B)(IV).

¹⁶ 42 U.S. Code § 6295 (o)(2)(A) and (B).

¹⁷ Department of Energy, “Saving Energy and Money with Appliance and Equipment Standards in the United States,” at https://www.energy.gov/sites/prod/files/2017/01/f34/Appliance%20and%20Equipment%20Standards%20Fact%20Sheet-011917_0.pdf (January 2017).

¹⁸ ACEEE, “Better Appliances: An analysis of performance, features, and price as efficiency has improved” (Page vii) (May 2013) <https://aceee.org/sites/default/files/publications/researchreports/a132.pdf>.

¹⁹ ACEEE, (Page vii) “Better Appliances: An analysis of performance, features, and price as efficiency has improved” (May 2013) <https://aceee.org/sites/default/files/publications/researchreports/a132.pdf>.

²⁰ ACEEE, (Pages 33-36) “Better Appliances: An analysis of performance, features, and price as efficiency has improved” (May 2013) at <https://aceee.org/sites/default/files/publications/researchreports/a132.pdf>.

²¹ ACEEE, (Page 2) “Better Appliances: An analysis of performance, features, and price as efficiency has improved” (May 2013) <https://aceee.org/sites/default/files/publications/researchreports/a132.pdf>.

²² ACEEE, “Better Appliances: An analysis of performance, features, and price as efficiency has improved” (Page 22) (May 2013) <https://aceee.org/sites/default/files/publications/researchreports/a132.pdf>.

increased by 13%.²³ Over the same period, clothes washers saw average retail price decline by 45% while energy use decreased 75% and average capacity increased by 33%.²⁴ Similarly, dishwasher prices fell by 30% while energy use decreased 50%.²⁵ These trends reinforce that in setting progressively better standards, DOE has been doing its job in promulgating “technologically feasible and economically justifiable” standards that conserve energy.²⁶ At the same time, DOE’s regulations for the efficiency program explicitly requires that impacts on low-income Americans be considered as part of the agency’s standard-setting process,²⁷ ensuring that, in cases where there might be issues, they are proactively addressed in the standard itself.

In an even more impressive example, the light bulb market has transformed, thanks in part to efficiency standards and DOE investment in R&D. A classic 60W equivalent LED bulb costs less than \$1.75 individually and less than \$1.25 in an 8-pack²⁸ and can last 25 times longer than an equivalent incandescent.²⁹ A 60W incandescent would have to cost \$0.07 or less just to compete on first cost,³⁰ and would have to fall to less than \$0.02 to compete on operating cost because it would still use at least four times the energy.³¹ As a result, the LED bulb will deliver significant savings over its life. In fact, DOE has predicted, “Widespread use of LED lighting has the greatest potential impact on energy savings in the United States. By 2027, widespread use of LEDs could save about 348 TWh (compared to no LED use) of electricity: This is the equivalent annual electrical output of 44 large electric power plants (1000 megawatts each), and a total savings of more than \$30 billion at today’s electricity prices.”³²

²³ ACEEE, “Better Appliances: An analysis of performance, features, and price as efficiency has improved” (Page 16) (May 2013) <https://aceee.org/sites/default/files/publications/researchreports/a132.pdf>

²⁴ ACEEE, “Better Appliances: An analysis of performance, features, and price as efficiency has improved” (Page 28) (May 2013) <https://aceee.org/sites/default/files/publications/researchreports/a132.pdf>

²⁵ ACEEE, “Better Appliances: An analysis of performance, features, and price as efficiency has improved” (Page 37) (May 2013) <https://aceee.org/sites/default/files/publications/researchreports/a132.pdf>

²⁶ 42 U.S. Code § 6295 (o)(2)(A).

²⁷ 10 C.F.R. § 430 Appendix A Subpart C (5)(e)(3)(i)(G) “If the Department determines that a candidate standard level will have significant adverse impacts on a significant subgroup of consumers (including low-income consumers), that standard level will be presumed not to be economically justified unless the Department determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects.”

²⁸ The Home Depot online store, at <https://www.homedepot.com/p/EcoSmart-60-Watt-Equivalent-A19-Non-Dimmable-LED-Light-Bulb-Soft-White-B7A19A60WUL11/303574508> and <https://www.homedepot.com/p/EcoSmart-60-Watt-Equivalent-A19-Non-Dimmable-LED-Light-Bulb-Soft-White-8-Pack-B7A19A60WUL18/303574541>.

²⁹ Department of Energy, Office of Energy Efficiency & Renewable Energy, “LED Lighting” <https://www.energy.gov/energysaver/save-electricity-and-fuel/lighting-choices-save-you-money/led-lighting>.

³⁰ A quick internet search for information on incandescents available today indicates they cost more than ten times that 7 cent per bulb value, even in bulk.

³¹ Department of Energy, Office of Energy Efficiency & Renewable Energy, “LED Lighting” <https://www.energy.gov/energysaver/save-electricity-and-fuel/lighting-choices-save-you-money/led-lighting>

³² Department of Energy, Office of Energy Efficiency & Renewable Energy, “LED Lighting” <https://www.energy.gov/energysaver/save-electricity-and-fuel/lighting-choices-save-you-money/led-lighting>

D. Americans continue to support strong appliance and equipment standards.

A Consumer Federation of America (CFA) study from last October found that 71% of Americans “support the idea that the government should set and update energy efficiency standards for appliances” and 95% agree that it is beneficial for appliances to be more efficient.³³ And Americans recognize that a reasonable payback period to account for higher upfront costs is still a good deal: “When asked if they would support appliance efficiency improvements if they increased appliance prices, 74 percent said they would if the payback period was three years.”³⁴

The effectiveness of standards depends on empowering DOE staff to run a robust program

A. The appliance efficiency program faced a difficult start, but then delivered for Americans.

In 1975, Congress passed the Energy Policy and Conservation Act (EPCA), which required the Department of Energy to set mandatory standards for energy use for major household appliances.³⁵ However, it wasn’t until 1987 that efficiency improvements got underway, due to the administration at the time refusing to put standards in place under the erroneous claim that the savings weren’t “significant.”³⁶ A federal lawsuit (for which Consumer Reports was a joint petitioner) finally resulted in DOE action in setting new efficiency standards for appliances.³⁷ As mentioned above, the standards put in place since 1987 are netting Americans in the trillion dollar range of savings, an amount reasonable observers would certainly consider “significant.”

³³ Consumer Federation of America, “Consumers Support Appliance Efficiency But Trump Administration Delays and Seeks to Weaken Standards” at https://consumerfed.org/press_release/consumers-support-appliance-efficiency-but-trump-administration-delays-and-seeks-to-weaken-standards/ (October 5, 2018).

³⁴ Consumer Federation of America, “Consumers Support Appliance Efficiency But Trump Administration Delays and Seeks to Weaken Standards” (October 5, 2018) https://consumerfed.org/press_release/consumers-support-appliance-efficiency-but-trump-administration-delays-and-seeks-to-weaken-standards/.

³⁵ EPCA Sec. 325(a)(1)-(2), Pub.L. No. 94-163, 89 Stat. 871, 923-24 (1975).

³⁶ NRDC v. Herrington, 768 F.2d 1355 (D.C. Cir. 1985) at 1369.

³⁷ See NRDC v. Herrington, 768 F.2d 1355 (D.C. Cir. 1985).

B. Over the last two years, DOE has again delayed statutorily required action.

Federal law requires that the standards be assessed for amendment every 6 years.³⁸ When DOE falls behind on statutory deadlines to evaluate, and as needed update, the standards, it not only violates the law, it creates a backlog of work for future administrations and can waste years of savings and delay distribution of efficient technologies in the market.

Unfortunately, for the last two years, DOE has fallen behind on nearly twenty decision points and if it continues to stall, will increase the backlog by a dozen more. This uncertainty, delay and lack of clear and public decision-making also hurts the appliance and equipment industries as they plan their product cycles and seek to differentiate those products in the marketplace.³⁹ By failing to open a public docket, collect data, properly and transparently weigh all the different factors that must be considered, and then reach a data-driven and fully justified decision, consumers and manufacturers are left spending more on energy and less on innovation and a more competitive market. It is neither permissible nor desirable for DOE to do nothing on appliance and equipment standards that were promulgated more than 6 years ago. Further, there remains a gaping hole in existing standards, as more and more home electricity use now comes from household items that have no standards.

C. DOE's recent rollback proposals undermine the benefits and intent of the program.

Making matters worse for consumers, DOE is now working to roll back the efficiency of some lighting products and put new barriers in front of the agency's ability to set standards for a variety of household items through its recently issued lighting definition rollback and "process rule" proposals just a few days before this hearing was originally scheduled to take place. We provide our initial reactions below, but note that more time will be required to evaluate the full implications.

When the Energy Independence and Security Act of 2007 (EISA) amended EPCA to expand coverage to include general service lamps (GSLs), it opened up new opportunities to tap into American innovation to reduce energy use. Moving to a wider range of efficient lighting products has transformed the lighting market, moving away from the incandescent bulb, which had seen

³⁸ 42 U.S. Code § 6295 (m)(1)(A) and (B): "(m)Amendment of standards: (1) In general: Not later than 6 years after issuance of any final rule establishing or amending a standard, as required for a product under this part, the Secretary shall publish—(A) a notice of the determination of the Secretary that standards for the product do not need to be amended, based on the criteria established under subsection (n)(2); or (B) a notice of proposed rulemaking including new proposed standards based on the criteria established under subsection (o) and the procedures established under subsection (p)."

³⁹ Kern, Rebecca, "Efficiency Standard Delays Pose Challenges for Appliance Makers," Bloomberg News at <https://www.bna.com/efficiency-standard-delays-n57982088426/> (February 7, 2018).

little efficiency gain or other changes in one hundred years to the incredibly flexible light emitting diode (LED), which use less than a quarter of the energy, lasts ten times longer and has opened up whole new ways of using lighting. The efficiency standards promulgated in 2012 for A-type bulbs can save Americans \$323 billion by 2050, and the efficiency standards set to apply to additional bulb types starting in 2020 can save another \$343 billion.⁴⁰

Unfortunately, DOE just announced its intention to roll back the scope of Congressionally established lighting efficiency standards set to go forward in 2020.⁴¹ Such a move is likely to encounter lawsuits and could cost consumers up to \$100/year per household starting in 2025, according to ACEEE estimates.⁴² The irony of this rollback is that it comes about as marketplace innovation is rapidly accelerating in the lighting sector, yielding more consumer choice. This definition change risks retarding that innovation. Instead of rollbacks, DOE should invest its valuable time and resources in analyzing standards that are behind schedule to be evaluated, many of which could be made more stringent, to the economic benefit of Americans and greater energy conservation.

DOE is also working to promulgate a new “process rule” that imitates the poorly conceived tactic used by a previous administration by attempting to limit new appliance and equipment standards unless they overcome a new hurdle regarding the magnitude of energy savings.⁴³ This approach is out of touch with the changing consumer marketplace, due in part to the success of previous appliance standards themselves, where energy use is more and more spread across a large number of products rather than simply in a few major appliances. As noted above, more and more consumer energy use is coming from a variety of smaller products. It is not logical to saddle consumers with higher than necessary utility bills simply because they are exercising their marketplace power to take advantage of modern electronics.

The process rule proposal would also add more burdensome processes, tests and complications that would lead DOE’s own staff to be tied in knots when it tries to follow the statutory requirements to consider and promulgate updated standard, even if there is consensus among stakeholders that a stronger standard is warranted and appropriate with a net benefit for Americans.

⁴⁰ ACEEE, “US Light Bulb Standards Save Billions for Consumers But Manufacturers Seek a Rollback,” at <https://aceee.org/sites/default/files/bulb-standards-0803-2.pdf> (July 2018).

⁴¹ Department of Energy, “Energy Conservation Program: Energy Conservation Standards for General Service Lamps,” Notice of Proposed Rulemaking, at <https://www.energy.gov/sites/prod/files/2019/02/f59/withdrawal-of-gsl-definition-nopr.pdf> (Feb 6, 2019).

⁴² ACEEE, “Rollback of light bulb standards would cost consumers billions — \$100 per household each year,” at <https://aceee.org/press/2019/02/rollback-light-bulb-standards-would> (February 6, 2019).

⁴³ Department of Energy, “Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards for Consumer Products” (“Process Rule”), Notice of Proposed Rulemaking, at <https://www.energy.gov/sites/prod/files/2019/02/f59/process-rule-notice.pdf> (Feb 6, 2019).

Conclusion

Appliance and equipment efficiency standards directly save Americans billions of dollars each year and help avoid the construction of costly new power plants. Further, the commercial equipment standards, not covered extensively in this testimony, increase corporate profitability and allow U.S. companies to better compete with overseas competitors.

Rather than continue to stall on or roll back standards, DOE should build on this progress and empower its staff to complete timely, data-driven, and thoroughly justified assessments of whether and by how much to improve appliance and equipment standards as part of a thorough rulemaking process that considers public and stakeholder input, as required by law and squarely in the interest of every American consumer.

Mr. RUSH. I want to thank the witnesses, all the witnesses.

We have now concluded the opening statements, and will move toward member questions. Each Member will have 5 minutes to ask questions of our witnesses. And I will begin by recognizing myself for 5 minutes.

Mr. Harak, when did the National Consumer Law Center first become involved with DOE appliance standard dockets and why? And initially, how does the delay of rulemaking of efficiency standards impact low-income consumers?

Mr. HARAK. I jointed the National Consumer Law Center in 2000. And it may be no surprise, this is not our primary work, appliance standards. We are mostly trying to make sure people don't freeze in the winter of cold and die of the heat in summer, have the lights on and the appliances they need.

But some of my colleagues here brought to my attention that there were standards proceedings. And at the time, the furnace standards proceedings were moving. And it became apparent that that is a really important issue for low-income consumers.

I live in Massachusetts. Mr. Chairman, you are in Illinois. These are cold States where people's heating bills are just about the largest bill they face. And if they lose their heating, that is one of the gravest threats they can face.

So we became involved in this from the perspective that it is very important for there to be standards that keep bills down on those major appliances for low-income people, and as I mentioned in my testimony, particularly because they are so disproportionately tenants. No tenant buys a heating system. Tenants don't buy a lot of the major appliances, and they really can be saddled with bills.

And so when you ask about what is the impact of delay, you heard a little bit from the Assistant Secretary there is a pretty complicated scheme of what DOE looks at. And one of the things they look at is the percentage of consumers who are better off if the standard passes and the percentage who are not. There is always some shakedown between that. But when DOE issues the rules, because the vast majority of people would benefit by that standard getting out the door, well, the logical converse of that is, if you don't get it out of the door, the majority of consumers are going to be harmed because those less efficient appliances are in the market.

And it is perhaps why I started with the story about that client with their heating system down. That is the reality of appliance standards. It is important when a Susan of the world has her heating system down, that the landlord cannot buy something that is extremely inefficient.

Mr. RUSH. Mr. Friedman, as a former Principal Deputy Assistant Secretary and Acting Assistant Secretary of Energy's Office of Efficiency and Renewable Energy, EERE, can you briefly discuss the important role that negotiated rulemakings have played in building consensus? From your understanding, how would this new process rule impact negotiated rulemaking?

Mr. FRIEDMAN. Thank you, Mr. Chairman, for the question.

The vast majority of the times DOE staff is able to dive in, look at the data, and produce standards that work for all Americans and work for industry. At times, some of the standards are more

controversial. And so staff rely on a negotiated rulemaking process, which it is pretty straightforward. You get everyone around the table, and you talk about what works, and you try to find a consensus that helps everyone. It has been incredibly successful at breaking through logjams.

One of the things I fear that is going to happen with this new process rule is, if it is binding, it is going to allow companies to tie up every single step in the courts, so you will never even get to negotiated rulemaking. And you would strangle the opportunity for industry and consumers to work together with Government to make things better for all.

Mr. RUSH. Mr. deLaski, do you have any input that you would like to offer on the same question?

Mr. DELASKI. Yes. I served as the chair of the Federal advisory committee that worked on negotiating rulemakings from 2012 until 2018.

I am concerned that the process rule as proposed would make successful negotiation far less likely, for the reasons that Mr. Friedman has described. That is probably first and foremost, is that it is going to freeze up the process altogether. So why negotiation if there is no risk that the Department is going to act at all, right? So the incentive to come to the table to negotiate has been massively reduced.

The second thing I thought—I think all of us actually would agree on this—is that it takes away the ability to do creative things in negotiation that enable success, like looking at flexible compliance dates, such as looking at different standards for different equipment types. So some of that flexibility that they have taken away by the process rule will really reduce the ability for—when you take away options off the table, that makes agreement harder to achieve. And that is what the process rule as proposed would do.

Mr. RUSH. That concludes Mr. Pallone's time. The Chair now recognizes the ranking member for 5 minutes for purposes of questioning the witnesses.

Mr. UPTON. Thank you, Mr. Chairman.

Again, I appreciate all of your testimony. I think that it is pretty apparent that all of us want appliance standards, energy efficiency standards for appliances.

Mr. Friedman, you made a very good point that the industry does want these, particularly the domestic industry here, because we can beat anyone else in the rest of the world. We also know that there is a direct payback to all the Americans that are able to use that.

I know, Mr. McGuire, you share that. As AHAM, you know that your member companies share those same views.

I have a couple of comments. Mr. McGuire, you indicated in your testimony—you didn't read it all, which is good because you summarized it—but you said, on page 9, "Home appliances are now in an endless cycle of regulation, where as soon as one compliance effort ends or is near completion, another round of regulation to change the standard again begins. . . . no time for manufacturers to catch their breath. Just as importantly, there is no time for DOE, manufacturers, or efficiency advocates to assess the success

of standards or review their impacts on consumers and manufacturers.”

What should the timing be? Should it come at a certain period after the regulations are finalized? What should that look-back period be? What would you suggest?

Mr. MCGUIRE. First of all, the six-year look-back, that clock starts running as soon as the rulemaking is completed for the standard. So before the companies have the ability to sell through product to the existing standard, DOE is already in the process of a rulemaking to change it. So the manufacturers have to be involved in that.

The other fundamental problem is that there is a six-year look-back for standards; there is a seven-year look-back for test procedures. They are out of sequence. You have to have a completed test procedure before you can test a product to see how much energy it uses and if it can meet the standard. So we think that sequence needs to be changed, needs to be looked at.

And secondly, DOE is really hamstrung between the statutory look-back requirement and the statutory balancing test of maximum technological feasibility, significant energy savings, and economic justification. They are hamstrung. They are never going to have the resources. They never have had the resources to do a good job on all these rulemakings at the same time. We have seen the perils of when they try to do that.

So a new process, an amendment to EPCA could be that, for some products that have been through three and four different standards, the diminishing returns of the energy savings are there. Those products ought to be in a separate class where they don't have to go through a serial look-back every time, unless, as Assistant Secretary Simmons said, through R&D that DOE does or that companies do, a technological breakthrough is determined, and then, a quick look can happen.

So there needs to be prioritization. Vast energy savings have been achieved for many products and we are at a diminishing return for others. So DOE should not be spending a lot of the time on the products that only delivered 4 percent of all the energy savings. And the Congress and I think just about every group at this table could work together on trying to find a solution to this law, which has had success.

Mr. UPTON. I want Mr. Friedman to respond to that. But also, the actual testing of the appliances, it is not like here in DC at DOE, right? At Consumer Reports, you have your own labs where you test them? Or do you take the data from the companies themselves?

You have got to use the three mikes again.

Mr. FRIEDMAN. At Consumer Reports, yes, we have our own testing labs up in Yonkers, New York, as well as an auto test track out in Connecticut. So we rely on our own data. We take no advertising dollars. We take no samples. We ensure that all of our results are independent. And similarly, the Federal Government—

Mr. UPTON. And do they usually match up with what the ENERGY STAR labels indicate?

Mr. FRIEDMAN. We don't do compliance testing. We do comparative testing. So it would be unfair to necessarily compare their data

to our data. We try to make sure that consumers can make the best choices when they walk into the marketplace; whereas, the Department of Energy's role is to ensure that a rising tide lifts all boats. Whereas, we help people find the very best of the best that are out there.

I would also just add, I personally think the staff did an amazing job during the Obama administration of producing a lot of rules, and they were in a tough spot, right? They were trying to catch up after years of neglect of the program. They worked quite well under existing processes and helped many, many, many Americans save quite a lot of resources.

I would also just add that it is surprising to me, the lack of faith that folks have in American innovation and the ability to keep pushing the boundaries of technology. If anything, the pace of innovation is changing so fast that, six years from now, you know, this is probably going to be obsolete. So the ability of the Department to not just keep up with but try to stay ahead of technology and move quickly is incredibly important. I would hate to see anything slow down, given the pace of innovation in this country, which I know you share a faith in.

Mr. UPTON. Just to conclude, because I know my time has expired, we are going to see amazing energy savings in a whole host of products. And I am going to be talking to Mr. Pallone later about actually having a hearing on where we are going in the future.

So with that, I yield back.

Mr. RUSH. I want to thank the gentleman. The Chair now recognizes the gentleman from California, Mr. Peters, for 5 minutes.

Mr. PETERS. Thank you, Mr. Chairman.

And I want to continue with Mr. Friedman, but your name tags are all messed up, just for the purposes of the TV.

So Mr. McGuire had an interesting idea about triaging the right kind of technology to focus on. Do you have an objection to that? Does that make sense to you, the notion that if something has gone through standards and there has been no basic research that has informed the technology, that we would focus on other things? Is that objectionable?

Mr. FRIEDMAN. I am an engineer. I am very practicable about things. So I see no objection to that, but I also see no reason to add new red tape to get there. The DOE staff is perfectly capable of looking at the data, seeing whether or not there is a significant opportunity, and moving forward with other opportunities. Adding more red tape doesn't actually speed that up. It slows it down. So again, I would go back to there are really talented folks there. Let them do their work.

Mr. PETERS. Right I guess the question, the point he was raising is that there may be more return on applying their work in particular areas rather than others. And that is something that should be left to them, you think?

Mr. PETERS. Well, absolutely. I mean, obviously, technology allows much more return to keep happening than we might expect today. And it is DOE's staff's job to keep up-to-date on that, and they can already, under the current process, make decisions like that to focus on areas that can deliver the most savings. With others, if they can't, they just say they are not ready to be updated.

Mr. PETERS. Let me ask Mr. McGuire, what is it that keeps them from making that decision on their own?

Mr. MCGUIRE. I think the statute and resources prevent them from doing a realistic—

Mr. PETERS. What about the statute prevents that, though?

Mr. MCGUIRE. Because of the look-back requirements out of synch between standards and test procedures balanced against this test of savings of energy and economic justification. So no real prioritization has really occurred. Every look-back, except for I think one, has resulted in a full-blown rulemaking to go forward. The only time in our products that didn't happen was, after the new standard was proposed, we demonstrated that it would harm performance of the product. And then, DOE pulled it back. So the process worked.

Mr. PETERS. So I think it is a reasonable point to raise as we do some reform here.

Ms. Kennedy, I wanted to ask you, do you perceive the issues that you have with the regime as mostly in the nature of oversight of how things are administered or do you think that there are statutory changes that are needed in the field to make sure that we are supporting climate change to the greatest extent or supporting climate action to the greatest extent possible?

Ms. KENNEDY. Well, certainly, there is a need for comprehensive U.S. climate legislation to address both clean energy and the climate crisis. Within the four corners of EPCA, this statute, I think that this subcommittee should look closely at opportunities to expand the program, as should the Department of Energy. The Department of Energy has the ability to expand the scope of the program in various ways. Of course, Congress, over the years, has added new products to the statute, such as lighting, and has, thus, brought to the fore really incredible energy efficiency change.

Mr. PETERS. And I think lighting has been a tremendous success. I want to know if you are aware of other things out there that we should be considering as a legislative body today.

Ms. KENNEDY. I think looking at the issue of consumer electronics is very important. And I would also counsel you that the products already covered by the statute can still produce significant energy efficiency improvements. So this idea in the process rule that we should set an arbitrary standard for energy efficiency savings of .5 quads is really misguided. We need all the energy efficiency savings we can get. The statute makes sure that every standard is economically justified, whether the savings are immense or slightly less so.

Mr. PETERS. Just really what I am trying to do is make sure that I understand what legislative action is required because I can't tell the administration how to administer this. So if we give them authority to do great things, and they decide they don't want to do that, that is their call. But what I need to know, and I ask for all of you going forward, is, if you would like to see reforms—and, Mr. Yurek, I think you are Mr. Yurek?

[Laughter.]

Mr. Yurek, you had some ideas specifically. I would like to know specifically what you would like to see in terms of reform, so we can get about doing the job that we need to do.

I also take up Mr. Upton's suggestion that we talk about consumer electronics because that is probably something that the legislature hasn't looked at.

But, again, not to be parochial, but I need to know what we want to put into legislation. And so to the extent you can help us with that, we will look forward to working with you all.

And, Mr. Chairman, I yield back.

Ms. KENNEDY. Just looking at the example of California, if I may, should provide lots of ideas for Congress to—

Mr. PETERS. Of course you are right.

[Laughter.]

My time has expired.

Mr. RUSH. The gentleman's time has expired. The Chair now recognizes Mr. Latta for 5 minutes.

Mr. LATTA. Well, thank you again, Mr. Chairman, for holding today's hearing.

And to our panel of witnesses, thanks very much for being with us today.

Mr. McGuire or Mr. Yurek, as you are probably aware, in the last Congress I worked on, and will continue to work on in this Congress, bipartisan EPCA reform. In your views, what should Congress prioritize as we consider modernizing EPCA. Mr. McGuire, I will start with you.

Mr. MCGUIRE. Thank you, Mr. Latta.

Well, I think, first of all, with regard to the rulemaking process, addressing the look-back timeframe for standards and test procedures, and to consider a provision where they at least could be coordinated better. But, secondly, for those products that have been through several standards, generations of standards, such as home appliances, they would essentially go to the bottom of the list in terms of DOE prioritizing work looking for significant energy savings.

And I think this quick assessment that DOE proposed is a good concept to think about, so that there is a bright-line threshold for significant energy savings. If that can't be found, and it is overwhelming that it can't be found, why spend three years on a rule-making trying to determine if it is economically justified?

Mr. LATTA. Mr. Yurek?

Mr. YUREK. I would agree with the position taken by Mr. McGuire, but I think it is really looking at this and saying, what was done before 2007 was DOE prioritized the rules that need to be done and concentrated on those where they saw the greatest energy savings. The amendment of EPCACT 2007, then, all of a sudden, put these mandatory six-year reviews for standards, seven years for test procedures into the act for all products. And for all products, it doesn't make sense.

So I think it is looking at how can you give DOE the authority to look at this, prioritize what needs to be done, focus on the products where we are going to have the energy savings and can get those right away versus wasting all this time doing all these evaluations. Yes, the clothes washer procedure worked that time, but that took how many years? Three-four years of DOE staff time analysis and other things, the industry's time, for something where

there was no energy savings. Instead, look at it, figure out how we can prioritize it, and focus on where the biggest energy savings are.

Mr. LATTA. Thank you.

Mr. McGuire, you mentioned in your written testimony the example of DOE's proposed standard for dishwashers and how the standard was such that some dishwashers could no longer get the job done. And this is a good example of something that I want to make sure that DOE is taking into consideration. How does DOE ensure that a proposed standard won't negatively impact product performance? Because we have heard from other Members up here about you don't want to end up having to do the thing, whatever you are doing with that appliance, twice or three times because you are wasting more energy.

Mr. MCGUIRE. Right. Well, I think Mr. Simmons described the dilemma the Department has in making sure that the performance of the product isn't jeopardized. And that, in part, has led to difficulty meeting the statutory deadlines.

In the case of dishwashers, DOE had proposed the most stringent of three options in terms of reducing energy and water use. And our industry during the proceedings said we think that most stringent level is not going to work for the product, and the process didn't allow enough time for our industry to test products for performance. And DOE proposed this most stringent level. We, then, did the testing, and it was clear that products from multiple manufacturers could not clean the dishes.

So there is something wrong with a process that goes—they missed that on the performance. You could say, well, we caught it in our comments, but that could have been done before DOE reached—

Mr. LATTA. If I can interrupt, OK, so when that occurred, what did DOE tell you? You are saying that we are having problems, but they say just keeping going anyway?

Mr. MCGUIRE. Well, they said their consultant said it is fine, that it won't be a performance problem. That is why we undertook the testing in the laboratories that are used for compliance for DOE, ENERGY STAR, and standards, and proved without a doubt that multiple loads of dishes could not be cleaned with about one gallon of water in a cycle. That is what they had reduced it to, 1.1 gallons. We showed them that, and they said, "You're right." And then, they pulled it back and said no standard is justified.

And by the way, the standard that they had proposed had a payback to the consumer of 20 years. The life cycle of a product, of a dishwasher, is 13 years. How does that make sense?

Mr. LATTA. Well, thank you very much.

And, Mr. Chairman, my time has expired, and I yield back.

Mr. RUSH. I want to thank the gentleman. The Chair now recognizes Mr. Pallone, full committee chairman, for 5 minutes.

Mr. PALLONE. Thank you, Mr. Chairman.

Assistant Secretary Simmons stated on the first panel that the proposed process rule is to, quote, "reduce the burden of the process to create tests and implement new energy efficiency standards". But, after reviewing the proposed process rule, it appears to me that steps are added to the process, with the appearance of lengthening the process. While the proposed process rule is thin on some

details, I count about 17 steps to make and implement a new standard. And I find it hard to believe it will be more efficient.

So I wanted to ask Mr. DELaski, can you walk the committee through the standard-making process under the proposed process rule? And compared to the current rulemaking process, how much longer do you estimate that each rulemaking will take under this proposed process?

Mr. DELASKI. I am not sure I could walk you through it. I have a colleague who has mapped it out for us.

Mr. PALLONE. OK, that is good enough.

Mr. DELASKI. It is complicated.

Mr. PALLONE. Explain it, though, because I won't follow that.

Mr. DELASKI. There is a lot of steps on this. The current process, under ideal circumstances, the current process takes about three years. This has added multiple additional steps. And as has been referenced earlier, some of these earlier steps now become a final step that would be a possibility for litigation.

So if the current process takes three years—at best, I would submit to you that, typically, it takes longer, as we have heard sometimes today—based on my experience working with the program over the past 20 years, I would expect that this is likely a recipe to at least double the duration of the process, if not just shut it down altogether, because of the litigation that you are creating possibilities for.

Mr. PALLONE. That sounds like great streamlining.

Mr. Chairman, do we have that sheet that Mr. DELaski—can we enter that into the record?

Mr. DELASKI. I would be glad to submit it for the record. This is our first draft, and we will be working to finalize it.

Mr. PALLONE. You will send us something?

Mr. DELASKI. Yes.

Mr. PALLONE. OK.

Well, in my opinion, these 17 steps in the rulemaking process, including the six public comment periods, are going to add years of delay, you said twice, and in some cases may block a standard from being implemented at all, which is what you said. Again, I am all for transparency, but this seems to me like delay masquerading as transparency, in all honesty.

Now, in Assistant Secretary Simmons' testimony, he stated that DOE has issued seven final rules since President Trump took office. I was going to ask Ms. Kennedy, can you comment on this number? Does this represent work completed during the Trump administration or was some of this work completed by the Obama Department of Energy?

Ms. KENNEDY. It does not represent work undertaken by this administration. I will check on this and get back to you, but I believe that five of those standards which the Assistant Secretary referred to were issued under the Obama administration and two were congressional standards which really needed to be posted. But I will check on that and get back to you.

Mr. Simmons acknowledged that there are 16 overdue standards that this administration hasn't issued and also, referred to the four Obama era efficiency standards which made it all the way through

under that administration but have not been published in The Federal Register since 2016.

Mr. PALLONE. All right. Thank you.

Mr. deLaski, I would like you, if you have anything to add to Ms. Kennedy's comments on that. But, then, I also wanted to ask you, I understand that appliance standards are saving people a lot of money and helping cut climate change emissions, but you also mentioned in your statement that they can help with resiliency, reliability, and affordability. So if you want to add to what Ms. Kennedy said, and then, if you could explain a bit more about what you said on resiliency, reliability and affordability?

Mr. DELASKI. Yes, I would be glad to do so. And just to follow up on Ms. Kennedy's comments, none of those seven standards represent substantive work by the current Department of Energy administration. They have not issued a single proposal for a new standard or a single proposal for a final standard that is the result of work under this administration.

Mr. PALLONE. All right. Thanks.

Mr. DELASKI. With respect to your second question, resiliency, it is often an overlooked benefit that we get from improving efficiency of all of our products. On the sweltering summer day when the electricity grid is struggling to keep up with the demand of people's air conditioners, it matters enormously how energy efficient those air conditioners are. By keeping down the demand levels—the electric grid has to match up. Demand and supply have to match up. And as the demand goes through the roof, if supply doesn't keep up, it leads to outages.

The same thing on the heating side. When the polar vortex hits, the furnaces, the efficiency of furnaces in our homes affects the ability of the natural gas supply system to keep up. If the system can't keep up, if the pressure can't be kept up, then people suffer. So by keeping efficiency in place, we are building resiliency into the electric supply and the gas supply system that, ultimately, helps consumers to stay warm or to stay cool and to be safe.

Mr. PALLONE. All right. Thanks a lot.

And thank you, Mr. Chairman.

Mr. RUSH. I want to thank Mr. Pallone. The Chair now recognizes Mr. Griffith for 5 minutes.

Mr. GRIFFITH. So here is the dilemma we have. I think we all want things to be more energy efficient, but we want products, when we go to buy them, to actually do what they are supposed to do and what they are purported to do, and not have to spend three times or double the cost to get our dishwasher working, to get our clothes washer working, to have our refrigerators working. I mean, that is the dilemma, and it is good that we are having this hearing, Mr. Chairman, so that we can try to sort these things out.

But I did find it of interest, I had this thing that my constituent sent me, and it is a little old, about the washing machines that I mentioned in the previous hearing and have mentioned a couple of times over the years, because I had a constituent that was all fired-up about it. And I noticed in there that—and it is a little old, so I understand that; things may have gotten better. But, in 2007, according to this piece out of The Wall Street Journal, after the more stringent rules kicked in, Consumer Reports noted that some top-

loaders—washing machines we are talking about—were leaving its test swatches nearly as dirty as they were before washing. For the first time in years, Consumer Reports said, “We can’t call any washer a Best Buy.”

“In 2007”—again, I am acknowledging it is a little old, so I am not saying it is something we should take to heart today, but it shows the point that consumers are having the problem with—“in 2007, only one conventional top-loader was rated ‘very good.’ Front-loaders did better, as did a new type of high-efficiency top-loader that lacks a central agitator. But, even though these newer types of washers cost about twice as much as conventional top-loaders, overall, they didn’t clean as well as the 1996 models.”

My dishwasher is newer now than it was three years ago. Got a new dishwasher. I find, as you, Mr. McGuire, pointed out, and even though that reg didn’t come in, I am doing a whole lot more washing of the dishes before I stick them in the dishwasher. And I actually mentioned to my wife, maybe we should just not have one if they are not going to clean the dishes. And she said, yes, but the temperature gets hotter in the dishwasher and that helps to sanitize them. But when I am at home, I am washing those dishes and I am cleaning everything off of them because I don’t trust the dishwasher. I am not going to pull that dish out of the dishwasher and serve it to somebody with specks of stuff on it.

Mr. McGuire, isn’t that the problem that you have been trying to highlight? Even though my dishwasher may not be the cause of the latest regs, but isn’t that what consumers are finding out there?

Mr. MCGUIRE. It is a very important feature of the balancing test that Congress enacted into EPCA and DOE has to deal with. Significant energy savings, economic payback, and don’t wreck the product. It has got to deliver performance.

And our industry is in everyone’s home every day. Our products have to be trusted. And so in the case of the dishwasher I had mentioned, fortunately, that was pulled back by DOE. But, in some of these home appliances, like clothes washers or cooking products, there are diminishing returns that make the payback questionable.

We are not here arguing about whether there should be efficiency standards. We all agree on that. We are talking about how you do it and how you prioritize with limited resources.

So we believe that today’s dishwashers that meet today’s standards perform very well. And I am sorry to hear about your neighbor’s clothes washer.

Mr. GRIFFITH. Yes, and I don’t think my dishwasher that I have now works as well as the one that was 15 or 20 years old before. But that is just anecdotal.

Mr. MCGUIRE. It should. It just uses less water, but it should operate just as well.

Mr. GRIFFITH. Yes. And then, you wanted to talk about—

Mr. FRIEDMAN. As the representative of the Consumer Reports, could I just respond to that really quickly?

Mr. GRIFFITH. Well, sure. Do you have an update for me? Can you send me that data? Just send it to me because my time is running out.

Mr. FRIEDMAN. I am happy to send it to you.

We put out a letter to the editor of The Wall Street Journal because they misrepresented our data.

Mr. GRIFFITH. OK.

Mr. FRIEDMAN. So that is an inaccurate reference.

Mr. GRIFFITH. All right. Well, that is fair. And I appreciate you letting me know that because I want accurate data.

Mr. FRIEDMAN. I am happy to help.

Mr. GRIFFITH. The problem is the consumer is feeling like they are getting less. They are spending more money on the product that they bought before, a lot more money, and they are not getting the product that they thought they were getting. And they feel like they are not getting as much. I think we have to make sure we have that balance out there.

Refrigerators, you wanted to talk about that a little bit, Mr. McGuire? You had talked about the efficiency on refrigerators for not a whole lot of money or for a whole lot of money more, \$5 or \$6 savings?

Mr. MCGUIRE. Well, yes, today's refrigerator standard that is in effect, and the ENERGY STAR level above it, which is voluntary, but that ENERGY STAR level is a more efficient product. And it is only saving the consumer about \$5 a year in electricity payment. So it just shows you that some of these incremental changes for products that have been regulated three and four times are going to be harder to justify.

Mr. GRIFFITH. Right. I appreciate that.

My time is up, and I yield back.

Mr. RUSH. The Chair now recognizes Mr. McEachin for 5 minutes.

Mr. MCEACHIN. Thank you, Mr. Chairman.

And to all of our witnesses, I would also say thank you for being here today.

I want to just echo what I said earlier. Achieving greater energy efficiencies is incredibly important to the health of our planet and our communities. And pursuing these efficiencies will also put money back in the pockets of our constituents, including struggling families for whom every dollar, every extra dollar makes a difference. So I think our topic today is incredibly important, and I am very glad that we are having this hearing.

Ms. Kennedy, I would like to echo the same question I asked Mr. Simmons earlier. Your testimony describes climate change as an existential threat, and you identify energy efficiency standards as a crucial tool in the struggle to minimize that change. So if energy efficiency standards are one tool in the climate toolkit, are we using that tool as effectively as current law permits? Does DOE decision making on these standards fully reflect the true long-term climate costs of greater energy use? And if not, what would you like to see improved?

Ms. KENNEDY. Thank you for that great question.

The consequences of the Department of Energy's delays on energy efficiency standards are really moving us backward on climate change. So just to put some specifics there, DOE's failure to issue the 16 overdue energy efficiency standards that we have discussed puts at risk 70 million metric tons of carbon savings each year. That is more than the annual carbon emissions from energy use in

all homes in New York City, Los Angeles, Houston, Chicago, and Philadelphia combined. So we are talking about some major backward progress on climate through DOE's inaction.

We see the same thing through the lighting efficiency standards. The lighting provisions which were added in 2007 by Congress, and signed into law by President Bush, will have huge carbon savings. And by gutting the definition of light bulbs, as DOE is proposing to do, in effect, DOE is taking almost all of the energy efficiency savings out of that standard, a change that will cost consumers up to \$12 billion on their utility bills and cause the use of up to 25 more power plants' worth of electricity each year.

So this program, when it is in place and being robustly implemented, is a big climate pollution saver and a big pollution saver overall. But, right now, Americans aren't seeing those benefits from the efficiency standards program. We would like to see DOE get back on track with its legal responsibilities to issue these standards. We would like to see DOE abandon its efforts to really gut the lighting efficiency standards, which Congress put into place.

And while we are happy to talk about improvements to the process on issuing efficiency standards, the process rule we are concerned is going to set us back, lose valuable time, as Mr. DELaski has outlined, and again, is really putting us in reverse, when we need to be all in on energy efficiency as a way of fighting climate and reducing American energy bills.

Mr. MCEACHIN. Thank you, ma'am.

Mr. Harak, can you speak to how delays at DOE or laxity in terms of where standards are set adversely affect low-income families? Can we put a dollar figure on the savings that these families have missed out on as a result of the current administration's regulatory choices?

Mr. HARAK. I don't think I can put precise dollar figures on it, although I can give you an estimate. So furnaces, in particular, as I mentioned, are one of the biggest bills for people in States that have some level of serious heating load. And an efficient furnace could cut your bill, particularly if you are replacing an old, inefficient furnace—that is, when you bought it, it had a certain rating; well, it has degraded since then—it could cut the bill 25 percent. I know with the low-income network that I work with and that actually installs these furnaces in low-income homes, you could easily be cutting that person's heating bill by 25 percent. And for a low-income person living in an inefficient house with an inefficient furnace, that is hundreds of dollars a year that are being lost out.

So as I mentioned in my initial testimony and in response to Mr. Pallone's questions, we are at the National Consumer Law Center particularly interested in stronger furnace standards because it is incredibly important for low-income people. And any delay in that—the last time the rule was significantly revised is more than 25 years ago now. There was some modest change in the 1990s. So delay really hurts low-income people and a very impact on their energy bills and their health and comfort, when you are talking about furnaces.

Mr. MCEACHIN. Thank you.

And thank you, Mr. Chairman. I yield back.

Mr. RUSH. I want to thank the gentleman. The Chair now recognizes Mr. Veasey for 5 minutes for the purposing of questioning the witnesses.

Mr. VEASEY. Thank you, Mr. Chairman.

Mr. Harak, I wanted you to talk a little bit more about renters. As you know, we have had a tremendous shift in our society. I will tell you, like personally, the neighborhood that my mother grew up in, the Lake Como community, because of segregation during that time period, there were people of all economic backgrounds that lived in that community, doctors, lawyers, but also people that worked in people's homes and drove buses, and did a lot of different jobs. Most of those families had two household incomes. They had two incomes inside of that house and they were homeowners.

As you know, now many low-income people in this country can no longer afford to buy a home. They are no longer homeowners. And many of them no longer have the luxury of two incomes in a household, and they find themselves more and more having to rent.

I wanted to ask you, what would be the stress put on low-income households if landlords don't—if we don't update this policy, making landlords updating their appliances, and things like that? And what impact can that have on the bottom line of low-income household families?

Mr. HARAK. Do you mind if I just ask where your district is? I have lived in Texas. So I am curious.

Mr. VEASEY. In Fort Worth, Texas. Mom grew up in a little community in Fort Worth, Texas, called the Lake Como community.

Mr. HARAK. I have lived in Fort Worth. So I was curious.

So let me say that, when the Department was considering central air conditioning standards, I made sure to speak to people at Texas ROSE, Ratepayers' Organization to Save Energy, in Texas, to get a sense of how do low-income people come into homes where there are these appliances. Well, one, they are renters. And as I mentioned in my testimony, renters will lose out if we don't have good standards because the owner is going to buy that appliance, and the owner is often going to go get the lower-cost appliance. It makes perfect economic sense.

But, then, I also spoke to folks. Well, how do people wind up in homes even as homeowners, let's say, with central air conditioning? Well, they are usually buying an older home. And so someone else probably installed that appliance. So that a low-income person buying a modest home in Fort Worth is probably not going to install new central air conditioning. And so we need the standards because the homes that are now on the kind of secondary market, that appliance was installed by someone else. We want to have good standards because low-income are buying that home after the central systems have already been in the home. So I think both low-income renters, but even low-income homeowners benefit from strong standards around these appliances that are the major portion of their bills.

I hope I answered your question.

Mr. VEASEY. Absolutely. No, that was actually very helpful.

I wanted to ask you, Mr. Friedman, would you agree that the DOE has a clear set of tools in its toolbox to help low-income renters?

Mr. FRIEDMAN. I do think DOE has many tools to help low-income residents. But, let's be honest, with more resources, I think DOE could do more. The Weatherization program has an amazing history of helping folks and during ARRA, was able to really ramp-up and help even more. But, at this point, the funding is much lower than it was during the Recovery Act. So that is certainly one place where I think, with more resources, DOE could do more.

I would also just add that ensuring that every dollar spent at DOE that is supposed to be focused on efficiency and getting appliance standards out is going to help everyone, and especially low-income homeowners who spend, as a share of their income, three times as much on heating, electricity, water, et cetera, than your average American. So low-income Americans tend to stand to gain even more than most Americans from these standards.

Mr. VEASEY. Thank you very much.

Mr. Harak, do you have any—

Mr. HARAK. I do think Mr. Friedman raises an incredibly important point. I am meeting with my Congresswoman, Katherine Clark, I hope in about 30 minutes to talk to her about the need for increased funding for the Weatherization Assistance Program.

If you want to talk about a program that makes a gigantic difference in the lives of low-income people, it is the Weatherization Assistance Program. As I mentioned in response to your first question, when the network I work with in Massachusetts goes to a low-income home, the low site savings are 20 percent in their energy bills. And if that house was really poorly insulated and had an old heating system, sometimes we are saving 40 percent in the household we are touching. So it is very important we get to more of those households, and that means we need a lot more money in the Weatherization Assistance Programs, which is, of course, part of DOE.

I appreciate the question.

Mr. VEASEY. Absolutely. Thank you.

Mr. Chairman, I yield back.

Mr. RUSH. I want to thank the gentleman. The Chair now recognizes Mr. O'Halleran from Arizona for 5 minutes for the purposes of questioning the witnesses.

Mr. O'HALLERAN. Thank you, Mr. Chairman.

I would like to commend each of the witnesses in our second panel today for contributing thoughtful insight into this important conversation about energy efficiency standards. I believe we can all agree that meaningful efficiency standards are important not only for the marketplace, but for consumers and the environment as well.

Mr. deLaski, in your testimony you cite a recent economic study which estimates that savings from energy efficiency standards resulted in 300,000 more jobs in the United States economy in 2016 than would have been the case, absent any standards. In your view, how might a delay in issuing efficiency standards impact the availability of these related jobs, especially in rural communities?

Mr. DELASKI. So the delay in the standards and updating standards is reducing the savings that consumers will get in the future. What was described in that economic study is the secondary effect, that if people save money on their bills, they are spending less money on gas and electricity and water and sewer bills, and that puts money back in their pocket that they spend on other goods and services. So the delays mean that there are \$60-some billion in savings that are going to be delayed, which means people have less money in their pocket to put on other goods and services that helps to create jobs in local communities. So that is the cost.

Mr. O'HALLERAN. Mr. Friedman, in your testimony you highlight your concerns with the Department's proposed changes of their process rule. In your view, do you see any harms caused to the marketplace by the Department setting a new definition for efficiency?

Mr. FRIEDMAN. Well, certainly, the thresholds that they have created, I see significant harm in terms of devices that people refer to as vampire loads, all those electronics that now we literally rely on throughout our daily lives. If the process rule and that threshold blocks the ability of the agency to set those standards, it is going to set us all back. And right now, that equipment is about 40 percent of energy use. That is only going to grow, both as other appliances get more efficient and as we get more and more cool stuff.

Mr. O'HALLERAN. Thank you.

Ms. Kennedy, I used to be a project manager and working on fairly complex projects on technology and buildings and development of designs of buildings in order to incorporate technology into them. I am at a loss, and maybe you can help me because you seem to be very concerned with the timeliness of things getting done here. I am at a loss to understand how it takes so long within this Department—and quite frankly, I have worked with the FCC and the CFTC, and some others—to get things done in an efficient way, in a timely way, to make sure that we take advantage of changes in technology and other areas, and make sure that we, as a Government, are efficient, also, in moving projects forward and getting things done on time. Can you help me at all?

Ms. KENNEDY. I was struck by the fact that Assistant Secretary Simmons didn't point to any reason for the delays in the 16 overdue efficiency standards. He said that the Department had sufficient resources. He didn't point to any particular problem. And so that tells me that there is a problem, that there is a problem of will, and that we need to get that program back on track. There is nothing in regulation or statute that is causing those delays. It is something within the Department of Energy under this administration.

And we have seen this program work well over various different administrations over the years of both political parties. So there is some issue around political will, possibly around ideology, which is holding things back. And that is really concerning for consumers, for the environment, for jobs, and our ability to fight back on climate change.

Mr. O'HALLERAN. I do know the developers that I have worked for in the past would be very upset on cost overruns and not getting jobs in and done on time.

So thank you, Mr. Chair. I yield.

Mr. RUSH. I want to thank the gentleman. The Chair now recognizes the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Chairman Rush.

I believe efficiency must be our first fuel of choice. According to the International Energy Agency's Energy Efficiency 2018 Report, energy efficiency alone can account for more than 40 percent of the emissions reductions needed to meet global targets set forth in the Paris agreement.

So Ms. Kennedy, what have you and NRDC found? How important is efficiency for achieving climate targets?

Ms. KENNEDY. Energy efficiency is absolutely crucial and fundamental to achieving our U.S. climate targets, or what should be our U.S. climate targets. Without energy efficiency, we can't get the job done. We need to also invest in renewables, electrify transportation and buildings, but energy efficiency is absolutely fundamental to fighting climate change and to doing it in an affordable way.

NRDC issued a report last year called "America's Clean Energy Frontier: The Pathway to a Safer Climate Future". And energy efficiency is going to deliver the largest amount of carbon savings that the U.S. can muster. So it is really important.

Mr. TONKO. Thank you.

And would you say DOE's standards program plays a big role in our overall efficiency agenda?

Ms. KENNEDY. It plays a very crucial role, yes.

Mr. TONKO. And can you give us a sense of how important improvements in lighting, including the performance gains and cost reductions in LED technologies, have been to improve building efficiency?

Ms. KENNEDY. The innovation that we have seen in lighting, the improvement that we have seen in lighting efficiencies, spurred by Congress' actions and by DOE's actions under the last administration, have been hugely important.

Mr. TONKO. And, Ms. Kennedy, again, and Mr. DeLaski and Mr. Friedman, I am sure all of you are familiar with the Energy Independence and Security Act of 2007. Can you explain the statutory backstop on tier 2 of lighting standards? And as you do that, can you also respond to the response made to me about the backstop of the Assistant Secretary and his rationale? Because I am trying to figure out what triggering the backstop is all about.

Ms. KENNEDY. Yes. The Department of Energy's current interpretation, which Assistant Secretary Simmons discussed this morning, is incorrect, in my view, and I have been addressing these issues for decades, both through litigation and through rulemaking, and other activities.

EISA directed the Department of Energy to do a rulemaking by 2017 to examine the scope of light bulbs that would be included under the new set of standards and also, to examine whether the standards in the backstop should be stronger. The Obama administration came up with a rule, through a long process that involved all sorts of stakeholder engagement, and acting within the authority which EISA provided it, determined that the scope of general service lamps should be expanded in various ways to include a number of additional bulbs.

The Department of Energy is now trying to undo that, and it faces a very high burden as it does that, because, as you know, once a Federal agency has gone through a long rulemaking, made a determination, there is no finding—there is no challenge striking down that determination, it is very, very hard to undo it and reach a different result.

The backstop absolutely has been triggered. Congress in EISA included this backstop provision, so that if the Department of Energy didn't do its job, that backstop would be in place, as of January 1st, 2020. So that backstop is there. I believe it is enforceable. And what the Department of Energy is doing is creating all sorts of uncertainty for manufacturers and for consumers.

And I will also just mention, those standards, the backstop standards, have been in place in California since 2018, and it has been a smooth transition, no problems, tons of bulbs on the market that meet those standards.

Mr. TONKO. Thank you.

Mr. DELaski and Mr. Friedman, I have just a little bit of time left, but if each of you could just speak to the comments made by the Assistant Secretary about the backstop?

Mr. DELASKI. I just will echo what Ms. Kennedy said, which is that the Assistant Secretary is wrong. The backstop has been triggered, and the light bulb standards needed to get back next year. That is what the law requires. And failure to do so is an abdication of the Department's legal obligations.

Mr. TONKO. Mr. Friedman?

Mr. FRIEDMAN. I could be wrong, but I am pretty sure my signature is on that rule that came out under the Obama administration. Our general counsel was very clear on the law. The Secretary supported the general counsel, and we issued a change in the definition. So I think the law is pretty clear, and I think, sadly, this may end up being the courts that have to reinforce what Congress said. Again, statute is not arbitrary. Statute is not optional. It needs to be followed.

Mr. TONKO. And resolving it in the courts will only provide for more uncertainty.

So I thank you all for your responses.

And with that, Mr. Chair, I yield back.

Mr. RUSH. The gentleman yields back. The Chair now recognizes the gentleman from Vermont, Mr. Welch, for 5 minutes.

Mr. WELCH. Thank you very much.

I thank the panel.

Mr. DELaski, Vermont enacted a couple of State-level standards, appliance standards, in the past two years, one for light bulbs and another that covers 18 products. Can you explain the relative role of States and the Federal Government in appliance standards?

Mr. DELASKI. Yes, I would be happy to. One of the fundamental elements of the Federal law that we haven't talked a lot about today is the Federal standards are generally preemptive. Once the Federal standards are in place, States are preempted from acting.

But one of the fundamental elements of the Federal legislation is that, in preempting the States, the Congress put on DOE the obligation to keep standards up-to-date, to do the reviews we have been talking about. That is the deal.

Mr. WELCH. Right.

Mr. DELASKI. So when that is not happening, you are seeing more States, leaders like Vermont, and there are another 13 States that are considering similar legislation currently, following in Vermont's leadership, leading footsteps. You are seeing more States step in. Now they can't address things that are preempted, but they are looking at other products.

Mr. WELCH. Right.

Mr. DELASKI. And they are also adopting the light bulb standards because they are concerned.

Mr. WELCH. Yes, let me go on that. So one of the laws that we did pass in Vermont was designed to protect against the Federal rollback of the light bulb standards, and it, essentially, copied the Federal light bulb standard in a State law. And now, the DOE has announced that they intend to rescind the broadened scope of the light bulb standards. What does that mean to States like Vermont and others that have essentially copied the Federal standard?

Mr. DELASKI. So Vermont, like California, will now be in a position to enforce standards, instead of the Federal Government. So what we are going to see is a State-by-State approach, in addition to insisting that the Federal standard also is in place. So the uncertainty that was referenced earlier, it is being multiplied over and over again.

Mr. WELCH. All right. Thank you.

Mr. DELASKI. Instead of having a situation where we knew what was going to happen—Congress set the bar 13 years ago—now we have uncertainty that is creating lots of problems.

Mr. WELCH. Right. Thank you.

Mr. YUREK, how does the uncertainty that was just mentioned, introduced by the DOE failure to meet their deadlines, affect your member companies? And you mentioned in your testimony that the feast-or-famine is not a helpful way for DOE to run the program. Can you explain what you mean by that?

By the way, my whole understanding is that a lot of the manufacturers in the private sector, they can live with standards. They just want to know what they are, and then, the competition is about who can do the best product compliant with those standards.

Mr. YUREK. That is very correct, Congressman. My members don't manufacture light bulbs. So I am not going to go down that path. But we do cherish and want certainty and predictability, and we need that to plan and make the investments in our products, in our production lines, in the distribution of those products. And so when there is a schedule, we want that schedule to be met, so that we can meet those. But we also want good rules that make sense.

And it also goes to the different consumers that were talked about earlier and their ability to afford. And we want to make sure that they are economically justified, so all consumers, be they low-income as well as those that can afford the higher costs, can afford to get the equipment to get the comfort that they need. So it is balancing that and using the full timeframe for developing the rule versus short-circuiting it, and then, coming up with rules that might not be the best.

Mr. WELCH. OK. Ms. Kennedy, actually, following up on that question, one of the debates we have here—it was on the earlier panel where my friend from Virginia raised questions about the affordability of standards. That, by the way, is a concern I have. And we are always wrestling with whether the standard overdoes it by making a product more expensive than you can afford, and then, you lose the savings because the product isn't going to be deployed.

So one of the challenges I have is there will always be a difference of opinion about where is the right place to land, but we probably agree, Morgan, that using less energy is better than using more. Is there some mechanism by which there can be some flexibility and quick response to negative reaction in the marketplace because the standard just overreaches a bit?

Ms. KENNEDY. Well, there is some flexibility in the procedures and the statute. Manufacturers have the ability to petition DOE for an exemption or waiver from a particular standard when—

Mr. WELCH. Could we get a turnaround on that a little quicker? Because I am actually sympathetic to that. I have a door and window manufacturer and they were totally committed to standards, totally committed to efficiency, but they actually were having a problem with the compliance challenges for a standard that was set to the point where people weren't going to be able to afford to buy that product. And if we can get an answer on that, then we take some of the fight out. Because the overreaction we have from some folks who are legitimately concerned about their lower-income consumers is to say, look we don't want any standards because it is going to price them out.

And Mr. Griffith, I don't want that. I really want standards.

But do you have some suggestions on how we could get a quicker turnaround, so there would be some confidence?

Thank you, Mr. Chairman.

Mr. RUSH. The Chair wants to thank all the witnesses for your participation. I know it has been time-consuming, and we certainly value your time. We certainly appreciate all your efforts and all your testimony here this morning. We want to thank you very much.

And the witnesses are dismissed. Right now, thank you once again.

And the Chair requests unanimous consent to enter into the record documents that have been previously agreed to by the ranking member of the subcommittee. And without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. RUSH. I remind Members that, pursuant to committee rules, they have 10 business days to submit additional questions for the record to be addressed by the witnesses who have appeared. I ask each witness to respond promptly to any such question that you may receive.

At this time, the subcommittee stands adjourned.

[Whereupon, at 1:46 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]



ELEMENTAL

March 6, 2019

The Honorable Frank Pallone
Chairman
House Energy & Commerce Committee
Washington DC 20510

The Honorable Greg Walden
Ranking Member
House Energy & Commerce Committee
Washington DC 20515

The Honorable Bobby L. Rush
Chairman
House Energy & Commerce Subcommittee
on Energy
Washington DC 20510

The Honorable Fred Upton
Ranking Member
House Energy & Commerce Subcommittee
on Energy
Washington DC 20515

Dear Chairman Pallone, Ranking Member Walden, Chairman Rush & Ranking Member Upton,

Nearly 12 years ago to the day, in March 2007, I faced the Dean of the U.S. House of Representatives, the Lion himself, Congressman John Dingell. It was not set to be a pleasant encounter. I was called to a press conference to explain the Department of Energy's historically abysmal record on energy efficiency standards. The Government Accounting Office had just released a report, showing that DOE had missed 34 of 34 Congressionally mandated deadlines over nearly two decades for appliance standards – a perfect record of failure that had landed the Department in multiple legal battles. I found myself, newly appointed as America's top regulator for energy efficiency, summoned to Capitol Hill. The Chairman wanted answers.

I swallowed my pride, squared my shoulders, took a deep breath, and stepped to the podium to vow an end to this utter failure of the Department to serve both the individual consumer and our national interest. In taking responsibility and committing to changing course, I delivered an improbable response that was not anticipated: I promised Chairman Dingell that DOE would not miss another deadline. As a public servant, deeply committed to unleashing the power of American innovation to strengthen our society, and as a father who envisioned a better future for all children, I pledged and pursued a determined course to end the embarrassing trajectory of Executive Branch neglect that had extended over decades.

As I prepared for Chairman Dingell to express his dismay at my boss, President George W. Bush, and the DOE in general, something extraordinary happened. Rather than deliver the scathing review so richly deserved by the GAO report, the Chairman instead stood beside me, both literally and figuratively, signaling a new moment for bipartisanship on clean energy policy. He joined me at the podium, put his arm around my shoulder, and told the assembled throng of reporters and advocates that he would hold me to my promise. Chairman Dingell affirmed that we would work together, hand in hand, to implement the will of Congress and eliminate the backlog in efficiency standards that was constraining innovation.



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Over the months and years, Chairman Dingell and I would collaborate increasingly often, working to find common ground where it existed and respecting differences of both policy and politics when consensus was not attainable. He was a fierce fighter, a defender of the auto industry, and could be intensely partisan when the moment required. But, in all things, he was a gentleman, a historian, a compassionate and caring citizen, shrewd policymaker and, most of all, a patriot from whom I learned so much. John Dingell is worthy of the many diverse tributes and praise that his memory has earned in recent weeks. His patriotic partnership to pursue the greatest outcomes from American innovation in efficiency, productivity, and competitiveness is something that I, and I hope every American, will always be grateful for.

Upon hearing news of his passing, my mind flashed back to those rich and meaningful collaborations from a decade ago. Imagine my sadness to discover, in almost the same moment, that the Department of Energy has once again failed to meet its most basic duty to serve our citizens, our innovators, and our common good through rigorous energy efficiency standards. In fact, the Administration now seeks to constrain American productivity and our environmental well-being by proposing processes that are more cumbersome, less effective, and unlikely to deliver cost savings, consumer choice, or pollution reduction.

As you gavel in your hearing today, I am sending this letter both to pay tribute to the man who served as Chairman of the Energy & Commerce Committee for 16 years, and to express my dismay that after a decade of bipartisan progress on energy efficiency that commenced on that day in March 2007, a new effort to constrain the benefits of American innovation has emerged.

Having served as the regulatory official for this portfolio, I want to affirm to all the members of the Subcommittee today that there is no basis in science, technology, policy, or economics for these new proposals from the Administration to roll back progress or to undermine bipartisan lighting standards. Indeed, any effort to diminish the efficacy of scientifically sound and technically informed appliance standards at the Department of Energy will drastically curtail economic advantages to our citizens and to our country's competitiveness. The Administration's proposals are measurably harmful to consumers, to markets, and to the environment. Further, there is no reason for the Department to continue missing statutory deadlines to promulgate new efficiency standards and remain in compliance with the will of Congress. These hurdles have been overcome already and the failure to continue progress simply reflects a lack of acumen, denying the benefits of innovation for the many in favor of the profits of a few.

In every case where the Department has enacted new appliance efficiency standards, those technological targets have been met or exceeded by the power of America's marketplace innovation, with tremendous benefits to all Americans. For example, during my service as Assistant Secretary, Congress enacted and the President signed legislation to commercialize LED lighting, which was not available for sale to the general public. Consequently, in less than a decade, American innovation in LEDs transformed the lighting landscape of the world with smarter, more versatile, more colorful, more efficient, more connected illumination for our



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homes, offices, vehicles, and communities. This has dramatically lowered the cost, energy consumption, and emissions profile of ordinary lighting, proving once again that nothing is as powerful as a good idea whose time has come.

Reflecting back with great admiration and respect for former Chairman Dingell, as well as Chairman Rush, Ranking Member Upton and many others on this committee who worked to forge a bipartisan consensus on innovation policy a decade ago, it occurs to me that the only thing that has changed significantly between then and now is the ability of an Administration to exhibit the same confidence in America's entrepreneurial power of innovation to tackle our nation's greatest crises.

The history of American progress is shaped, almost entirely, by a series of outlandish goals that our great innovators not only achieved, but exceeded in both scale and time. That is unquestionably the story of how this nation elevated humanity's comforts, convenience, and quality of life, turning night into day, and multiplying productivity in a quest for greater prosperity. It is the rationale for intelligent and informed residential lighting and appliances standards. Americans today have more choices at less cost delivering more energy savings than at any time in human history. We have shared the beneficence of this remarkable achievement around the world. Robust efficiency standards have not burdened the market – they have catalyzed it.

If nothing else, this moment serves as a vital reminder of the essential role of Congressional oversight of agency actions. We, as a nation, are long overdue for a new, comprehensive bipartisan Energy Policy Act that is focused on the dual benefits of national security and natural security, achieved through accelerated deployment of capital and technology. More than a decade ago, the Department of Energy had drifted off course in delivering tangible benefits to consumers. With bipartisan enactment of the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007, Congress refocused the DOE, established an expectation of public policy leadership to improve the lives of all Americans, introduced commercial stretch goals that gave us a decade of strategy, and unleashed an unprecedented period of technology innovation and commercialization that has not only delivered billions in savings to consumers but made our nation more safe, secure, and sustainable. This is a record to be proud of, and one whose time has come again. I am personally grateful to have worked with so many of you, as well as Chairman Dingell, during this exceptional period of leadership.

Rather than slow the pace of commercialization by rolling back efficiency standards, let's once again stand together in favor of the kind of technological innovation that liberates Americans from energy prices and achieves the easiest, fastest and most profitable source of GHG reductions. It has never been more important to empower consumers with better products at lower cost that strengthen our nation and improve our environmental health. Backsliding is not just unwise, it is unjustifiable by any standard.



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In just a few years, we have gone from an economy in which LED lighting was considered cutting-edge technology to an economy in which no one would build a commercial building without LED lights in it. Consumers not only expect LEDs in their homes and apartments, they now expect to operate those lights on voice command. In 2009, there were fewer than 400,000 LED bulbs in the home. Five years later, in 2014, there were more than 78 million bulbs installed – a pace of technology adoption that is among the highest in history.

Technology, opportunity, and economics are all on our side. But time is not. Throttling innovation at this critical juncture will do irreparable and unnecessary harm to our markets and our global leadership in energy technology.

As you all come together today to hold this important hearing, I urge you not to relent. Remain steadfast in your bipartisan commitment to improving the lives of consumers and designing a better future for our children. I humbly ask that you honor the environmental spirit and conservation legacy of Chairman Dingell, the man who helped enact the original appliance standards program in the Energy Policy and Conservation Act of 1975, a leader who was willing to cross the aisle and devise common solutions based on common sense in the name of advancing American innovation leadership. Please consider your own legacy and spirit of community when you deliberate on our national security and environmental wellbeing, pressing hard for answers and insisting on accountability to sustain our leadership in the 21st Century.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alex Karsner', written over a light blue horizontal line.

Alexander A. Karsner
Assistant Secretary for Renewable Energy
& Energy Efficiency, 2006-2008

cc: Members of the House Energy & Commerce Energy Subcommittee

Consumer Technology Association

1919 S. Eads St.
Arlington, VA 22202
703-907-7600
CTA.tech

March 5, 2019

The Honorable Bobby L. Rush
Chairman
House Subcommittee on Energy
U.S. House of Representatives

The Honorable Fred Upton
Ranking Member
House Subcommittee on Energy
U.S. House of Representatives

Subject: **Subcommittee hearing on “Wasted Energy: DOE’s Inaction on Efficiency Standards and Its Impact on Consumers and the Climate”**

Dear Chairman Rush and Ranking Member Upton:

The Consumer Technology Association, as the trade association representing more than 2,200 companies in the \$398 billion U.S. consumer technology industry, welcomes the Committee’s continued engagement in pursuit of our shared commitment to energy efficiency. Energy efficient consumer products are in demand and promote our goal of environmental sustainability.

The title of the Subcommittee’s hearing suggests a focus on the binary question of whether or not a new energy appliance standard has been adopted. The Committee should instead measure success based on the overall effectiveness of DOE and industry’s programs in improving energy efficiency, not on the number of new standards adopted. There has been a growing consensus that flexible collaborative programs with industry can result in superior and faster energy savings while delivering more innovation and features to consumers. These so-called “voluntary agreements” have garnered bipartisan support here in the United States and from governments, energy efficiency advocates, and manufacturers around the world.

The backstory

The history of voluntary agreements in the United States traces back to 2012, when DOE was attempting to consider energy efficiency standards for the set-top boxes used by pay-TV providers. Energy efficiency advocates had raised concerns that set-top boxes had quickly become one of the more significant unregulated sources of energy consumption in the home, in particular because of the emergence of higher-energy consuming digital video recorders. But DOE recognized the impossibility of predicting all the technological and business changes that would have occurred with this fast-changing equipment and market



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by the time its rules could have become applicable five years later. Companies were developing new features every year and would constantly have had to petition DOE to adopt or amend allowances and then wait for DOE approval before they could make the feature available to consumers. That result would have delayed or even derailed the introduction of new features to consumers and upgrades to service provider networks, in conflict with EPCA's directive to avoid "any lessening of the utility or the performance of the covered products likely to result from the imposition of the standard,"¹ and the Obama Administration's directive to federal agencies to "promote innovation."² It would have also deprived innovators of first-mover advantages in a competitive market.

Instead, DOE and industry looked for alternatives. In 2009, the European Commission's Ecodesign Directive recognized that voluntary programs can allow for "flexible and appropriate adaptations to technological options and market sensitivities." It instructed its regulators to give priority to voluntary agreements "where such action is likely to deliver the policy objectives faster or in a less costly manner than mandatory requirements." Under this directive, the Commission worked with industry to launch a voluntary agreement for set-top boxes. The Commission staff were closely involved in setting overall expectations, but industry was able to craft the specific targets and rules that would satisfy those expectations.

DOE decided to follow this example, and the results have been spectacular. By law, DOE's rules could not have become effective sooner than 2018, but an independent audit found that by the end of 2017, the set-top box Voluntary Agreement had already saved consumers more than \$3.5 billion in energy - enough electricity to power all homes in Los Angeles for a year - and avoided more than 20 million metric tons of carbon dioxide emissions. Before DOE's first generation of energy efficiency levels could have taken effect, the industry program was already on its second and had already adopted a third set to take effect in 2020. As a result, set-top box energy consumption declined 34 percent in those five years, and new DVRs - which are the most energy-intensive type of set-top box - dropped by nearly 50 percent.

President Obama's Energy Secretary, Ernest Moniz, and Senator Diane Feinstein were thus correct when they predicted in 2013 that the agreement would "save families money by saving energy, while delivering high quality appliances for consumers that keep pace with technological innovation"³ and be "a big win for nearly every American" because DOE standards could not have produced as much savings as quickly.⁴ The agreement was named "Project of the Year" by *Environmental Leader*, a leading daily trade publication covering energy, environmental and sustainability news.

When the initial agreement expired at the end of 2017, the parties coordinated with DOE again to extend it for another four years, with even more rigorous commitments set to take effect in 2020. Secretary Perry

¹ 42 U.S.C. 6295 (o)(2)(B)(i).

² Improving Regulation and Regulatory Review, Executive Order 13563, 76 Fed. Reg. 3821 (Jan. 21, 2011) ("In developing regulatory actions and identifying appropriate approaches, each agency shall ... seek to identify, as appropriate, means to achieve regulatory goals that are designed to promote innovation.").

³ U.S. Department of Energy, ENERGY.GOV, U.S. Energy Department, Pay-Television Industry and Energy Efficiency Groups Announce Set-Top Box Energy Conservation Agreement; Will Cut Energy Use for 90 Million U.S. Households, Save Consumers Billions (Dec. 23, 2013), available at <http://energy.gov/articles/us-energy-department-pay-television-industry-and-energy-efficiency-groups-announce-set-top>.

⁴ *Id.*

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announced that “DOE supports the commitment from industry to improve energy efficiency and looks forward to the renewal of this voluntary agreement with our private sector partners,” adding that “voluntary industry standards such as this are an effective alternative to government regulation.”⁵

Innovation-friendly flexibility

Another reason that voluntary programs can be more effective than regulation is because they afford the parties more flexible opportunities to achieve energy savings. For example, DOE regulation could have capped the energy that could be used by a DVR set-top box, but it could not have ordered pay-TV providers to reduce the number of DVRs used by consumers. By contrast, the set-top box voluntary agreement has achieved a reduction in the number of DVRs, first by promoting the deployment of “whole-home” solutions that enabled consumers to use a single DVR to record and play back recorded content on any TV in their house, and more recently by promoting the use of apps through which consumers can watch live and recorded content without any operator-provided set-top box at all.

The set-top box agreement was also a model for a second agreement for consumer Internet access “small network equipment” such as modems, routers, and wi-fi extenders. Agility and flexibility were even more important for that equipment because of the rapid pace of hardware and feature evolution. A DOE regulation drafted more than five years prior would have focused on a world in which consumers typically hard-wired a single desktop computer to a modem delivering 1.5 mbps of Internet speed. That rule would have become effective in a world in which consumers wirelessly connect dozens of laptops, tablets, game consoles, alarm and home monitoring systems and other devices over much faster Wi-Fi speeds that need to be robust throughout the home. By contrast, the small network equipment voluntary agreement’s new features process was able to keep pace with this rapid innovation and the agreement has managed to improve the energy efficiency of small network equipment even as features and performance radically increased.

Voluntary programs can include multiple levels of transparency and verification. Performance under the U.S. set-top box and Internet equipment agreements is annually verified and reported under Voluntary Agreements by an independent auditor, D+R International and posted at www.energy_efficiency.us. Under the Voluntary Agreements’ audit and verification program supervised by D+R, select models are tested in a third-party lab or under a supervised testing program with an accredited observer.

While these programs are often described as voluntary agreements, they should not be misunderstood as government abdication to regulatory indifference. Government agencies in the U.S., Canada, Europe, Australia, Japan, South Korea and elsewhere have actively engaged with industry in the development and implementation of these agreements. Secretary Moniz hailed the set-top box agreement as “a collaborative approach among the Energy Department, the pay-TV industry and energy efficiency groups.” The U.S. programs include effective enforcement provisions that require non-compliant parties to remediate extra energy usage caused by their non-compliance. For example, in one instance, a company downloaded new energy-saving software to older models in the January following a year in which it missed its energy commitment, offsetting the extra energy before a government enforcement proceeding could have even completed its fact-finding. A regulator would have lacked the authority to compel such a creative and

⁵ <https://cta.tech/News/Press-Releases/2018/March/Consumers-Will-Save-Billions-More-as-Landmark-Set.aspx>

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effective remedy. By spurring the private sector to adopt such programs, it can be possible for a regulator to achieve the Administration's goals more effectively.

A new policy tool

Today, Voluntary Agreements have become known as the superior solution for products where technology and markets change too fast for regulation to keep pace, and there are numerous voluntary energy efficiency programs for many different types of appliances around the world. As we move further into an era of even more complex and rapidly-evolving appliances and consumer technologies, DOE needs these and other new tools to effectively promote energy efficiency without undermining innovation.

EPCA itself requires that DOE tailor its actions to the market. DOE may only adopt regulatory standards that are technologically and economically feasible and produce savings superior to non-regulatory marketplace approaches.⁶ DOE has committed by rule that prior to the adoption of any energy standard it will "fully consider non-regulatory approaches" and "the effectiveness of market forces and non-regulatory approaches," including "voluntary programs,"⁷ and will disfavor mandatory standards that "would not result in significant energy conservation relative to non-regulatory approaches."⁸ The Committee should accordingly evaluate DOE's effectiveness by more nuanced yardsticks than simply how many traditional regulatory programs it has adopted.

CTA looks forward to continued engagement with the Committee. CTA's comprehensive approach to energy efficiency includes extensive support for the federal ENERGY STAR program, a foundational role in the industry Voluntary Agreements to improve the energy efficiency of set-top boxes and small network equipment, and a lead role in the development of consensus standard test methods for several categories of consumer electronics. CTA has supported the Connected Devices Alliance (CDA), a collaboration involving

⁶ 42 U.S.C. §§ 6295(o)(2)(B) ("In determining whether a standard is economically justified, the Secretary shall, after receiving views and comments furnished with respect to the proposed standard, determine whether the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering . . . the total projected amount of energy, or as applicable, water, savings likely to result directly from the imposition of the standard"), 6295(o)(3) ("The Secretary may not prescribe an amended or new standard under this section for a type (or class) of covered product if . . . the establishment of such standard will not result in significant conservation of energy or . . . is not technologically feasible or economically justified").

⁷ 10 C.F.R. Ch. 11, Appendix A to Subpart C of Part 430—Procedures, Interpretations and Policies for Consideration of New or Revised Conservation Standards for Consumer Products, Objectives, Objective 1(e) (committing DOE to the following objective: "Fully consider non-regulatory approaches. The Department seeks to understand the effects of market forces and voluntary programs on encouraging the purchase of energy efficient products so that the incremental impacts of a new or revised standard can be accurately assessed and the Department can make informed decisions about where standards and voluntary "market pull" programs can be used most effectively. Under the guidelines in this appendix, DOE will solicit information on the effectiveness of market forces and non-regulatory approaches for encouraging the purchase of energy efficient products, and will carefully consider this information in assessing the benefits of standards."). See also *id.* at 4, Process for Developing Efficiency Standards and Factors to be Considered, Factor (d)(7)(viii) ("analysis of energy savings and consumer impacts will incorporate an assessment of the impacts of market forces and existing voluntary programs in promoting product efficiency, usage and related characteristics in the absence of updated efficiency standards.").

⁸ *Id.* at 5(e)(3)(D) (if a "candidate standard level would not result in significant energy conservation relative to non-regulatory approaches, that standard level will be presumed not to be economically justified unless the Department determines that other specifically identified expected benefits of the standard would outweigh the expected adverse effects.").

Chairman Rush and Ranking Member Upton
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governments from the Group of 20 (G20) countries and industry representatives to globally coordinate actions related to energy savings from networks and networked devices. As the industry authority on market research and forecasts, technical training and education, engineering standards, and industry promotion, CTA has also facilitated other government and industry energy efficiency public policy efforts, where it advocates for approaches that are globally harmonized and flexible to keep pace with technology, innovation and economic growth.

Sincerely,



Gary Shapiro
President & CEO



Douglas K. Johnson
Vice President, Technology Policy
djohnson@cta.tech

THE GEORGE WASHINGTON UNIVERSITY

WASHINGTON, DC

The GW Regulatory Studies Center
805 21st St. NW, Suite 612
Washington, DC 20052

March 5, 2019

Chairman Bobby L. Rush and Ranking Member Fred Upton
House Committee on Energy and Commerce
Subcommittee on Energy
2125 Rayburn House Office Building
Washington, DC 20515

RE: Written submission for the record by Brian Mannix¹ for the hearing, *Wasted Energy: DOE's Inaction on Efficiency Standards and Its Impact on Consumers and the Climate*.

Dear Chairman Rush and Ranking Member Upton:

Let me first note with sadness the passing of former Committee Chairman John Dingell, and respectfully acknowledge his long service to this committee, to his constituents, and to our country. Forty years ago as a young economic analyst – first at the newly formed Department of Energy, and later at the now defunct Council on Wage and Price Stability – I was tasked with answering letters bearing Chairman Dingell's signature, demanding to know what was holding up DOE's overdue Appliance Efficiency Standards. The answer is still relevant today.

¹ Brian F. Mannix is a Research Professor at the GW Regulatory Studies Center. This submission reflects the views of the author, and does not represent an official position of the GW Regulatory Studies Center or The George Washington University. The Center's policy on research integrity is available at: <http://regulatorystudies.columbian.gwu.edu/policy-research-integrity>.

DOE's initial effort to conduct a regulatory analysis of the proposed appliance standards was extensive, and in 1980 it was selected for review by President Carter's interagency Regulatory Analysis Review Group (RARG). As detailed in the attached article,² the RARG concluded that mandatory efficiency standards were not economically justified.

In the course of our review of DOE's analysis, we have identified several assumptions and methodologies that appear unrealistic, unduly pessimistic about the workings of the market or of labelling, unduly optimistic about the effect of mandatory standards, or simply undocumented or unclear.

... DOE's analysis of the net benefits of the standards appears to have exaggerated them, particularly in comparison to the benefits of labels. We suggest that this analysis be redone with more realistic and cautious assumptions and with lower standards, ... If, as a result, a particular standard does not appear to offer significant net benefits beyond those available from labelling, we recommend that DOE find, as it has the power to do, that such a standard is not justified.³

Two months after the RARG issued its report, in November of 1980, Chairman Dingell wrote to ask why DOE's final standards had not yet appeared. I was at the Council on Wage and Price Stability, which served as staff to the RARG, and which was part of the Executive Office of the President – then in the midst of a presidential transition. For direction, I called the office of another member of the Committee, David Stockman. President-elect Reagan had already designated Mr. Stockman as his nominee to be Director of the Office of Management and Budget, which included the Office of Information and Regulatory Affairs (OIRA), newly created by the Paperwork Reduction Act of 1980. I was told to keep the standards on hold, and that Mr. Stockman and Chairman Dingell would be flying back to Michigan together and would discuss what to do with them.

After the Carter-Reagan transition, the Energy Department tried again to issue the standards, notwithstanding the negative review by the Carter administration's RARG. They appealed to now OMB Director Stockman.

Putting aside the economic merits or lack thereof, the DOE argued that Congress surely had not intended to pass a statute that would produce no standards. Stockman was unmoved, and pointed out that a bill mandating standards had

² Brian F. Mannix and Susan E. Dudley, "The Limits of Irrationality as a Rationale for Regulation," *Journal of Policy Analysis and Management*, Vol. 34 Issue 3, 2015, 705-712.

³ Regulatory Analysis Review Group (RARG). (1980). *Department of Energy's proposed efficiency standards for consumer appliances. Report of the Regulatory Analysis Review Group*, September 15, 1980. Retrieved from <http://cwps.mercatus.org/wpcontent/uploads/161501.pdf>.

failed multiple times in the House Committee on Energy and Commerce, of which he had been a member. Finally the bill passed, with his vote, when the “economically justified” condition was inserted. By his reading, that language meant that the statute would prohibit the DOE from ever issuing a standard for any appliance. In 1982 the DOE proposed, and then finalized, a finding that appliance efficiency standards were not economically justified.

Five years later, Senator Phil Gramm [also a former member of the House Energy and Commerce Committee] introduced the National Appliance Energy Conservation Act, which mandated energy efficiency standards for a number of appliances. After intense lobbying by the appliance industry in favor of the bill, it passed with strong support, but not with support from Senator Gramm, an economist. Immediately after introducing the bill, he announced that he intended to vote against it, and urged his colleagues to do the same.

Senator Gramm pointed out that the legislation was anticompetitive, and that its real motivation was to suppress competition and to force consumers to buy more expensive appliances than they wanted. He knew that, with industry support, this anti-consumer bill was going to pass despite his opposition; he also knew that Ronald Reagan, at this point in his presidency, was reluctant to use a veto on the bill.⁴

The distinguishing feature of the amended law was the requirement that DOE issue efficiency standards, even if they were *not* economically justified and did *not* benefit consumers. Nonetheless, in order to make their standards look good, the Department proceeded to publish misleading economic analyses based on assumptions that had been discredited by the RARG in 1980. Among the gimmicks that DOE has used over the years to inflate the benefits of energy efficiency standards are obviously false assumptions, such as: (1) all households are the same size, (2) all states have exactly the same climate, and (3) the “usage elasticity” of appliances is zero – i.e., consumers do not respond at all to the cost of operating appliances.

To its credit, DOE has recently issued a proposed rule⁵ to improve the process by which energy efficiency standards are developed. The Department is under continuous pressure from industry lobbyists/salesmen to restrict consumer choice and raise the cost of appliances, and its recent efforts appear to be directed at giving greater weight to consumer welfare. My recommendation to the subcommittee is to encourage DOE to base its decisions on a truthful balancing of benefits and costs, in which climate benefits would certainly be counted, but

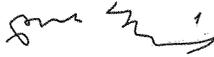
⁴ Senator Gramm’s wife, economist Wendy Gramm, was then Administrator of OIRA.

⁵ See <https://www.federalregister.gov/documents/2019/02/13/2019-01854/energy-conservation-program-for-appliance-standards-proposed-procedures-for-use-in-new-or-revised>

estimated consumer benefits would accurately reflect real consumer preferences rather than the up-selling preferences of appliance makers. It would also be helpful to remove from the statute the endless cycle of mandatory deadlines, and to restore the original requirement that all standards must be economically justified.

The attached article goes into more detail on the reasoning behind appliance efficiency standards, and some of the economic subterfuge that has been used to promote them.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian F. Mannix", with a stylized flourish at the end.

Brian F. Mannix

THE LIMITS OF IRRATIONALITY AS A RATIONALE FOR REGULATION

Brian F. Mannix and Susan E. Dudley

If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary. In framing a government which is to be administered by men over men, the great difficulty lies in this: you must first enable the government to control the governed; and in the next place oblige it to control itself.

– Federalist 51

James Madison was speaking of the structural checks on governmental power when he wrote those words, but it is worth recalling his advice when we contemplate the role of benefit-cost analysis as a check on the unconstrained exercise of the

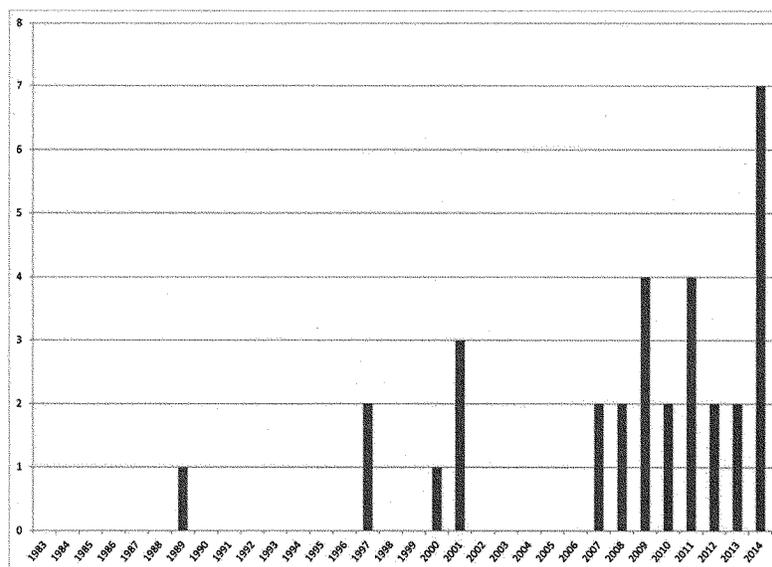


Figure 1. Number of DOE Energy Efficiency Regulations Issued by Year.

government's regulatory powers, and the implications of the reality that people's behavior, both in and out of government, sometimes falls short of what we might incorporate into an economic model or hope for in a perfect world.

Recent years have seen a rapid growth in the number of federal regulations intended to reduce Americans' consumption of oil, coal, electricity, or energy generally (U.S. Office of Management and Budget [OMB], 1997). These often take the form of standards that prescribe a minimum energy efficiency for commercial and household appliances and vehicles; Figure 1 shows the number of appliance efficiency standards issued by the Department of Energy (DOE) since 1983, for example. In setting these standards, the responsible regulatory agencies (chiefly the DOE, the Department of Transportation [DOT], and the Environmental Protection Agency [EPA]) have advanced fantastic claims about the magnitude of private benefits these rules will yield. For example, according to the EPA and DOT's most recent fuel economy standards for vehicles produced in 2017 and beyond,

[a]lthough the agencies estimate that technologies used to meet the standards will add, on average, about \$1800 to the cost of a new light duty vehicle in MY [model year] 2025, consumers who drive their MY 2025 vehicle for its entire lifetime will save, on average, \$5700 to \$7400 (7 and 3 percent discount rates, respectively) in fuel, for a net lifetime savings of \$3400 to \$5000.

Nationally, they estimate the standards will impose net present value costs of between \$144 billion and \$150 billion, but yield private fuel savings to vehicle owners of between \$364 billion and \$475 billion. The DOE makes similar claims with respect to the net private benefits of its appliance regulations, as shown in Figure 2.

In this context, we use "private benefits" to refer to the dollar-denominated value of future energy savings that result from regulatory restrictions on what consumers

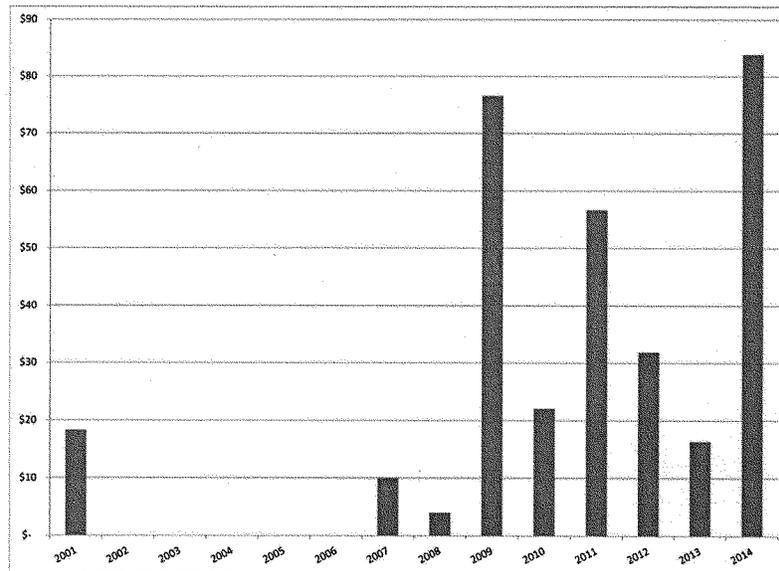


Figure 2. DOE's Estimated Net Present Value of Private Benefits of Energy Efficiency Regulations Issued by Year.

and businesses may buy. These private benefits, representing consumers' imputed willingness to pay for the personal benefit they derive from the rules, are typically larger than the public benefits, and much larger than the costs that agencies ascribe to those same rules (Dudley, 2012). And herein lies a puzzle, sometimes called the "energy paradox" (Jaffe & Stavins, 1994). How much is the average consumer willing to pay in order to be prohibited from buying, for example, an incandescent light bulb? After all, prior to the regulation, *not* buying the incandescent bulb is free. Why would anyone pay to have that choice imposed on them? As one recent paper noted:

How can it be that consumers are leaving billions of potential economic gains on the table by not buying the most energy-efficient cars, clothes dryers, air conditioners, and light bulbs?... If the savings are this great, why is it that a very basic informational approach cannot remedy this seemingly stunning example of completely irrational behavior? It should be quite simple to rectify decisions that are this flawed. Rather than accept the implications that consumers and firms are acting so starkly against their economic interest, a more plausible explanation is that there is something incorrect in the assumptions being made in the regulatory impact analyses (Gayer & Viscusi, 2013, p. 263).

What might those incorrect assumptions be? Regulators might be underestimating the costs experienced by consumers, including the lost value consumers placed on various desirable attributes of light bulbs, washing machines, and automobiles. They might be overly optimistic about the energy savings that will be realized, or the value that consumers place on those savings. Or they might be using an artificially low discount rate that does not account accurately for consumers' opportunity costs. When evaluating government expenditures, the typical practice is to use a low,

risk-free, discount rate because no single expenditure is likely to be more than a small part of the government's budget. But this is not true of automobiles and appliances purchased by consumers, who have budget constraints and an aversion to risks, and thus experience real costs that do not get captured by an artificially low discount rate (Miller, 2015).

None of this is to say that private benefits do not belong in a benefit-cost analysis, which is supposed to be a complete accounting of all the welfare effects of a policy decision. The paradox is that we know the value of private benefits and costs only by observing the choices—the revealed preferences—of consumers in the marketplace. This principle lies at the core of benefit-cost analysis, and indeed all of microeconomics. If well-informed consumers do not buy the more expensive—but more energy-efficient—model of washing machine, then we know that the private costs *must* exceed the private benefits as experienced by the consumer. And yet we see regulatory impact analyses that make the opposite claim (see Figure 2).

Note that the questions raised by private benefits have nothing to do with the public objectives of a regulation, and the market failures that may give rise to the need therefor. Let us stipulate up front that there are legitimate public benefits that may flow from policies that reduce energy use, and these can be addressed by doing a standard analysis of classical market failures. Information asymmetry is an example of such a market failure, and we have long had fuel economy and energy-efficiency labels on cars and appliances to remedy it. This is a reasonable policy “nudge,” and ought to be sufficient to the task.

An analysis of market power and competition can also be relevant to the question of reducing energy use. Soon after OPEC began exercising market power over world oil prices, for example, analysts pointed out that the United States could respond by acting as a monopsonist, reducing its consumption and thereby driving prices lower (National Academy of Sciences, 2002, p. 20). This may or may not be a good strategy. Over the years, OPEC members have seen their market power decline steadily as they lose market share to noncartel members. Similarly, self-imposed limits on U.S. oil consumption would put our economy at a disadvantage relative to competing countries, which also benefit from the price decline but are not similarly conserving. Nonetheless, the argument for a “monopsony premium” for oil is economically plausible, representing an externality—a benefit of reduced oil use that accrues to the public generally and that will not be taken into account in private decisions.

Other types of externality might be used to justify mandatory action. Analysts have argued for an energy security premium associated with oil use, to account for the public expenditures involved in trying to maintain stability in regions, like the Middle East, that supply the world market for crude oil (Brown & Huntington, 2010). A variant on this argument is that the objective is not so much to cover our security costs, as it is to reduce cash flows to oil exporting countries that use the money to support terrorism or to develop weapons of mass destruction. Whatever the merits of these arguments, it is at least plausible that U.S. national security suffers when oil consumption is high, and that a national security premium should be used when calculating the benefits of energy-saving policies.

More recently, reduction of carbon emissions in order to improve the climate has been advanced as a motivation for energy conservation programs. Elsewhere we have endorsed the Obama administration's attempt to ground energy policies on an analysis of the Social Cost of Carbon (SCC), even while acknowledging the contentious science and economics behind its calculation and its application (Dudley & Mannix, 2014).

Even when fully loaded with premiums for monopsony, energy security, and climate externalities, however, the largest component of future energy savings is, by far, the private value to the energy consumer (Gayer & Viscusi, 2013). Typically agencies will justify this by referring to “lack of consumer information and/or

information processing capability about energy efficiency opportunities” (U.S. DOE, 2014).

In recent years some authors have tried to resolve the paradox of private benefits by referring to the literature of behavioral economics, which shows that consumers are not always as rational as economic models typically assume (Madrian, 2014). But the debate over consumer rationality and the treatment of private regulatory benefits is much older. The Energy Policy and Conservation Act of 1975 (EPCA) authorized federal appliance efficiency standards, but only if efficiency labels had first been given time to work. As part of Jimmy Carter’s 1977 National Energy Plan, Congress removed this condition. The newly created DOE proceeded to draw up proposed standards and a supporting analysis that relied heavily on private benefits to justify them, citing consumer myopia as a motivation. These standards were reviewed by President Carter’s Regulatory Analysis Review Group (RARG)¹ (1980).

The RARG found the DOE’s explanation of consumer short sightedness unpersuasive. “While consumers still might be ‘myopic’ in considering future energy savings, the case is not nearly so clear-cut as it once might have seemed” (RARG, 1980, p. 5). It did, however, find evidence that the DOE’s own decisionmaking might be the result of bias:

In the course of our review of DOE’s analysis, we have identified several assumptions and methodologies that appear unrealistic, unduly pessimistic about the workings of the market or of labelling, unduly optimistic about the effect of mandatory standards, or simply undocumented or unclear (RARG, 1980, p. 7).

Finding that “the net benefits predicted for the proposed standards appear to derive largely from assumptions in the base case of extremely irrational behavior on the part of consumers,” RARG recommended that, in the absence of more compelling evidence of a continuing market failure, the DOE find that the standard was not justified.

... DOE’s analysis of the net benefits of the standards appears to have exaggerated them, particularly in comparison to the benefits of labels. We suggest that this analysis be redone with more realistic and cautious assumptions and with lower standards, as suggested above. If, as a result, a particular standard does not appear to offer significant net benefits beyond those available from labelling, we recommend that DOE find, as it has the power to do, that such a standard is not justified (RARG, 1980, p. 7).

Despite the negative review by the Carter White House, the DOE attempted to issue final appliance efficiency standards in January 1981. The Reagan administration agreed with its predecessor, however, and instructed the DOE to issue a “no-standard standard,” as the statute provided and the RARG had recommended. The DOE then appealed to the newly appointed director of OMB, David Stockman. Putting aside the economic merits or lack thereof, the DOE argued that Congress surely had not intended to pass a statute that would produce no standards. Stockman was unmoved, and pointed out that a bill mandating standards had failed multiple times in the House Committee on Energy and Commerce, of which he had been a member. Finally the bill passed, with his vote, when the “economically justified” condition was inserted. By his reading, that language meant that the statute would prohibit the DOE from ever issuing a standard for any appliance.² In 1982 the DOE proposed, and then finalized, a finding that appliance efficiency standards were not economically justified.

¹ Most executive branch regulatory agencies were RARG members. In 1980 the Executive Committee of the RARG consisted of the Council of Economic Advisors, the Office of Management and Budget, the Department of Labor, and the Environmental Protection Agency. RARG procedures and membership are summarized in OMB (1997).

² One of us, Mannix, attended this meeting as a member of OMB staff.

Five years later, Senator Phil Gramm introduced the National Appliance Energy Conservation Act, which mandated energy efficiency standards for a number of appliances. After intense lobbying by the appliance industry in *favor* of the bill, it passed with strong support, but not with support from Senator Gramm, an economist. Immediately after introducing the bill, he announced that he intended to vote against it, and urged his colleagues to do the same. He had asked to be permitted to introduce this industry-sponsored bill in order to explain on the floor of the Senate why it was profoundly anticonsumer. What propelled its passage? As the RARG had argued in its 1980 review, appliance efficiency standards were dangerously anticompetitive. By 1987 some of the larger manufacturers had made substantial investments in more energy-efficient models, but were having trouble convincing consumers to buy them. Mandatory efficiency standards would override consumers' preferences, allow manufacturers to charge a price premium for the newer models, and exclude less-expensive (especially imported) appliances from the market. Intense lobbying by the industry was able to override the Carter and Reagan administrations defense of consumer choice.

A similar "Bootleggers and Baptists" (Smith & Yandle, 2014) story can be told about the CAFE standards for automobiles. There are sound, market failure based, arguments that can be used to make a case for mandatory fuel-economy standards, and there are also economically unsound "private benefit" ones. The National Academy of Sciences (NAS, 2002) was critical of arguments that the private energy savings from CAFE standards could make individual consumers better off. But CAFE standards persist, because there is also an anticompetitive, anticonsumer explanation for why they enjoy support. In 2007 Congress changed the way we calculate the fuel efficiency of automobiles, giving extra credit to vehicles with a large "footprint." This footprint method is intended to favor U.S. manufacturers; but, by encouraging consumers to buy larger cars, it makes the standards much less effective in achieving the fuel savings that supposedly motivate them.

Given the tendency of regulatory programs to be hijacked by private interests, even while being sold as overwhelmingly in the public interest, we need to be conscientious in applying the principles of economics to the analysis of regulations, in order to be sure that regulations are doing more good than harm. Economists have developed the Kaldor-Hicks criterion for benefit-cost analysis: any policy change that produces "losers," should also produce "winners" who would be willing to pay a sufficient amount to compensate the losers.

But these gains and losses are always meant to be measures of individual welfare changes, where each affected individual is presumed to be the judge of his or her own welfare. No one else is privy to the complex mix of individual preferences and circumstances that cause us to make the choices that we do. Economists can observe consumer behavior and make inferences about their preferences, but these need to be empirically grounded—not imposed by assumption or by rule.

In the context of positive economics, this notion of consumer sovereignty is an epistemological principle, adopted to make economics a rigorous science. In the context of weighing the benefits and costs of regulatory action, that epistemological principle still applies. But there is an additional reason to be deferential to consumers about their own welfare, because we are no longer just engaging in positive science. BCA is used to make recommendations to policymakers, and that normative context is important. An economist who builds a predictive model that does not successfully forecast consumer behavior will go back to the drawing board to try to make a better model. A BCA analyst who builds such a model will be tempted to conclude that it is consumers who are wrong, and recommend that regulation be used to force consumers to more closely conform to his model.

This is not necessarily done in bad faith; even a diligent and well-meaning central planner will suffer from the myopia inherent in the "planner's paradox" (Mannix,

2003). But we should be very skeptical of regulators who cannot justify the use of coercive regulation without claiming that consumers are irrational, and that the regulator is a more faithful agent of the consumers' interests than they themselves are.

The insights of behavioral economics are certainly interesting as positive research. And they are useful in counseling people to make better decisions, including by designing government programs that provide information or present options in an accessible way. But "choice architecture" cannot produce benefits by destroying choice. Nothing in behavioral economics would allow us to assume that regulators, alone, make perfect decisions. As Gayer and Viscusi observe:

Perhaps the main failure of rationality is that of the regulators themselves. Agency officials who have been given a specific substantive mission have a tendency to focus on these concerns to the exclusion of all others. Thus, fuel efficiency and energy efficiency matter, but nothing else does. If other attributes matter, it is assumed they either are irrelevant or will be included at no additional cost in the post-regulation products. In effect, government officials act as if they are guided by a single mission myopia that leads to the exclusion of all concerns other than their agency's mandate (Gayer & Viscusi, 2013, p. 263).

Allowing regulators to control consumers "for their own good"—based on some deficiency in the consumers themselves rather than any failure in the marketplace—is to abandon any serious attempt to keep regulatory policy grounded in any objective notion of the public good.

The chief danger is that regulatory agencies will take the irrationality of consumers as sufficient reason, by itself, to intervene in markets, and will give primacy to the government's own judgment of what is good for us. Ultimately, we insist that our regulators start from a presumption of rationality for the same reason that we insist that our criminal courts start from a presumption of innocence: not because the assumption is necessarily true, but because a government that proceeds from the opposite assumption is inevitably tyrannical (Mannix, 2010).

BRIAN F. MANNIX is a Research Professor in the George Washington University Regulatory Studies Center, 805 21st Street, N.W., Suite 612, Washington, DC 20052 (e-mail: bmannix@gwu.edu).

SUSAN E. DUDLEY is Director of the GW Regulatory Studies Center and a Distinguished Professor of Practice in the George Washington University Trachtenberg School of Public Policy and Public Administration, 805 21st Street, N.W., Suite 612, Washington, DC 20052 (e-mail: sdudley@gwu.edu).

ACKNOWLEDGMENTS

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REFERENCES

- Brown, S. P. A., & Huntington, H. G. (2010). Reassessing the oil security premium. Resources for the Future Discussion Paper, DP 10-05. Resources for the Future, Washington, DC.
- Dudley, S. E. (2012). Perpetuating puffery: An analysis of the composition of OMB's reported benefits of regulation. *Business Economics*, 47, 165–176.
- Dudley, S. E., & Mannix, B. F. (2014). The social cost of carbon. *Engage*, 15, 14–18.

- Gayer, T., & Viscusi, K. (2013). Overriding consumer preferences with energy regulations. *Journal of Regulatory Economics*, 43, 248–264.
- Jaffe, A. B., & Stavins, R. N. (1994). The energy paradox and the diffusion of conservation technology. *Resource and energy economics* (Vol. 16 No. 3, pp. 91–122). Elsevier.
- Madison, J. (1787). The same subject continued: The union as a safeguard against domestic faction and insurrection. *Federalist* 51.
- Madrian, Bridgette C. (2014). Applying insights from behavioral economics to policy design. *Annual Review of Economics*, 6, 663–688.
- Mannix, B. F. (2003). The Planner's paradox. *Regulation Magazine*, 26, 8–9.
- Mannix, B. F. (2010). The troubling prospect of “behavioral” regulation. *Regulatory Policy Commentary*, George Washington University Regulatory Studies Center, April 19, 2010.
- Miller, S. E. (2015). One discount rate fits all? The regressive effects of the DOE's energy efficiency rule. *Policy Perspectives*, 22, pp. 43–47.
- National Academy of Sciences (NAS). (2002). Effectiveness and impact of Corporate Average Fuel Economy (CAFE) standards. National Academy Press, Washington, DC.
- Regulatory Analysis Review Group (RARG). (1980). Department of Energy's proposed efficiency standards for consumer appliances, Report of the Regulatory Analysis Review Group, September 15, 1980. Retrieved from <http://cwps.mercatus.org/wp-content/uploads/161501.pdf>.
- Smith, A., & Yandle, B. (2014). *Bootleggers and baptists: How economic forces and moral persuasion interact to shape regulatory politics*. Washington, DC: Cato Institute.
- U.S. Department of Energy. (1982). Energy conservation program for consumer products, final rule for clothes dryers and kitchen ranges and ovens. 47 Fed.Reg. 57198.
- U.S. Department of Energy. (2014). Final rule technical support document: Energy efficiency program for consumer products and commercial and industrial equipment; residential furnace fans.
- U.S. Environmental Protection Agency and Department of Transportation National Highway Traffic Safety Administration. (2012). 2017 and later model year light-duty vehicle greenhouse gas emissions and corporate average fuel economy standards. 77 Fed.Reg. 62623–63200.
- U.S. Office of Management and Budget (OMB). (1997). Report to Congress on the costs and benefits of regulation. Retrieved from http://www.whitehouse.gov/omb/inforeg_chap1.



National Electrical Manufacturers Association

KEVIN J. COSGRIFF
President and Chief Executive Officer

March 6, 2019

The Honorable Bobby Rush
Chairman, Energy Subcommittee
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable Fred Upton
Ranking Member, Energy Subcommittee
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Rush and Ranking Member Upton:

The purpose of this letter is to present the views of the National Electrical Manufacturers Association (NEMA) on our experiences with the Department of Energy's (DOE) efficiency standards program in general and recent developments on General Service Lamps. We trust this information will be useful to you in connection with the hearing "Wasted Energy: DOE's Inaction on Efficiency Standards and Its Impact on Consumers and the Climate" scheduled for February 12, 2019.

NEMA represents nearly 325 electrical equipment and medical imaging manufacturers that make safe, reliable, and efficient products and systems. Our combined industries account for 360,000 American jobs in more than 7,000 facilities covering every state. Our industry produces \$106 billion shipments of electrical equipment and medical imaging technologies per year with \$36 billion exports.

There are a number of electrical products within NEMA that are regulated by the DOE pursuant to the Energy Policy and Conservation Act (EPCA), including lighting components and products, electric motors, distribution transformers, uninterruptible power supplies, and external power supplies. Our Member companies have been at the forefront of investing in, designing, manufacturing, and promoting the sale of energy efficient products and equipment for decades. NEMA Members have contributed significantly to the statement made by DOE on its website that "by 2030, cumulative operating cost savings from all standards in effect since 1987 will reach nearly \$2 trillion."¹ Energy savings has become part of NEMA culture, and Congress should recognize the environmental as well as the economic successes of this statute.

We have supported the energy saving goals of the regulatory program under EPCA and we have petitioned for and/or supported a number of the energy conservation Standards that DOE has adopted over the decades. NEMA has been engaged in facilitating non-partisan agreement on legislative

¹ <https://www.energy.gov/eere/buildings/appliance-and-equipment-standards-program>

amendments to EPCA in 1987, 1992, 2005 and 2007. NEMA disagreements with DOE have been few because DOE has not abided with the intent of Congress as reflected in the statutory text or has, in our estimation, exceeded its authority. We expect, as does Congress, that DOE will follow the laws that Congress enacts. That includes statutory requirements under EPCA about the process for enacting or amending energy conservation Standards and test procedures for covered products, the scope of what products Congress has directed DOE to regulate or not regulate, and the economic justification and technical feasibility of DOE Standards.

It is important to emphasize the tremendous progress this country has already achieved through, for example, more energy efficient lighting. In the Energy Independence and Security Act of 2007, Congress established a goal for energy savings by 2020 from DOE energy conservation standards for general service lamps. In the 2007 legislation, Congress stated that it expected DOE Standards for these lamps to “produce energy savings greater than or equal to the savings from a minimum efficacy standard of 45 lumens per watt.”² NEMA is pleased to report that American consumers, retailers, and manufacturers have already exceeded that goal without the hand of additional DOE regulation of these lamps. This is but one success story for Congress to recognize.

Congress defined general service lamps to include the common general service incandescent or halogen light bulb, compact fluorescent light bulb (CFL), and the general service LED light bulb (a lamp that had not been produced at the time Congress wrote the law) as well as other light bulbs that were used to satisfy lighting applications traditionally served by general service incandescent lamps.³ General service lamps are the familiar household light bulbs that emit omnidirectional light, have a medium screw base, operate on household voltages, and serve a broad range of light output.⁴ Congress expressly excluded from the definition a long list of specialty lamps with different characteristics, and it is because Congress was so precise in its definition of general service lamps that it was not possible for a broader definition adopted in January 2017 to survive legal scrutiny.⁵

² See 42 U.S.C. §6295(i)(6)(A)(v). The statutory target was set at 45 lumens per watt because the efficacy of the compact fluorescent lamp was at or above that level in 2007, and efforts were underway to improve that efficacy.

³ See 42 U.S.C. §6291(BB)(i).

⁴ See congressional definition of general service incandescent lamp, 42 U.S.C. §6291(30)(D): a “*standard incandescent or halogen type lamp*” referring to the standard omnidirectional light bulb; “has a medium screw base” referring to the bulb’s use in the most common lamp socket; “has a lumen range not less than 310 lumens and not more than 2600 lumens” referring to the broad lumen range of the standard incandescent or halogen type lamp; “capable of being operated at a voltage range at least partially within 110 and 130 volts” referring to common household voltages in the US; “intended for general service applications” referring to the fact that it is not used in specialty applications like directional lamps or decorative lamps. See the parallel recognition of these characteristics in the congressional definition of medium screw base compact fluorescent lamps, 42 U.S.C. §6291(S): an integrally ballasted fluorescent lamp, with a medium screw base, a rated input voltage of 115-130 volts, and which is designed as a direct replacement for the general service incandescent lamp.

⁵ Importantly, Congress identified a long list of specialty lamps in the statutory text that did not have these characteristics and said they were “not included” in the definition of general service lamps. For example, “reflector” bulbs are not included in the congressional definition because they are “directional” lamps, and do not emit omnidirectional light. Several specialty lamps are defined in terms of their very low wattage and they emit only a very low light output and do not serve the broad range of light output (310-2600 lumens) characteristic of a general service lamp. A number of excluded lamps are decorative lamps with special, non-standard bulb shapes used for the aesthetic or special functional purposes rather than “general service.” The congressional definition of

But we would like to move beyond legalisms to show how successful the DOE program in the lighting area has been. The graphs that are attached to this letter describe what has been occurring in the marketplace for general service lamps over time. It is consistent with what the American consumers see on store shelves around the country in hardware stores, grocery stores, and other retail sites where household light bulbs are sold.

When Congress enacted the Energy Independence and Security Act, shipments of compact fluorescent lamps (CFLs) soared to over 300 million units per year for the first time⁶ and stayed above that level in all but one year through 2015. At the same time, shipments of general service incandescent lamps declined because of the growing penetration of longer life CFLs in general service lamp sockets. General service LED lights, with an efficacy of 80 lumens per watt or greater and an even longer lamp life, were first introduced into the market in 2012. Subsequently, prices for these products fell significantly and shipments began to soar in 2015. As of the third quarter of 2018, the most recent quarter for which data is available, general service LED lamp shipments account for 65% of shipments in the general service lamp category,⁷ and they are rapidly replacing both incandescent and compact fluorescent lamps in sockets.

The charts relating to general service lamp “stock” are a reasonable description of what has happened in the general service light bulb marketplace since 2007 based on shipments of general service lamps over time, and common assumptions about lamp life and replacement.⁸ With 75% or more of the “stock” of general service lamp sockets occupied by light bulbs with an efficacy well above the required 45 lumens per watt level,⁹ American consumers, retailers, and manufacturers who make, sell and buy these light bulbs have already exceeded the congressional energy savings goal for this category of regulated product. Moreover, consumer adoption of LED bulbs that NEMA describes above is going to continue.

Another lighting success story from the Energy Independence and Security Act are the provisions relating to consumer education and lamp labeling.¹⁰ One reason American consumers are choosing

compact fluorescent lamp likewise expressly excluded from the statutory definition fluorescent lamps designed for special purposes or special applications. Similarly, the definition of general service lamp expressly excluded these same specialty lamps from that definition. 42 U.S.C. §6291(BB)(ii). It is this consistent and unambiguous congressional treatment of what was and was not a general service lamp that made DOE’s January 2017 legally untenable.

⁶ Source: US Government Import for Domestic Consumption Data (2001-2017).

⁷ <https://www.nema.org/Intelligence/Indices/Pages/LED-A-line-and-Halogen-Lamp-Shipments-Increase-in-Third-Quarter-2018.aspx>

⁸ In 2015, a report prepared for and published by DOE estimated that 46% of general service lamp sockets were then occupied by CFLs. See *Adoption of Light-emitting Diodes in Common Lighting Applications* (Navigant, July 2015).

⁹ The efficacy of the general service CFL is above 45 lumens per watt and the efficacy of a general service LED is typically in the 80-90 lumen per watt range. Efficacy is a measure of light output (lumens) per unit of energy (watt).

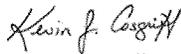
¹⁰ P.L. 110-140, sec. 321(b), 121 Stat. 1584 (Dec. 19, 2007).

more energy efficient lighting on their own is because of the new labels that display the energy savings from LED lamps and the longer lamp life that requires less frequent replacement. And we cannot ignore the role that retailers who have assigned informed personnel to explain this information to lighting consumers while they are shopping. These efforts, when combined with a competitive manufacturing market that has improved lighting quality and reduced product cost,¹¹ the role of utilities in encouraging consumers to use energy saving light bulbs, that has rendered the general service LED lamp a clear competitive alternative to general service CFL and halogen incandescent lamps.

Beyond lighting, DOE standards for other electrical products are already at high levels of efficiency and further regulation is going to be very difficult to justify economically without significant economic pain to our Members' customers, and to our Members. Nevertheless, NEMA and its Members have been identifying selective opportunities, for example, to improve energy savings from the use of advanced technology electric motors --- such as with pumps and swimming pool pumps, and furnace fans --- where those energy savings can be economically justified.

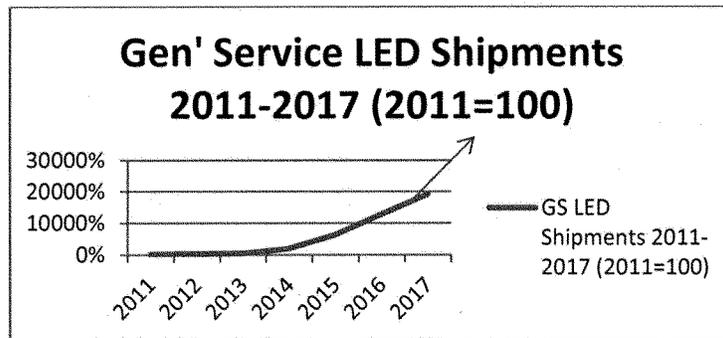
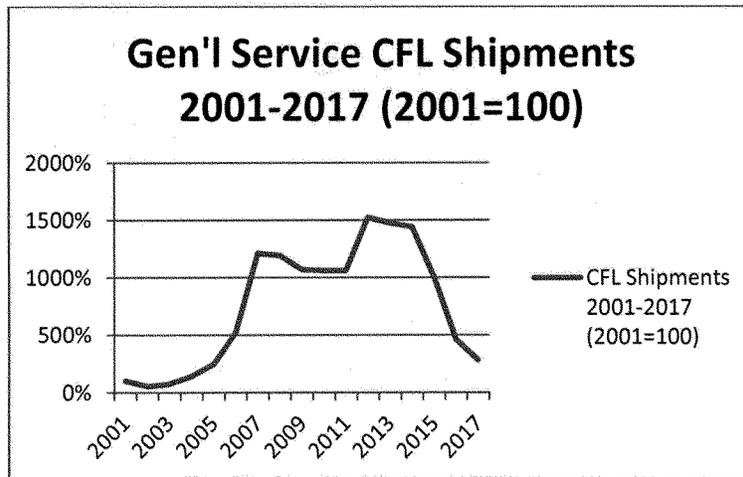
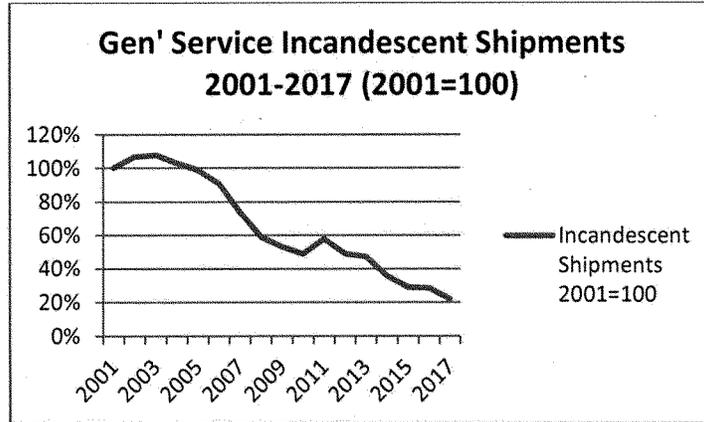
We trust this information is useful to you as you review the DOE appliance efficiency Standards program. Should you have questions or need more information, please have your staff contact Philip Squair, VP Government Relations, at philip.squair@nema.org.

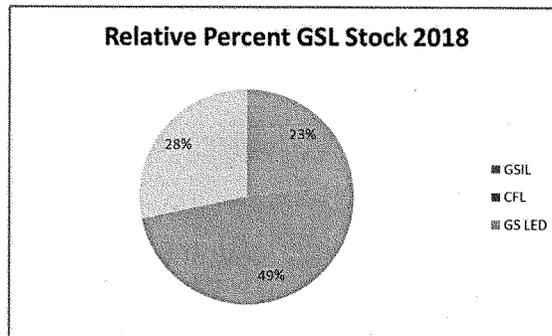
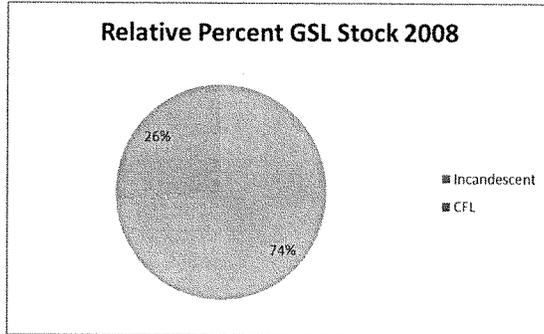
Sincerely,



Kevin J. Cosgriff
President and CEO

¹¹ Also contributing to bringing down some of the costs of manufacturing LED lighting has been the public investments through the Next Generation Lighting Initiative enacted as part of the Energy Policy Act of 2005, 109 P.L. 58 sec. 912, 119 Stat. 858 (Aug. 8, 2005).







Spire Inc.
700 Market Street
St. Louis, Missouri 63101

March 7th, 2019

The Honorable Bobby Rush and Fred Upton
House Committee on Energy and Commerce Subcommittee on Energy and Power
2125 Rayburn House Office Building, Washington, D.C. 20515

Subject: Comments of Spire Inc. on hearing titled "Wasted Energy: DOE's Inaction on Efficiency Standards and Its Impact on Consumers and the Climate."¹

Dear Representatives Rush and Upton:

Spire Inc. ("Spire") is a utility holding company with 3,300 employees providing natural gas to 1.7 million customers across Missouri, Alabama and Mississippi. Spire commitment to providing our customers with cost-effective energy efficiency rebates and low-income programs focused on energy savings has been strong for many years. In our Fiscal Year 2018 (ending September 30, 2018), Spire's Missouri utilities provided over \$7 Million of energy efficiency and low-income weatherization funding within our Missouri service areas. Spire only opposes energy efficiency standards that ineffective, counterproductive and against our customers best interests, several of which are being discussed in this hearing.

Spire urges Leadership and Members of the Subcommittee on Energy and Power (the "Subcommittee") to recognize that the need for speedy regulatory action should not obviate the need to ensure that DOE's actions are lawful and constructive. Adoption of several standards DOE has developed for commercial packaged boilers and other gas heating technologies, but has not yet published in the Federal Register, would be:

1. unlawful,
2. unlikely to provide substantial economic benefits. and
3. likely increase, instead of decrease, overall carbon emissions.

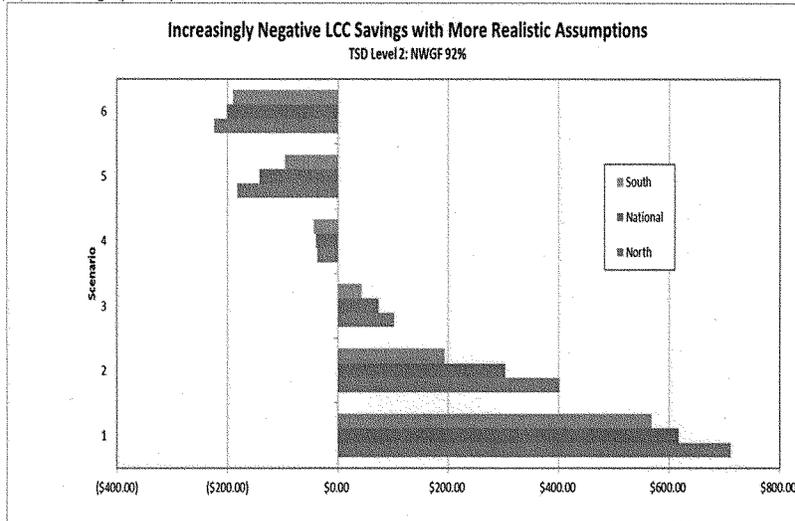
The purpose of this letter is to convey additional information regarding these concerns to the Subcommittee that explains why DOE's "inaction" is justifiable. Spire and many other stakeholders, have repeatedly raised these concerns with DOE and has further requested that DOE correct certain fundamental defects in its regulatory analysis before any new standards are adopted.

Many of DOE's recent proceedings for natural gas appliances suffer from certain systemic defects in DOE's regulatory approach and analysis. The commercial packaged boiler proceeding is but one case-in-point. There are substantial reasons why such rulemakings have not – and should not – be completed based on DOE's existing regulatory analysis. Numerous concerns have been expressed in comments submitted to the DOE regarding the transparency and enforceability of EERE procedures. DOE has begun to address those procedural concerns as evidenced by the recent release of proposed changes to DOE's "Process Rule" governing the standards development process.² In addition, there have been significant concerns about DOE's reliance on assumptions and analytical techniques that have produced determinations that can vary dramatically for no apparent reason. Of particular concern to Spire is DOE's failure to rely upon real-world, readily-available market

¹<https://energycommerce.house.gov/newsroom/press-releases/pallone-rush-on-department-of-energy-s-proposals-to-rollback-energy>

² <https://www.energy.gov/sites/prod/files/2019/02/f59/process-rule-notice.pdf>

data to measure savings for high-efficiency equipment. Instead, DOE creates and relies upon excessively complex estimation techniques that calculate excessive, volatile and inaccurate savings for high-efficiency equipment. A graphical presentation of this is shown below:



Step-by-step scenario descriptions (starting from the bottom):

1. DOE's published LCC savings as published in SNOPR and TSD
2. Natural gas marginal (tail block) price factor (per MMBtu) based on 5-year average of EIA reported city-gate price+ 1\$ additional overhead charge to customers
3. Scenario 2 + Average difference in installation costs between condensing and non-condensing furnace of \$550 vs. \$253 DOE estimates (based on ACCA 2015 "Survey of Furnace Installation Contractors")
4. Scenario 3 + Furnace average lifetime 18.1 years per Laclede study
5. Scenario 4 + Natural gas price escalation forecast set to equal electric price escalation forecasts per AEO 2016
6. Scenario 5 + 10% Discount rate with normal distribution mean of 10% and standard deviation of 5%

The source of this graphic is Spire's [2017-01-06 Comment response to DOE's published Supplemental notice of proposed rulemaking \(SNOPR\) and announcement of public meeting, reopening of public comment period.](#)³ The takeaway from this illustration is DOE's typical rosy "determinations" for economic benefits based upon its complex estimation techniques are easily reversed into economic hardships when real-world data are used.

For another example of the error in DOE's calculation of economic benefits is its calculation of life cycle cost (LCC) analyses over last 8 years. DOE produced LCC analyses for weatherized residential gas furnaces in 2011 for its "regional" DFR and again in 2015 for its "national" NOPR. The latter showed unexplained increases in LCC savings of 1% to over 2,000%, despite no major changes in relevant technological or economic conditions other than a significant decline in gas prices. This "inflation" is illustrated by the following table:

³ <https://www.regulations.gov/document?D=EERE-2014-BT-STD-0031-0309>

**Comparison of 2011 & 2015 Life Cycle Cost (LCC)
Spreadsheet Results for Weatherized Residential Gas Furnaces**

	AFUE	2011	2015	Delta	% Change
		Average LCC savings	Average LCC savings		
National - All Installations	90%	\$87	\$236	\$149	170.9%
	92%	\$136	\$305	\$169	124.1%
	95%	\$205	\$388	\$183	89.1%
	98%	\$46	\$441	\$395	859.1%
North - All Installations	90%	\$155	\$208	\$53	34.0%
	92%	\$215	\$277	\$62	29.0%
	95%	\$323	\$374	\$51	15.7%
	98%	\$198	\$467	\$269	135.9%
South/Rest of Country - All Installations	90%	-\$13	\$267	\$280	2156.3%
	92%	\$19	\$336	\$317	1667.2%
	95%	\$28	\$404	\$376	1341.4%
	98%	-\$181	\$412	\$593	327.7%
National - Replacements	90%	-\$11	\$113	\$124	1130.2%
	92%	\$39	\$179	\$140	355.5%
	95%	\$111	\$264	\$152	136.8%
	98%	-\$26	\$319	\$346	1309.0%
North - Replacements	90%	\$90	\$106	\$16	17.4%
	92%	\$151	\$172	\$21	13.6%
	95%	\$262	\$259	-\$3	-1.1%
	98%	\$158	\$362	\$204	129.0%
South/Rest of Country - Replacements	90%	-\$160	\$120	\$280	175.4%
	92%	-\$125	\$188	\$312	250.5%
	95%	-\$110	\$268	\$378	343.7%
	98%	-\$297	\$273	\$570	191.7%
National - New Construction	90%	\$383	\$588	\$205	53.6%
	92%	\$429	\$659	\$230	53.5%
	95%	\$487	\$730	\$244	50.0%
	98%	\$264	\$764	\$499	188.9%
North - New Construction	90%	\$343	\$484	\$141	41.2%
	92%	\$404	\$557	\$153	38.0%
	95%	\$502	\$665	\$163	32.5%
	98%	\$315	\$704	\$389	123.4%
South/Rest of Country - New Construction	90%	\$445	\$710	\$265	59.5%
	92%	\$469	\$779	\$310	66.0%
	95%	\$463	\$807	\$344	74.3%
	98%	\$184	\$834	\$649	352.3%

Notes to table:

- 2011 data from EERE-2011-BT-STD-0011-0010 LCC spreadsheet, summary tab, cells K9:K58, L9:L58 & A19:A158
- 2014 data from EERE-2014-BT-STD-0031-0021 LCC spreadsheet, summary tab, cells O8:O41, AE8:AE41 & AT:AT41

The above table was presented to DOE at the continuation of its public meeting on April 13th, 2015 and subsequently entered into regulations.gov on April 30th, 2015.⁴ DOE was asked to account for these changes at that public meeting and failed to respond. April 13, 2015 Public Meeting Transcript, page 127, line 21-22.

⁴ <https://www.regulations.gov/document?D=EERE-2014-BT-STD-0031-0047>

Spire has raised two even more fundamental problems with DOE's approach to standards development for gas products that the Subcommittee should understand, and that Spire has been most actively urging DOE to resolve.

First is the Monte Carlo modeling DOE misapplies for economic analysis. Our technical specialists uncovered that DOE's Monte Carlo simulations are not actually designed to address the economic impacts a new standard would have. Rather:

- The economic impact of an efficiency standard on product purchasers depends on the economic outcomes of the efficiency investments that would only be made if that standard were adopted; the outcomes of the efficiency investments purchasers would choose to make in the absence of regulation would happen anyway and are thus part of the regulatory baseline.
- DOE's modeling approach is designed to account for the right number of efficiency investments (i.e., the number of efficiency investments that would only occur if a standard were adopted), but it does not calculate regulatory impacts based on the right efficiency investments: those that would be made only if a new standard were adopted. Instead, it calculates purported rule impacts based on randomly-selected universe of all efficiency investments, including the efficiency investments that purchasers would choose to make in the absence of a new standard.
- This approach would only be valid if there were some basis to conclude that there would be no difference – in terms of the quality of economic outcomes – between the universe of efficiency investments purchasers would choose to make in the absence of regulation and the universe they would only make if a new standard were adopted. There is no such basis. To the contrary, it would be absurd to suggest that purchasers acting in the absence of regulation are so universally and completely indifferent to the economic outcome of their efficiency investments that their investments would reflect no statistically-significant preference for economically beneficial investments (and no aversion to economically disastrous investments). Available evidence clearly indicates that the opposite is true. Because DOE's modeling ignores this fact, it produces results that systematically overstate the economic benefits a standard could be expected to have.

Using Docket No. EERE-2013-BT-STD-0030 for commercial boilers as an example, the American Public Gas Association (APGA) and Spire sent a letter to Secretary Perry that explained this horrendous analytical error. The same error appears in other Dockets setting more stringent appliance minimum efficiency standards for other gas appliances. We also reminded Secretary Perry of other specific requests to investigate systemic problems.

Second is that DOE's failure to recognize that it cannot lawfully adopt efficiency standards for gas products that would eliminate the availability of noncondensing gas products because gas products using condensing combustion technology are the only gas products able to achieve such efficiency standards. Faced with the need for building modifications necessary to accommodate condensing gas products, Spire believes that many purchasers would have little choice but to defer the replacement of older gas products or turn to electric alternatives. The latter outcome would be typically leave consumers to bear significantly higher energy costs, and – in view of the prevalence and inherent inefficiency of combustion-based electrical power generation – could, on average, produce a substantial net increase in overall carbon emissions rather than the modest reduction the efficiency standard is ostensibly designed to provide.

EPCA makes it clear that DOE should not promulgate any standard that is "likely to result in the unavailability in the United States of any product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States" at the time a standard is under consideration. 42 U.S.C. § 6295(o)(4).

In contrast, DOE argues that the ability to connect a replacement furnace (or boiler or water heater) with an existing venting system is not a feature since they all produce the same product: heating.⁵ This is like saying that all refrigerators are the same because they all refrigerate food or all washing machines are the same because they all wash clothes. Yet DOE has given such appliances numerous “separate product classes.” DOE’s rationale stretches credulity in view of DOE’s recognition that the ability of non-condensing furnaces to function without a natural vent system requires “features” that non-condensing furnaces lack.⁶ In any case, DOE’s denial does not change the fact that the ability of a furnace to function with a natural vent system is a feature that can be – and often is – the difference between a gas furnace that is a reasonable option for a given application and one that is not. The same applies to non-condensing commercial equipment such as boilers.

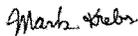
In conclusion: The details regarding these communications are available at regulations.gov.⁷ Spire’s [2017-01-06 Comment response to the published Supplemental notice of proposed rulemaking \(SNOPR\) and announcement of public meeting, reopening of public comment period](#) also supplements this letter to the Subcommittee.

The point of this is that Spire and its aligned stakeholders also have grievances that have yet to be addressed. However, we recognize that Assistant Secretary Simmons has only been appointed for a few weeks and resolving such thorny issues takes time; especially when litigation is initiated; as in the case of NRDC vs. Perry over the commercial boiler Docket.

DOE’s pending rulemaking regarding standards for commercial packaged boilers and other gas-fueled appliances have been infused with all of these problems. Spire respectfully submits that DOE’s current analysis in these proceedings are fatally defective, and that – as previously indicated – adoption of the standards currently under consideration would be unlawful and due to lack of net public benefits.

Spire believes that DOE should be commended for its efforts to address serious and longstanding concerns with overhauling its deeply flawed and opaque appliance efficiency regulation program. To reiterate in closing: It is critical to ensure that the job of efficiency regulation is not done quickly at the expense of being done right.

Respectfully submitted,



Energy Policies and Standards Specialist
Spire Inc.

⁵ [81 Fed. Reg. at 65753](#)

⁶ [81 Fed. Reg. at 65755](#)

⁷ [2017-04-29 Joint response to 60-day litigation threat letter](#)

March 7, 2019

The Honorable Bobby Rush
United States House of Representatives
2188 Rayburn House Office Building
Washington, DC 20515-1301

The Honorable Fred Upton
United States House of Representatives
2183 Rayburn House Office Building
Washington, DC 20515

Re: House Energy and Commerce Committee Subcommittee on Energy, Hearing entitled
"Wasted Energy: DOE'S Inaction on Efficiency Standards and it's Impact on Consumers and the
Climate"

Dear Chairman Rush and Ranking Member Upton,

The American Public Gas Association (APGA) and the American Gas Association (AGA) we appreciate the opportunity to submit this letter on the important hearing entitled the "Wasted Energy: DOE's Inaction on Efficiency Standards and Its Impact on Consumers and the Climate."

APGA is the national association for publicly owned natural gas distribution systems. There are approximately 1,000 public gas systems in 37 states and over 730 of these systems are APGA members. Publicly-owned gas systems are not-for-profit, retail distribution entities owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that own and operate natural gas distribution facilities in their communities. Public gas systems' primary focus is on providing safe, reliable, and affordable natural gas service to their customers.

AGA, founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States. There are more than 74 million residential, commercial and industrial natural gas customers in the U.S., of which 95 percent — more than 71 million customers — receive their gas from AGA members. Today, natural gas meets more than one-fourth of the United States' energy needs.

At the most basic level, APGA and AGA represent the views of American natural gas consumers. Our members serve the homeowners and small businesses that rely on affordable natural gas to heat their homes and water, cook their meals, dry their clothes, power their restaurants, schools and hospitals, and service businesses of all types.

A Consumer Perspective

As an industry, we are proud of our track record in providing safe, affordable and reliable energy to the American public. Natural gas utilities now serve more than 74 million American customers. That is up from 35 million in 1970. Most importantly, while customers have increased by the millions, the volume of gas delivered has remained relatively flat. Several factors are responsible for this such as tighter fitting windows and doors, better building envelopes and better insulation, but credit is also due to utility sponsored energy efficiency programs and the development of increasingly more efficient natural gas technology. This is an energy efficiency success story.

We believe that energy efficiency will continue to be a cornerstone upon which we build our energy future. APGA and AGA are strong proponents of energy efficiency standards which are based on sound science, transparent analysis, and economic justification. DOE's energy efficiency standards program was established to save consumers money by efficient energy usage; however, the goal of program is not to eliminate consumer choice. DOE should not implement more stringent efficiency standards without a full review and analysis of the potential impact on the overall energy markets and product markets, and the standards' effect on customer choice, among other things.

A proposed standard's impact on consumer costs must be taken seriously by DOE. We have requested that DOE clarify its definition of "economic justification" used in efficiency rulemakings. The current proposed residential furnace standard is ill defined, obscuring transparency and injecting more ambiguity into the rulemaking process. We have recommended that any proposed efficiency standard be measured by a simple payback period to determine economic justification, followed by a transparent assessment and threshold of the percentage of consumers that would be negatively impacted by the new efficiency standard.

DOE must recognize that when a majority of consumers cannot afford new higher efficiency equipment, a litany of unintended consequences result from new standards. Regulations that increase the price of equipment and installation costs for minimal efficiency improvements result in consumers choosing to repair and keep in service older and less efficient equipment. Moreover, increased equipment prices may result in fuel switching to a more costly and higher emitting fuel source, thereby limiting the benefits of the new standards.

Consumer purchasing shows that the market favors innovation and higher efficiency equipment. For example, in 2007, DOE reviewed the minimum residential furnace standards and declined to require a condensing furnace standard due to the fuel switching that would occur, primarily in the South; yet the market share for high efficiency condensing furnaces has grown dramatically over the last eight years, especially in the North where the life cycle savings of high efficiency furnaces warrant their purchase. Agencies must learn to defer to markets where the data shows that the market is working, as is the case with residential furnaces.

DOE must rely on sound science, transparency and economic justification as fundamental principles for the development of energy efficiency standards which meet the requirements of its enabling statute. These principles are not intended to stymie energy efficiency gains, but are foundations for ensuring that new energy efficiency standards achieve the desired gains. Equipment manufacturers, consumers and many other stakeholders have an interest in moving towards the adoption of the next generation of energy efficient equipment. DOE's role should be to establish minimum standards in an open and transparent manner, based on peer-reviewed scientific information.

APGA and AGA are concerned about the lack of transparency in the rulemaking for residential furnace efficiency standards. Specifically, in the furnace rulemaking initiated in 2015, DOE relied on proprietary data from two privately authored American Home Comfort studies in its life cycle costs calculation. Interested parties in the rulemaking were required to spend \$15,000 to access to the two studies and the associated data. The data revealed energy savings contrary to what was claimed by DOE. More details on this matter was provided in our previous comments

to DOE on its NOPR. We applaud DOE's recent effort to review their modeling and the associated inputs used in for the evaluation of new efficiency standards.

The natural gas industry has incurred substantial technical and legal costs to argue against a flawed proposed standard that would cause great harm to natural gas consumers by doing away with non-condensing furnaces and thereby forcing many consumers to fuel switch to less efficient non-gas appliances. The furnace rule appears to be an example of ideology driving the decision-making process and not sound science. Eight years ago DOE tried to push the original proposal through the direct final rule process despite receiving adverse concerns from over 30 separate organizations. APGA appealed that rule, and DOE's response, after agreeing in appellate mediation to vacate the rule and remand the proceeding, was to publish an even more extreme and onerous proposal that under its own analysis would negatively impact one in five homeowners. While the natural gas industry is a strong supporter of energy efficiency, we are also strong opponents of proposed rules that are founded on faulty science and on non-transparent analysis – rules that ultimately will burden, rather than benefit, millions of consumers, driving many of them to less efficient alternatives.

Conclusion

APGA and AGA appreciate the opportunity to submit testimony before the House Energy and Commerce Subcommittee on Energy on this critical energy efficiency and public interest issue. We believe it is critical to DOE's mission to consider these comments as well as the comments from other stakeholders. Carefully considering all sides of an issue should not be labeled as "inaction" or "wasted energy." Instead, we would like to commend DOE staff for approaching their responsibilities under the Energy Policy and Conservation Act in good faith and not manipulating data to push a pre-set agenda. We stand ready to work with the Committee on this and all other energy efficiency and natural gas issues.

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

GREG WALDEN, OREGON
RANKING MEMBER

ONE HUNDRED SIXTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

April 9, 2019

The Honorable Daniel Simmons
Assistant Secretary, Energy Efficiency and Renewable Energy
U.S. Department of Energy
Forrestal Building
1000 Independence Avenue, SW
Washington, DC 20585

Dear Assistant Secretary Simmons:

Thank you for appearing before the Subcommittee on Energy on March 7, 2019, at the hearing entitled "Wasted Energy: DOE's Inaction on Efficiency Standards and Its Impact on Consumers and the Climate." We appreciate the time and effort you gave as a witness before the Subcommittee.

Pursuant to Rule 3 of the Committee on Energy and Commerce, members are permitted to submit additional questions to the witnesses for their responses, which will be included in the hearing record. Attached are questions directed to you from me and other members of the Committee. In preparing your answers to these questions, please address your responses to the member who has submitted the questions using the Word document provided with this letter.

To facilitate the publication of the hearing record, please submit your responses to these questions by no later than the close of business on Friday, April 26, 2019. As previously noted, this transmittal letter and your responses as well as the responses from the other witnesses appearing at the hearing, will all be included in the hearing record. Your written responses should be transmitted by e-mail in the Word document provided with this letter to Adam Fischer (adam.fischer@mail.house.gov). You do not need to send a paper copy of your responses to the Committee. Using the Word document provided for submitting your responses will also help maintain the proper format for incorporating your answers into the hearing record.

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Assistant Secretary of Energy Efficiency and Renewable Energy
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Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Adam Fischer with the Committee staff at (202) 225-2927.

Sincerely,



Frank Pallone, Jr.
Chairman

Attachment

cc: The Honorable Greg Walden
Ranking Member
Committee on Energy and Commerce

The Honorable Bobby Rush
Chairman
Subcommittee on Energy

The Honorable Fred Upton
Ranking Member
Subcommittee on Energy

[Mr. Simmons did not answer submitted questions for the record by the time of printing.]

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Assistant Secretary of Energy Efficiency and Renewable Energy
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**Subcommittee on Energy
Hearing on
“Wasted Energy: DOE’s Inaction on Efficiency Standards and
Its Impact on Consumers and the Climate”
March 7, 2019**

The Honorable Daniel Simmons, Assistant Secretary
Energy Efficiency and Renewable Energy, U.S. Department of Energy

The Honorable Frank Pallone, Jr. (D-NJ)

1. Mr. Simmons, you mention in your testimony that DOE has issued 7 final rules pertaining to energy conservation standards and 2 final rules pertaining to test procedures.

- a. What are those rules? When were they issued? Which were statutorily required?

RESPONSE:

- b. Why were these rules issued, yet other rules that were completed during the previous administration still have not been published in the Federal Register?

RESPONSE:

2. In the February 2019 Notice of Proposed Rulemaking on definitions of lamps, DOE leans heavily on the idea that the legal basis for the January 2017 final rules “misconstrued existing law.” DOE states that its now-proposed narrower definitions are “more legally justifiable than the definitions contained in the January 2017 rules.” In some respects, the NOPR argues that the 2017 definitions were “unauthorized as a matter of law,” or “may have overstepped” DOE’s authority. As I understood your explanation at our March 7 hearing, DOE has chosen to propose a rule to reverse the 2017 final rules on lamp definitions because those rules are inconsistent with EPCA and would subject DOE to significant litigation risk.

- a. Has DOE concluded that the January 2017 final rules modifying the definitions of “general service lamp” and “general service incandescent lamp” are legally flawed? If so, please explain DOE’s view on its legal concerns with the 2017 final rules.

RESPONSE:

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- b. NEMA filed a petition for judicial review of the January 2017 final rules on lamp definitions. That litigation between DOE and NEMA was settled. The settlement, interestingly, contains no terms relating to reconsidering or revising the January 2017 lamp definitions. Instead, all three commitments by DOE related to procedural steps DOE will take with respect to considering revised lamp standards. The absence of any terms of this settlement concerning modifications to the challenged lamp definitions themselves suggests that neither DOE nor NEMA believed that 2017 lamp definitions required revisions. If DOE believed there were legal errors in the 2017 lamp definitions, please explain why changes to the definitions were not addressed in the 2017 settlement of a challenge to the legality to those definitions.

RESPONSE:

- c. Given that any judicial challenges to the legality of the 2017 final rules were required to be filed within 60 days of the final rules, and the only timely judicial challenge has been settled by DOE, please explain what legal risk remains with respect to the definitions in the 2017 final rules.

RESPONSE:

3. You suggest that DOE is on safer legal ground to withdraw the 2017 definitional changes and revert to the statutory definitions.
- a. Did the Energy Independence and Security Act of 2007 amend EPCA by adding 42 U.S.C. § 6295(i)(6)(A)(i)(II) to require DOE to undertake a rulemaking to determine whether exceptions for certain incandescent lamps built into the statutory definitions should be discontinued?

RESPONSE:

- b. Were the January 2017 final rules promulgated in response to this statutory direction to consider whether exceptions for certain incandescent lamps should be discontinued?

RESPONSE:

- c. If so, please explain how the 2017 changes in regulatory definitions promulgated as a result of a rulemaking undertaken at the direction of Congress presents undue risk of being found to be inconsistent with EPCA.

RESPONSE:

4. Given that the 2017 final rules were developed in rulemakings undertaken at the direction of Congress, and that the 2017 final rules were subject to a petition was resolved without

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any changes to the final rules, it appears that the 2019 NOPR to withdraw the 2017 final rules is motivated by a policy interest in narrowing the applicability of energy efficiency standards, not by legitimate concerns that retaining the 2017 final rules creates undue legal risk. Please explain how policy objectives and legal risk assessment factored into DOE's decision to propose to withdraw the January 2017 final rules on lamp definitions.

RESPONSE:

5. Given DOE's failure to promulgate a final rule on revisions to standards for general service lamps, does the backstop requirement in that 42 U.S.C. § 6295(i)(6)(A)(v) – which provides that “the Secretary shall prohibit the sale of any general service lamp that does not meet a minimum efficacy standard of 45 lumens per watt” effective January 1, 2020 – apply?

RESPONSE:

- a. If not, please explain why not? Please explain DOE's construction of the language in 42 U.S.C. § 6295(i)(6)(A)(i)-(v) that supports your position.

RESPONSE:

6. Under DOE's construction of EPCA, if DOE does not issue a final rule on amended standards for general service lamps before January 1, 2020, would the backstop standard come into effect on January 1, 2020? If not, please explain what applicability, if any, DOE believes 42 U.S.C. § 6295(i)(6)(A)(v) has after January 1, 2020.

RESPONSE:

7. Under DOE's construction, in what sense would section 42 U.S.C. § 6295(i)(6)(A)(v) function as a “backstop” to put in place standards in the event of inaction by DOE?

RESPONSE:

8. In your testimony you outlined four phases of setting standards (framework document, preliminary analysis, proposed rule, and final rule), and blamed missed deadlines on the time it takes to complete the process. So that we can better understand the delays please specify:

- a. How long did each of the four phases take for each standard set by DOE using this process in the previous administration?

RESPONSE:

- b. How long has each of the phases that has been initiated taken so far for each of the sixteen standards for which DOE has missed statutory deadlines?

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RESPONSE:

The Honorable Bobby Rush (D-IL)

1. Why did DOE fall behind the statutory deadlines for proposed rules or final rules on efficiency standards for each of the following products:

a. Small electric motors?

RESPONSE:

b. Pool heaters?

RESPONSE:

c. Water heaters?

RESPONSE:

d. Clothes dryers?

RESPONSE:

e. Room air conditioners?

RESPONSE:

f. Cooking products?

RESPONSE:

g. Refrigerators and freezers?

RESPONSE:

h. Fluorescent lamp ballasts?

RESPONSE:

i. Dedicated outdoor air systems?

RESPONSE:

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j. Computer room A/Cs?

RESPONSE:

k. VRF A/Cs and heat pumps?

RESPONSE:

l. Commercial water heaters?

RESPONSE:

m. Residential clothes washers?

RESPONSE:

n. Evaporatively cooled commercial ACs?

RESPONSE:

o. Water-cooled commercial ACs?

RESPONSE:

p. Metal halide lamp fixtures?

RESPONSE:

2. Please explain what funding, staffing, or other barriers may have prevented timely issuance of proposed rules or final rules for any of these standards.

RESPONSE:

a. If such challenges persist, what resources does DOE need to resolve them?

RESPONSE:

b. If these challenges no longer persist, have they been resolved such that you can commit to timely completion of future standards rulemakings?

RESPONSE:

3. Following the March 7 hearing, a DOE spokesperson indicated to the media that 13 of the 16 delayed standards actions would be completed "in the coming months," including actions on clothes dryers, cooking products, and electric motors.

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- a. When DOE refers to “in the coming months,” what does it mean? Will the actions be completed within six months? By the end of 2019?

RESPONSE:

- b. Please specify which 13 standards actions will be completed “in the coming months.”

RESPONSE:

- c. Please specify which 3 standards actions may not be completed “in the next coming months.”

RESPONSE:

- i. When will these standards actions be completed?

RESPONSE:

- d. For the standards actions which will be completed in the near future, what specific steps have you taken to accelerate the process?

RESPONSE:

- i. Would application of those same steps similarly accelerate the promulgation of other standards actions? If not, why not?

RESPONSE:

4. Would funding levels for EERE consistent with the President’s proposed FY2019 budget (65% below current levels) affect EERE’s ability to issue the required standards actions on the timetable you’ve identified?

RESPONSE:

5. Will the proposed new criteria for judging the significance of energy savings (>0.5 quads of savings over 30 years, or >10% energy savings over current standard) in the Process Rule be applied to the 16 delayed standards rulemakings?

RESPONSE:

- a. If so, does DOE believe that any of the delayed rulemakings will not provide significant energy savings?

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RESPONSE:

6. Will the proposed procedural changes to the Process Rule be applied to the completion of the 16 delayed standards rulemakings?

RESPONSE:

- a. If so, please explain whether and how application of the revised process may further delay the completion of those rulemakings.

RESPONSE:

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The Honorable Peter Welch (D-VT)

Thank you for your participation and insight as part of our committee's recent appliance efficiency standard hearing. I was very glad to hear that the Department is committed to meeting statutory deadlines in the appliance and equipment standards program.

1. It has come to my attention that the Secretary of Energy is several months late in certifying the energy efficiency improvements associated with the latest model energy codes. I'm specifically referring to the 2018 International Energy Conservation Code (residential). The statutory deadline for a DOE assessment was September 2018. When does DOE plan to certify this?

RESPONSE:

2. In your testimony, you reported that DOE has completed seven final rules pertaining to energy conservation standards and two final rules pertaining to test procedures under the Appliance Standards Program. Can you please provide us a list of the specific final rules completed, when they were completed, and the specific action taken by the agency in that final rule?

RESPONSE:

3. In response to a question, you said that you expected DOE would complete "some" standards within the next year. Subsequently, you confirmed in an interview with Utility Dive that you would complete 13 of 16 overdue standards this year. Can you please tell us which 13 and which specific actions you expect the agency to complete within the next year?

RESPONSE:

The Honorable Daniel Simmons
Assistant Secretary of Energy Efficiency and Renewable Energy
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The Honorable Richard Hudson (R-NC)

1. Assistant Secretary Simmons: Thank you for being here today as we examine appliance efficiency standards and affordable energy for consumers. Electrolux Appliances is a North Carolina based appliance manufacturer with facilities all over North Carolina. Just outside my district at their facility in Kinston, North Carolina they manufacture dishwashers. They pride themselves on innovation and providing more efficient appliances and helping to ensure the benefit is to the consumers. Would you elaborate on the "look back" requirements, what they are for and if they make for more effective standards?

RESPONSE:

- a. Is there sufficient time in the current standard setting cycle to assess the effectiveness of previous standards?

RESPONSE:

- b. In your experience, does DOE do an effective job assessing whether past standards have actually achieved what was promised?

RESPONSE:

- c. How can analysis in this process be improved to ensure more effective standard setting?

RESPONSE:

2. Assistant Secretary Simmons: Let me ask a basic question: are new standards typically based on an average consumer? And if so, does this mean that, say, a product that may make sense for the heavy use of a family, may not make sense for a couple or otherwise small household?

RESPONSE:

- a. How does the standard process take into account the range of consumer preferences?

RESPONSE:

- b. Are there ways to address the range of consumer preferences so certain groups, like the elderly, aren't priced out of the market for new products?

RESPONSE:

[Page 10 was blank on the original document.]

The Honorable Daniel Simmons
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The Honorable Jeff Duncan (R-NC)

Mr. Simmons - Thank you for being here. I want to bring attention to an appliance manufacturer in my district, Electrolux. Electrolux has manufactured refrigerators at its plant in Anderson, South Carolina since 1988. The Anderson plant produces nearly 2 million refrigerators each year and employs approximately 1,900 full-time and contract employees. The company is in the process of investing \$250 million to modernize this plant so that they can continue producing highly efficient refrigerators.

They are supportive of the Appliance Standard Program and are not in favor of rolling back any standards, but they do believe there are ways to improve the process.

Investment and innovation by the appliance manufacturers are what drives results. In the standards program. I've seen firsthand the technology at the Anderson plant and the work many of my constituents are doing to improve the efficiency of these high-tech fridges. Over the 30 years the Anderson plant has been manufacturing fridges, the fridges have become almost 30 times more efficient.

Consumers want energy efficient products and if companies like Electrolux aren't producing them, they won't be successful.

1. Electrolux wants to be involved in improving the program. How can the DOE better utilize the resources and expertise that manufacturers have to better improve the process?

RESPONSE:

- a. I understand the updated process rule requires test procedures first before implementing standards. How will this improve the effectiveness of the program?

RESPONSE:

- b. Will this help Office of Energy Efficiency and Renewable Energy focus on areas and implement rules that can achieve the most efficiency gains?

RESPONSE:

2. I commend the DOE in doing what they can to maximize reliable stakeholder input. You even mentioned that technological innovation is the driving force behind energy efficiency successes. I have seen this first hand with product engineers I have visited at Electrolux. In your opinion, what can be done to better improve the program and capitalize on the gains already achieved by manufacturers. How can we provide them with more regulatory certainty?

RESPONSE:

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- a. Should new efficiency standards be rolled out based on the amount of “significant energy savings” for consumers rather than just to meet a statutory deadline?

RESPONSE:

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Assistant Secretary of Energy Efficiency and Renewable Energy
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The Honorable Bill Flores (R-TX)

1. Assistant Secretary Daniel Simmons: On February 6, 2019 DOE announced a notice of proposed rulemaking concerning the definition of general service lamps. You stated in your testimony that DOE's proposal will maintain the existing statutory definition of general service lamps and withdraw the definitions established in January 2017. You stated further that DOE is showing that it will follow the text of the law.

- a. Please cite the relevant statutory text and provide DOE's rationale for the proposed rulemaking.

RESPONSE:

- b. If energy savings can be economically justified, is DOE authorized to establish separate energy conservation standards for the types of bulbs that are proposed to be withdrawn from the January 2017 definitions?

RESPONSE:

Mr. Andrew deLaski
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Hearing on
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Its Impact on Consumers and the Climate”
March 7, 2019**

Mr. Andrew deLaski, Executive Director, Appliance Standards Awareness Project

The Honorable Frank Pallone, Jr. (D-NJ)

1. In your testimony, you referred to a flow chart that illustrates the procedure to create new standards under the proposed process rule. Please provide an electronic copy of that diagram.

Response: Please find below our diagram of the revised process DOE proposes to use for establishing standards for newly covered products. For products already subject to standards but for which DOE is undertaking a proceeding for a potential revision, the first three boxes would be eliminated. Lowell Ungar with the American Council for an Energy-Efficient Economy is the primary author of this flow chart and any further questions may be directed either to him (lungar@aceee.org) or me (adelaski@standardsASAP.org). In our view, several of the early steps in each phase of the process (test procedures and standards development) could be consolidated into a single, consolidated step, obviating the need for a rulemaking about whether to initiate rulemaking.

Thank you for the opportunity to testify and respond to this follow up question.

Andrew deLaski

