



March 26, 2018

By E-mail

Mr. Daniel Simmons
Department of Energy
Principal Deputy Assistant Secretary
Energy Efficiency and Renewable Energy
1000 Independence Avenue, SW
Washington, DC 20585-0121

ProgramDesign2017STD0059@ee.doe.gov

Re: Joint Comments on DOE's Request for Information for Energy Conservation Standards Program Design; Docket No. EERE-2017-BT-STD-0059; RIN 1904-AE11

Dear Mr. Simmons:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI), the Air Movement and Control Association (AMCA) International Inc., American Lighting Association (ALA), Association of Home Appliance Manufacturers (AHAM), Hearth, Patio & Barbecue Association (HPBA), National Electrical Manufacturers Association (NEMA), and Plumbing Manufacturers International (PMI) (collectively, the Joint Commenters) respectfully submit the following comments to the Department of Energy (DOE) on its Request for Information (RFI) for Energy Conservation Standards Program Design; Docket No. EERE-2017-BT-STD-0059; RIN 1904-AE11; 82 Fed. Reg. 56181 (Nov. 28, 2017). DOE is seeking comment on the potential advantages and disadvantages associated with market-based approaches such as those used to set average efficiency standards, feebate programs, or other approaches that may reduce compliance cost and/or increase consumer choice while preserving or enhancing appliance efficiency.

The Joint Commenters support DOE in its efforts to ensure a healthy national marketplace through the Appliance Standards Program which, when done correctly, prevents a patchwork of state standards and reduces manufacturing as well as consumer costs. The Appliance Standards Program has been successful over its more than 30 year existence—efficiency gains have been significant. But, because of that success, for many products, future opportunities for savings are at an end or are quickly declining. Thus, though we appreciate the desire for continuous program

improvement and the original thought behind ideas like feebates, this is not an opportune time to restructure a well-established program as drastically as the RFI suggests by considering fleet average or credit trading approaches to compliance. Instead, the Joint Commenters urge DOE to focus its limited resources on reforming the existing program as we have suggested in recent comments and as DOE is investigating through a request for information on reforming the Process Improvement Rule, 10 C.F.R. 430 Appendix A to Subpart C.¹ These reforms will go a long way within the existing EPCA framework to reduce burden and ensure consumers realize energy savings from a broad range of products that perform as consumers rightly expect.

Moreover, the Joint Commenters do not believe that an “averaging” or “trading” approach such as those DOE outlines in the RFI will have the desired results of reducing compliance costs and/or increasing consumer choice. Under the Energy Policy and Conservation Act of 1975, as amended (EPCA) there is a serious question whether the agency would have authority to convert the existing standards, which apply to individual units, to some fleet-type approach. On top of that, EPCA prohibits backsliding to less stringent energy conservation standards and requires near-constant review of standards levels. So, unless DOE could legally rationalize that an averaging or trading scheme could be enacted compatible with that, then possibly this scheme would need somehow to be added on top of the already existing regulations unless the law is changed.

Equally significant, there are also practical impediments to the smooth functioning of such a system that will add cost and burden for manufacturers and, perhaps—ironically—limit consumer choice. And, because compliance would be based on sales, it is possible that, in order to ensure compliance, consumers will experience decreased choice possibly at increased costs. Thus, the Joint Commenters do not support pursuing the “averaging” or “trading” compliance schemes the RFI contemplates.

I. The Appliance Standards Program Should Be Maintained, But Reforms Are Needed.

The Energy Conservation Program was designed to establish minimum energy conservation standards for consumer products, including home appliances and certain commercial and industrial equipment nationwide. Manufacturers support a continued but reformed Appliance Standards Program that is driven by data to ensure a national marketplace, which reduces manufacturing and consumer costs. The current national system creates a federal energy standard program that preempts states from creating a patchwork of differing energy standards around the country. Congress has the authority to regulate interstate commerce, and the Joint Commenters strongly support this system of federal preemption, which promotes and protects the national marketplace.

For many products, however, EPCA requires a never-ending churn of DOE rulemakings—every six years after the issuance of a final rule establishing or amending standards, DOE must go

¹ Request for Information and Notification of Public Meeting: Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards for Consumer Products; 82 Fed. Reg. 59992 (Dec. 18, 2017) (Process Rule RFI)

through another regulatory process to consider changing the standard, followed by the exact same processes in six more years, and it just keeps going.

Over the last few decades, there have been multiple standards for over 60 categories of products, with 44 new or updated standards in the last Administration. The Joint Commenters and our members have many times negotiated these rules to ensure that they were economically feasible and technologically justified, and to advance the national interest in saving energy. The efficiency gains over the decades have been dramatic and undeniable, but, for many products, the future opportunities for additional cost effective savings beyond those already achieved are severely diminished as products are nearing maximum efficiency under available technology. The cumulative regulatory burden of these standards, along with related Environmental Protection Agency (EPA) refrigerant bans, for example, can adversely affect U.S. appliance and HVAC manufacturing employment. DOE proposed standards have even threatened to imperil the functioning of basic products such as dishwashers.

Although the Joint Commenters support the Appliance Standards Program, there are tremendous opportunities to modernize EPCA and the related regulations, and we call on Congress and the Administration to seize those opportunities. We thus appreciate DOE's RFI to the extent it considers alternatives to the never-ending cycle of standards rulemakings, the regulatory burden and cost it places on manufacturers, and the reduced choice consumers may experience as energy conservation standards continue to become more stringent. The questions DOE raises in the RFI compel us to consider the extent to which EPCA permits DOE to consider "compliance flexibility." Our conclusion is that there is limited opportunity within EPCA's framework for the compliance concepts considered in the RFI, and to the extent that they might be implemented, it appears that the concepts could create two layers of regulation thus, increasing cost and burden for manufacturers rather than reducing it. Moreover, it would take an enormous amount of DOE and stakeholder resources to design and implement the approaches considered in the RFI, including a potential cost/benefit analysis of the current energy conservation program versus an "averaging" or "trading" compliance scheme.

Instead, modernization and regulatory reform are the best way to preserve and stabilize the national standards program while recognizing that the opportunity for economically justified energy savings that are technologically feasible is limited for products that have been subject to multiple regulations. A modernized program should limit unnecessary, lengthy, unending rulemakings, focus on priorities, return to properly sequencing test procedures and standards, and evaluate cumulative regulatory burden while improving transparency and stakeholder engagement. AHRI, AHAM, HPBA, and NEMA detailed these necessary reforms in comments dated July 14, 2017,² which we incorporate by reference here and attach at Attachment A and the Joint Commenters and others further outlined in comments on DOE's request for information on the process rule, which we incorporate by reference here and attach at Attachment B.³ **We strongly urge DOE to focus its efforts and limited resources on the reforms we identified in our comments on DOE's Process Rule RFI instead of on considering a potential overhaul of**

² Joint Comments on DOE's Regulatory Burden Reduction RFI, 82 Fed. Reg. 24582 (July 14, 2017).

³ Joint Comments on DOE's Process Rule RFI, 82 Fed. Reg. 59992 (March 2, 2018).

the more than 30-year-old Appliance Standards Program such as that contemplated by the RFI for Energy Conservation Standards Program Design.

II. Averaging and Trading Approaches To Energy Conservation Standards May Be Inconsistent With EPCA’s Requirements.

First, as noted, there is a base question of whether EPCA authorizes a fleet approach versus a standard applicable to each unit or model. Then, the anti-backsliding provision in EPCA does not permit DOE to prescribe standards that would increase allowable energy use in terms of minimum energy conservation standards for covered products even if justified. Specifically, “[t]he Secretary may not prescribe any amended standard which increases the maximum allowable energy use or decreases the minimum required energy efficiency of a covered product.” 42 U.S.C. § 6295(o)(1). Inherent in an “averaging” or “trading” regulatory approach to energy conservation standards is that manufacturers would be able to produce some products and models with a range of efficiency levels, including the flexibility to produce products less efficient than current standards require, so long as a certain average is achieved. An “averaging” or “trading” approach to energy conservation standards could possibly run afoul of EPCA’s anti-backsliding provision. If it is possible for an averaging or trading approach to standards and compliance to be developed under EPCA’s current structure, DOE may need to maintain the concept of minimum energy conservation standards with which all products must comply. That could mean a double layer of regulation, which, as discussed more fully in Section III, would add unacceptable additional burden and cost for manufacturers.

Moreover, for competitive and other reasons, manufacturers generally do not object to the policy supporting EPCA’s anti-backsliding provision unless a serious mistake has been made that harms consumers and/or manufacturers. In order to comply with energy conservation standards, manufacturers make investments in plants, tooling and equipment, and product redesign and must shift production from products that will no longer comply with standards to the ones that will. In some cases, manufacturers must shift resources away from innovating new product features in order to comply with energy conservation standards. This sometimes means stranding and decommissioning assets, investing in new employee resources or skills, making upstream and downstream supply chain changes (including marketing), all of which involve some degree of sunk cost. Backsliding to a less efficient product is not likely an economically attractive option absent some special, compelling set of circumstances.

Additionally, unless Congress changes the existing regulatory scheme, DOE is required to review standards every six years and determine whether an amended standard will result in significant conservation of energy, is technologically feasible, and economically justified. Fundamentally changing the Appliance Standards Program to an “averaging” or “trading” approach will not remove this requirement. Thus, under some of the concepts DOE outlines in the RFI, it is foreseeable that minimum energy conservation standards could continue to change, just as they do now, or at least the overall stringency would increase. Demonstrating compliance will become more burdensome because of the reporting requirements associated with compliance based on an “averaging” or “trading” scheme. And there would need to be an extensive rulemaking just to implement the fleet average type concept.

A better approach is for DOE to use its existing authority, when supported by data, to make determinations that no amended standards are justified, thereby reducing burden and cost on manufacturers by limiting the number of redesigns to meet ever-increasing energy conservation standards and ensuring consumers continue to receive the product performance, functionality, and choice they expect.

III. Averaging and Trading Approaches To Energy Conservation Standards May Add An Unnecessary Regulatory Layer And Increase Burden And Cost.

It is unclear whether and how, under an “averaging” or “trading” approach to energy conservation standards, the testing, labeling, and certification schemes that accompany the established minimum energy conservation standards would be retained. It is possible that the regulatory burden associated with compliance under the existing regulatory scheme would not be displaced. The Joint Commenters do not support an additional regulatory scheme that imposes its own, *additional* compliance, recordkeeping, reporting, and certification burdens. Aside from the question of whether “averaging” or “trading” would be a sound regulatory approach for both consumers and manufacturers if we were starting this program from scratch, if an averaging approach to regulation adds an additional layer to the existing regulatory reporting and certification, we must oppose it. It is by no means clear that “compliance flexibility” as contemplated by the RFI would reduce regulatory burden or increase consumer choice.

In fact, the Joint Commenters believe that the approaches DOE contemplates in the RFI would be more likely to add to administrative burden and cost than to reduce them. DOE noted that “[t]he establishment of credit trading would require additional data collection and monitoring to set standards and ensure compliance. As under the current CAFE program, calculating credit holdings would depend on accurate sales data for every covered model. In cases where standards vary regionally, these data would also need to be broken out by region. These data would be necessary to support accurate and consistent calculations for the determination of appropriate energy conservation standard levels as part of the rulemaking, and would be essential for enabling and monitoring the credit market and ensuring compliance.”

Collecting sales data and reporting it to DOE would be an enormous undertaking above and beyond DOE’s existing certification, compliance, and enforcement data reporting requirements, which are already burdensome. It is impossible for us to provide DOE with exact cost or burden estimates given that the RFI does not identify a particular scheme. But all of the market-based systems DOE contemplates would require collection and reporting of sales data. To use that data for regulatory compliance would mean additional record-keeping requirements and quality assurance practices that may not currently exist. Accordingly, there would be administrative costs to set up new systems, possibly including the need to develop and implement new software. There would also be ongoing costs associated with collecting the data, reporting it, and record keeping. This could involve new staff or the shifting of responsibilities depending on the company. Accordingly, with respect, the Joint Commenters believe that any potential “flexibility” that might be gained with a market-based approach to standards compliance would be outweighed by the additional cost and burden associated with collecting and reporting sales data.

An “averaging” or “trading” compliance scheme’s reliance on sales volume also presents challenges beyond data collection, reporting, and record-keeping. First, the nature of a competitive market is such that it is impossible for compliance purposes to reliably predict sales volumes for particular models. This will present an administrative challenge and enforcement risk for manufacturers and an enforcement challenge for DOE. The automotive industry examples cited in the RFI and discussed in some of the cited studies is not necessarily a model for other industries. Because of the highly controlled dealer-manufacturer relationship in the automotive industry, sales figures are likely much better understood in real time and the distribution network is smaller and well-established. Manufacturers know immediately when a new car has rolled off the dealer’s lot. The manufacturer to consumer chain for the electrical industry, on the other hand, is highly fragmented. Manufacturers of electrical products such as those the Joint Commenters’ members make may distribute the same product to wholesale distributors, electrical contractors (installers), retailers, and online channels. Manufacturers of electrical products generally do not have the same real-time information about where their product is in the supply chain or whether it has been sold so that they could anticipate and adjust if the fleet is not performing as predicted.

Additionally, unit sales of electrical products vastly dwarf those of automobiles. To estimate their annual energy use, and energy savings or losses, as part of a “fleet average” regulatory program represents uncertainty and risk on the part of manufacturers who would be responsible for paying fines if sales of less-efficient, but consumer-demanded products are not sufficiently offset by more efficient products. This would likely mean that manufacturers would need to continually track sales, to the extent it’s possible to do so accurately, and attempt through financial incentives and marketing to direct consumers to products with certain efficiency levels in order to ensure compliance with the fleet average. **Not only is this a difficult and burdensome task for manufacturers, but more importantly, it would distort the market and reduce consumer choice.** To deal with compliance risk, firms may need to significantly “over-comply” to create a margin for error, which is marketplace not engineering error. This effectively makes the standards much more stringent.

Moreover, the scope and breadth of consumer and commercial product sales would contribute to a gargantuan amount of data gathering and analysis for manufacturers and DOE. The staggering amount of data, coupled with uncertainty with regard to consumer purchasing behavior, is a significant concern for the Joint Commenters. It is not clear how DOE staff could manage such a program, particularly if resources are decreased, and it seems clear that the amount of staffing, economic forecasting, and reporting by manufacturers would increase significantly. This would add significantly to cumulative regulatory burden rather than reducing it.

IV. Market Based Approaches To Energy Conservation Standards Will Distort The Market, Reduce Consumer Choice, and Likely Result In Higher Prices.

As discussed above, a compliance scheme based on fleet averages will likely require manufacturers to direct or “nudge” consumers to certain products in an attempt to meet regulatory requirements. Specifically, such a program would likely force manufacturers to alter their model mix to meet the compliance targets. For example, manufacturers would need to floor

or promote more efficient models to prevent purchases of less efficient models. This will not only distort the market, but will also mean that consumer choices are diminished.

For a trading type program, it is hard to see how, in a competitive market such as those for the products DOE covers, companies would want to trade efficiency credits among competitors. We would be surprised if the markets DOE covers would meet the conditions for a successful cap and trade market. We suspect that consumers will likely lose twice. They will not reap any benefits from the credits because product costs will likely rise. And product model selection could decrease as manufacturers choose to stop production of models requiring double layers of compliance. It is also possible that some manufacturers will lose—as certain manufacturers benefit from credits and others are essentially penalized, there is a risk that the credits could be leveraged to increase market share and slowly move the industry toward increased concentration.

These likely results from an averaging or trading approach to energy conservation standards are directly contradictory to DOE's intent in considering market-based approaches for compliance with energy conservation standards is to reduce compliance costs and/or increase consumer choice.

V. The Joint Commenters

AHRI is the trade association representing manufacturers of heating, cooling, water heating, commercial refrigeration equipment, and refrigerant producers. More than 300 members strong, AHRI is an internationally recognized advocate for the industry, and develops standards for and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the HVACR industry is worth more than \$20 billion. In the United States alone, our members employ approximately 130,000 people, and support some 800,000 dealers, contractors, and technicians.

AMCA International is a not-for-profit trade association with more than 380 member companies worldwide representing more than \$3 billion in annual revenue. Member companies are manufacturers of fans, dampers, louvers, air curtains, and other air-system products for commercial HVAC; industrial process; and power-generation applications. AMCA's mission is to advance the health, growth, and integrity of the air-movement-and-control industry with programs such as certified ratings, laboratory accreditation, verification of compliance, and development of international standards.

ALA is a trade association representing over 3,000 members in the residential lighting, ceiling fan and controls industries in the United States, Canada and the Caribbean. Our member companies are manufacturers, manufacturers' representatives, retail showrooms and lighting designers who have the expertise to educate and serve their customers.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's more than 150 members employ tens of thousands of people in the U.S. and produce more than 95% of the household appliances shipped for sale within the U.S. The factory shipment value of these products is more than \$30 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.

Based in Arlington, VA, HPBA is the principal trade association representing the hearth products and barbecue industries in North America. HPBA's members include manufacturers, retailers, distributors, manufacturers' representatives, service installation firms, and other companies and individuals who have business interests related to the hearth, patio, and barbecue industries. HPBA's core purpose is to promote the welfare of the industries it serves, and one of its critical roles is to serve as an advocate representing the interests of these industries and of its individual members in matters involving the development or implementation of laws or regulations that affect them.

NEMA represents nearly 350 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.

PMI is the nation's leading trade association for plumbing product manufacturers. Its members produce 90 percent of the plumbing products sold in the United States and employ thousands of workers in over 70 locations in 25 states. Our member companies' plumbing products are found in the majority of homes, commercial buildings, schools, restaurants, manufacturing facilities, hospitals, and hotels across the nation. Examples of these products include, but are not limited to kitchen and bathroom faucets, toilets, showerheads, urinals, fixture fittings, sinks, whirlpools/tubs, water fountains, and waste disposal systems. PMI member companies continue to raise the bar in developing the most advanced water-efficient plumbing products.

The Joint Commenters appreciate the opportunity to submit these comments on DOE's RFI for Energy Conservation Standards Program Design and would be glad to discuss these matters in more detail should you so request.

(Signatures on next page)

Respectfully Submitted,



Joe Trauger
Senior Vice President, Policy & Government Relations
Air-Conditioning, Heating, and Refrigeration Institute



Michael Ivanovich
Senior Director, Industry Relations
AMCA International



Eric Jacobson, CAE
President/CEO
American Lighting Association



Jennifer Cleary
Senior Director, Regulatory Affairs
Association of Home Appliance Manufacturers



Ryan Carroll
Vice President—Government Affairs
Hearth, Patio & Barbecue Association



Kyle Pitsor
Vice President, Government Relations
National Electrical Manufacturers Association



Matt Sigler
Technical Director
Plumbing Manufacturers International

Attachment A



July 14, 2017

By E-mail

Mr. Daniel Cohen
U.S. Department of Energy
Office of the General Counsel
1000 Independence Avenue, SW
Washington, DC 20585-0121

Regulatory.Review@hq.doe.gov

Re: Joint Comments on DOE's Regulatory Burden Reduction RFI

Dear Mr. Cohen:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI), Association of Home Appliance Manufacturers (AHAM), Hearth, Patio & Barbecue Association (HPBA) and National Electrical Manufacturers Association (NEMA) (collectively, the Joint Commenters) respectfully submit the following comments to the Department of Energy (DOE) on its Regulatory Burden RFI, 82 Fed. Reg., 24582 (May 30, 2017).

The Joint Commenters support DOE in its efforts to ensure a national marketplace through the Appliance Standards Program, which reduces manufacturing and consumer costs. Our members' innovations over the last few decades have provided tremendous energy savings for consumers. We believe, however, that DOE can achieve meaningful burden reduction by modifying its existing regulations without compromising the Department's statutory obligations. In fact, DOE can eliminate requirements that will trim the program such that it is consistent with the Energy Policy and Conservation Act of 1975, as amended (EPCA). Moreover, 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 recommend the following changes, which we describe more fully below. We recommend and request that DOE:

- When justified, use its authority to make determinations that amended energy conservation standards are not necessary;

- Increase transparency and public engagement before DOE proposes an energy conservation standard;
- Ensure proper development, application, and sequencing of test procedures;
- Eliminate duplicative reporting;
- Meaningfully consider cumulative regulatory burden in its analyses; and
- Correct assumptions in its economic analysis.

I. The Joint Commenters

AHRI is the trade association representing manufacturers of heating, cooling, water heating, commercial refrigeration equipment, and refrigerant producers. More than 300 members strong, AHRI is an internationally recognized advocate for the industry, and develops standards for and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the HVACR industry is worth more than \$20 billion. In the United States alone, our members employ approximately 130,000 people, and support some 800,000 dealers, contractors, and technicians.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's more than 150 members employ tens of thousands of people in the U.S. and produce more than 95% of the household appliances shipped for sale within the U.S. The factory shipment value of these products is more than \$30 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.

Based in Arlington, VA, HPBA is the principal trade association representing the hearth products and barbecue industries in North America. HPBA's members include manufacturers, retailers, distributors, manufacturers' representatives, service installation firms, and other companies and individuals who have business interests related to the hearth, patio, and barbecue industries. HPBA's core purpose is to promote the welfare of the industries it serves, and one of its critical roles is to serve as an advocate representing the interests of these industries and of its individual members in matters involving the development or implementation of laws or regulations that affect them.

NEMA represents 350 electrical equipment and medical imaging manufacturers at the forefront of electrical safety, reliability, resilience, efficiency, and energy security. Our combined industries account for more than 400,000 American jobs and more than 7,000 facilities across the United States. Domestic production exceeds \$114 billion per year and exports top \$50 billion.

II. The Appliance Standards Program Should Be Maintained, But Reforms Are Needed.

The Energy Conservation Program was designed to establish minimum energy conservation standards for consumer products, including home appliances and certain commercial and industrial equipment nationwide. For many products, EPCA requires a never-ending churn of DOE rulemakings—every six years after the issuance of a final rule (establishing or amending standards) DOE must go through another regulatory process to consider changing the standard, followed by the exact same processes in six more years, and it just keeps going.

Over the last few decades, there have been multiple standards for over 60 categories of products, with 44 new or updated standards in the last Administration. The Joint Commenters and our members have many times negotiated these rules so they were economically and technically justified, and to advance the national interest in saving energy. The efficiency gains over the decades have been dramatic and undeniable, but, for many products, the future opportunities for additional cost effective savings beyond those already achieved are severely diminished as products are nearing maximum efficiency under available technology. The cumulative regulatory burden of these standards, along with related Environmental Protection Agency (EPA) refrigerant bans, for example, can adversely affect U.S. appliance manufacturing employment. DOE proposed standards have even threatened to imperil the functioning of basic products such as dishwashers.

Manufacturers support a continued but reformed Appliance Standards Program that is driven by data to ensure a national marketplace, which reduces manufacturing and consumer costs. The current national system creates a federal energy standard program that preempts states from creating a patchwork of differing energy standards around the country. Congress has the authority to regulate interstate commerce, and the Joint Commenters strongly support this system of federal preemption, which promotes and protects the national marketplace.

Although the Joint Commenters support the Appliance Standards Program, there are tremendous opportunities to modernize EPCA and the related regulations, and we call on Congress and the Administration to seize those opportunities. Modernization and regulatory reform are the best way to preserve and stabilize the national standards program while recognizing that the opportunity for economically justified energy savings that are technologically feasible is limited for products that have been subject to multiple regulations. A modernized program should limit unnecessary, lengthy, unending rulemakings, focus on priorities, return to properly sequencing test procedures and standards, and evaluate cumulative regulatory burden while improving transparency and stakeholder engagement. Most of these proposals merely reflect DOE practices under the Process Improvement Rule abandoned over the last eight years.

III. When Appropriate, DOE Should Use Its Authority To Make Determinations That No Amended Standards Are Necessary.

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 imposes regulatory burden on manufacturers and on consumers and creates unnecessary costs for the Federal budget.

For consumers, as time goes on and DOE continues to set more stringent standards, consumers are experiencing a net cost. The table below shows the high percentage of consumers experiencing a net cost, according to DOE’s analysis, from a handful of recent energy conservation standards.

Appliance Standard	Percent of Consumers Experiencing Net Cost Per DOE’s Analysis
2015 Clothes Dryer	Up to 32
2019 Dehumidifier	Up to 28.7
2010 Direct Heating Equipment	Up to 25
2013 Dishwasher	19 for standard size
2014 Furnace Fans	Up to 32 for owners of manufactured homes (up to 30 for standard)
2010 Residential Water Heaters	Up to 33
2014 Room Air Conditioner	Up to 33.6
2014 Refrigerator/Freezer	Up to 45.7
2015 SPVU	39 (for SPAC)

Not only are many consumers experiencing a net cost to achieve minimal savings, but the payback periods for those who will experience a benefit are long. For example, 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, which is approximately two-thirds the life of the product.

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 rulemakings across industries.

Appliance Standard	Loss in Industry Net Present Value (%)
2015 Clothes Washer	33
2010 Direct Heating Equipment	Up to 23.6
2013 Dishwasher	13.3
Proposed Dishwasher (not finalized)	17.7-34.7
2019 Dehumidifier	20.9
2014 Furnace Fans	16.9
2011 Fluorescent Ballast	36.7
2009 General Service Fluorescent Lamp	15
2015 General Service Fluorescent Lamp	21.5
2014 Metal Halide Fixtures	26.7
2016 Package AC	Up to 26.8
Proposed Portable Air Conditioner	30.6
2014 Refrigerator/Freezer	21.7 for standard size refrigerator-freezers
2010 Residential Water Heaters	Up to 13.9
2014 Room Air Conditioner	18.6
2015 SPVU	Up to 17.9

Although the manufacturer impact is measured within the product scope of a particular rulemaking, many manufacturers make a number of covered products within a broader industry of appliances, air conditioning, or lighting, and those manufacturers are feeling these impacts both cumulatively and repeatedly. DOE does not meaningfully account for that in its analysis as we discuss further below.

In addition to these costs, there is burden associated with participation in the never ending churn of rulemaking. Manufacturers are forced to divert resources away from research and development and other activities in order to participate in and respond to rulemaking. Given the frequent, required churn of rules amending standards, almost as soon as one rulemaking for a product ends and a standard is set, another rulemaking to amend that standard begins. Manufacturers do not have time to catch their breath. In addition, manufacturers must continually redesign and retool in order to comply with a series of ever-tightening standards. The result is that losses in industry net present value are more significant and, in some cases, threaten domestic employment. These negative impacts are unsustainable.

Rulemakings that set energy conservation standards should be initiated because of product developments and innovations, not because of statutorily mandated schedules based on the mere passage of time. Understanding that DOE must nevertheless abide by the rulemaking schedule EPCA sets, there are regulatory and policy changes DOE can make to ease the burden on manufacturers and consumers.

First, DOE should exercise its authority, as appropriate and when supported by data, to determine that no amended standards are justified when undertaking a mandatory review of energy conservation standards. DOE should return to working with stakeholders to gather the necessary data and the Joint Commenters are each glad to work with DOE on such efforts.

Second, DOE should only amend standards if there are significant savings, no disproportionate burden on manufacturers, and no negative impact on product performance or consumer choice. The Joint Commenters propose that DOE undertake a process to define significant savings and disproportionate burden on manufacturers.

Third, for products with three-year lead in periods, DOE should not initiate rulemakings to amend the standard until at least one year after the compliance date of the most recent standard. This permits manufacturers to use the lead-in period to design and manufacture products that comply with the current standard rather than to use a portion of it also addressing a rulemaking for the next standard. It would also ensure that the rulemaking to possibly amend the standard is based on data from products that meet the most current standard.

The Joint Commenters have long been supporters of negotiated rulemakings to set appliance standards. Negotiated rulemakings offer manufacturers more flexibility and certainty. They also can often be completed over a shorter period of time, thus reducing the amount of resources diverted away from research and development and other activities. **DOE could further reduce burden on manufacturers by continuing to state a strong preference for negotiated rulemakings. In fact, DOE could further strengthen its preference for such rulemakings.**

Never-ending regulatory churn is not limited to standards rulemakings under EPCA—test procedures must be reviewed every seven years. Accordingly, DOE should seriously consider whether or not a test procedure requires amendment. **Specifically, in deciding whether to amend test procedures DOE should place a strong focus on the additional test burden amendments would place on manufacturers and whether the burden is balanced by accuracy as well as the technical need for the amendments.**

IV. DOE Should Increase Transparency And Public Engagement Before It Proposes An Energy Conservation Standard.

To keep pace with EPCA’s mandated timeline for revising energy conservation standards and the related test procedures, and driven by President Obama’s climate plan, DOE was short-circuiting the rulemaking process by ignoring its own rule from the Clinton administration and forgoing such critical pre-proposal steps such as: public data availability, stakeholder input, and company interviews. These steps were designed to and did provide DOE with a better understanding of the realities of the current market and product mix and could have prevented many analytical errors that have been strewn throughout DOE’s recent proposals. In addition, pre-proposal steps allow stakeholders time to prepare much more useful comments for DOE’s consideration.

DOE should not treat the Process Improvement Rule as guidance, but rather should treat it as a rule.¹ Ideally, DOE would eventually issue a rule modernizing the Process Improvement Rule. In the interim, DOE should expressly state that it is committed to

¹ See Appendix A to Subpart C of Part 430—Procedures, Interpretations and Policies for Consideration of New or Revised Energy Conservation Standards for Consumer Products.

following the processes outlined in the Process Improvement Rule, particularly with regard to pre-rulemaking stakeholder engagement.

Moreover, DOE should rescind the portion of the November 16, 2010 unilateral statement that waives portions of the Process Improvement Rule by indicating that in “appropriate cases,” DOE will eliminate the early phases of the rulemaking process and move directly to notices of proposed rulemaking. This statement was issued without any notice or opportunity to comment and is so buried on DOE’s website that it is not even listed on the Office of General Counsel’s or the EERE guidance page—it is instead available only by combing through press releases.²

V. Proper Development, Application, And Sequencing Of Test Procedures Greatly Reduces Regulatory Burden And Ensures Energy Conservation Standards Are Supported By Sound Data.

EPCA requires that compliance with a new or amended standard must be measured using a defined test procedure, but DOE has failed to publish final test procedures before proposing standards. Minimally acceptable engineering analysis and sound policy conclusions can only be based on a known and final test procedure that government, manufacturers, and other stakeholders have had the opportunity to use in evaluating design options and proposed standard levels. Otherwise, all parties face a veritable Tower of Babel and are not able to meaningfully communicate with each other. This requirement is meaningless if a test procedure is not finalized well before a proposed rule is issued, much less finalized, so that all stakeholders can evaluate the significance and the meaning of the possible standards.

In order to reduce the incredible burden placed on manufacturers when DOE amends test procedures and standards in parallel, **DOE should issue a rule that it shall only use the test procedure that will be used to determine compliance with a final standard in its rulemaking from start to finish.** The Joint Commenters propose that DOE not publish a Request for Information/Framework Document (or any other document initiating a rulemaking) until at least 180 days after a final rule is published for the test procedure that will be used to determine compliance with the final standard.

DOE should also issue a rule that it will not use amended test procedures for enforcement purposes before the test procedure is required to demonstrate compliance with the applicable energy conservation standard. This just makes logical sense. DOE and the regulated community must use the same test procedure to determine compliance with a standard. To do otherwise places burden on manufacturers to either guess which test DOE will use when it conducts assessment and enforcement testing or to test products to more than one test procedure and ensure compliance under each of them. That is contrary to EPCA’s intent.

There are cases where test procedure amendments are required outside of a process to also amend the related energy conservation standard—either because of a technology development or

² See <http://energy.gov/gc/articles/doe-announces-changes-energy-conservation-standards-process>.

in order to comply with EPCA's seven year review schedule for test procedures which does not align with its six year review schedule for standards. In such cases, **DOE should conduct statistically significant testing to analyze the impact of a test procedure change on measured energy or efficiency and exercise the flexibility EPCA provides per 42 U.S.C. § 6293(e) to adjust the standards to account for such changes.** To do this, DOE should expressly reverse its interpretation that adjusting a standard to account for test procedure changes is prohibited by EPCA's anti-backsliding provision. That interpretation makes no sense—by definition the standards are to be adjusted in order to ensure that their stringency is not adjusted without proper rulemaking and analysis by the change to the test procedure.

VI. Reliance on Voluntary Consensus Test Procedures Reduces Duplication And Burden.

Often, DOE bases its energy test procedures on industry test procedures developed through the consensus process. It makes sense for DOE to rely on such test procedures rather than waste resources reinventing the test, especially because tests developed through the consensus process have also been vetted by a variety of stakeholders. In recent years, however, DOE has been making significant changes to the voluntary consensus test procedures such that, in some cases, the tests are so different they do not generate the same results and/or require different test set up. This increases burden on manufacturers to change test procedures and to harmonize industry tests with DOE's revised version of the test. It also perpetuates the never-ending amendment cycle for test procedures.

In order to ease this burden, **DOE should issue a policy statement that it will adopt, in full and without modification, applicable voluntary consensus industry test procedures or rating procedures and incorporate them by reference in DOE's regulations.** In order to keep pace with revisions, DOE should update its procedures on a timely basis consistent with the revision schedule for the voluntary consensus test procedure.

VII. DOE Can Significantly Reduce Burden By Eliminating Duplicative Reporting

The Joint Commenters strongly urge DOE to reevaluate its annual certification statement requirement which requires manufacturers of products regulated under DOE's energy conservation program to submit annual certification reports. *See* 10 C.F.R. 429.12. DOE requires that "each manufacturer, before distributing into commerce any basic model of a covered product or covered equipment subject to an applicable energy conservation standard . . . , and annually thereafter . . . , shall submit a certification report to DOE certifying that each basic model meets the applicable energy conservation standard(s)." 10 C.F.R. 429.12(a). The annual report must contain all basic models that have not been discontinued. Discontinued models are those that are "no longer being sold or offered for sale by the manufacturer or private labeler." *See* 10 C.F.R. 429.12(f).

Requiring manufacturers to file reports on covered products with DOE (and the Federal Trade Commission) every year even if there is no design change creates unnecessary paperwork costs for no reason. DOE put these rules in place under the Obama administration and they are ripe for regulatory reform. **Manufacturers should be required to report only when a new**

product is introduced, when a model is changed in a way that impacts measured energy or efficiency, and when a product is no longer in production.

Annual reporting does nothing to enhance consumer knowledge and serves no purpose for DOE rulemaking or enforcement efforts. But eliminating the annual report will significantly reduce costs for manufacturers. Historically, DOE has estimated that the time to comply with the annual certification requirement is about 20 hours per response. But that is a severe underestimation.

In order to get a more comprehensive picture of the time to comply with the annual reporting requirement, AHAM recently surveyed its members and found that, across DOE covered products under AHAM’s scope, the average time for a company to comply with DOE and FTC’s annual reporting requirements is 230 hours. Work hours for annual reporting by manufacturer ranges depending on the number of models and is as high as 553 hours. This is over and above the 129 hours, on average, each manufacturer spends reporting new models, changed models, or deleted models throughout the year. That means that the total certification reporting burden, including ad hoc certifications and the annual report, is, on average, 359 hours and up to 732 total hours for a manufacturer with more models.

Almost half of the surveyed manufacturers indicated that additional staff, such as interns, general support staff, and assistants, are required to comply with the current reporting requirements. The average number of employees involved in the process to complete certification and annual reporting is 7.3 employees. For manufacturers with more models, it is as high as 17 employees. Manufacturers identified the staff in the table below are required to complete reporting obligations, with the brunt of the burden falling on product/compliance/design engineers. *Those employees play a significant and important role in research and development activities, thus demonstrating how much time is diverted from those activities in order to comply with reporting obligations.*

Employee Type	Percentage of Total Reporting Hours
Product/Compliance/Design Engineer	56.3
Lab Technician	14.3
Plant Manager	1.2
Data Entry Personnel	8
Compliance Officers	5.3
Regulatory Affairs	5.7
Other	9.2

This significant burden can easily be greatly reduced by eliminating the rules DOE put into place during the Obama administration that require annual reporting for no reason and returning to a reporting scheme under which reporting is required only when a new product is introduced, when a model is changed in a way that impacts measured energy or efficiency, and when a product is no longer in production. It may be the case that a manufacturer would prefer to delete models from the database only on an annual basis and, so, any proposal to modify the reporting requirements should allow that as an option. Based on the estimated time to comply with annual reporting requirements determined by AHAM’s member

survey, we estimate that eliminating DOE's annual report would save manufacturers 101 hours per year on average and up to a 438 hour reduction per year.

We note that other of the Joint Commenters may complete similar studies and, should we have additional data on the burden DOE's annual report imposes and the reduction associated with eliminating it, we will share it with DOE. Some AHAM members make products in other categories as well and so the overall reporting burden for those companies will be much higher.

The Joint Commenters also request that DOE consider the following paperwork reduction reforms to reduce reporting burden for manufacturers:

- Establish the CCMS database as the central place for manufacturers to file data related to energy. DOE and FTC have largely streamlined their requirements so that one database can be used to meet each agency's annual reporting requirements.³ DOE could further streamline the database by adding a column to each template such that ENERGY STAR qualification can be indicated and a separate report to EPA is not necessary.⁴
- DOE should limit the data reporting to only information that is essential to show compliance with the standards rather than unjustifiably requiring certified data that is not necessary to demonstrate compliance with Federal minimum energy conservation standards.

³ The scope of DOE's report is much broader than FTC's report. The Federal Trade Commission (FTC) has long required that manufacturers of covered products "submit annually to the Commission a report listing the estimated annual energy consumption . . . or the energy efficiency rating . . . for each basic model in current production." *See* 16 C.F.R. 305.8(a)(1). DOE's report, on the other hand, because it requires a listing of all basic models that are "being sold or offered for sale by the manufacturer or private labeler," potentially requires reporting of basic models that have been out of production for a year or more. In fact, as an example, some manufacturers have informed AHAM that they have had to include basic models that have been out of production for five years or more. AHAM's recent member survey indicates that if DOE simply harmonized its reporting scope with FTC's scope such that the annual report was only required to include basic models in current production, it would reduce the average number of work hours to 122 hours, a reduction in work hours by an average of 108 hours annually which is a reduction of 47% of work hours annually. Per model, the reporting time would go from 23 minutes per model to compile the information required to report to DOE and FTC down to 12 minutes per model for an FTC annual reporting scope. The Joint Commenters' preference, however, would be to entirely eliminate annual reporting requirements, while reserving an option to delete models on an annual basis.

⁴ AHAM's survey of its members indicates that the average total costs to qualify all product categories to ENERGY STAR specifications is \$224,143. There is significant fluctuation in this cost as it is highly dependent on the product, the number of models, and specific requirements (e.g., third party testing; fees for reporting certification, and deleting models from the Environmental Protection Agency's Qualified Products List; etc). Refrigerator/freezers are the most costly and burdensome product to certify according to the survey.

- To decrease compliance burden, if DOE amends a standard or test procedure, DOE should commit to issuing related CCMS templates no later than one year before the compliance date of the standard or test procedure.
- DOE should work with the California Energy Commission to find ways to streamline and reduce manufacturers’ need to “re-input” values into CEC’s database that have already been submitted through CCMS.

VIII. DOE Should Meaningfully Consider Cumulative Regulatory Burden

Manufacturers are subject to many, often simultaneous, regulatory requirements from not only DOE, but also EPA, the Federal Trade Commission, the Consumer Product Safety Commission, and the Federal Communications Commission among others. For example, the table below lists the proposed, final, and upcoming regulations for refrigerator/freezers from just these agencies:

Agency	Regulation	Expected Compliance Date
EPA	SNAP,* Foam Blowing Agent	2020
EPA	SNAP,* Refrigerant	2021
EPA	ENERGY STAR (voluntary)	2014, 2017 update
DOE	Test Procedure Revision	2022
DOE	4 th Standards Update	2022
FTC	Revised EnergyGuide Label	2016, and again 2017

*Significant New Alternatives Policy Regulation to ban certain hydrofluorocarbons as acceptable alternatives.

Although DOE often lists rules impacting manufacturers in its analysis, it does not take the close look at the cumulative impact that we believe is warranted.

A true cumulative regulatory burden analysis should not only consider the sheer number of rulemakings to which appliance manufacturers are subject, but should also account for the timing and technical and economic relationship of those rulemakings. For example, DOE’s recent practice of amending the test procedure while at the same time proposing amended standards increases the burden on manufacturers in responding to DOE’s proposed rules. When the rulemakings parallel each other, it is difficult, if not impossible, to comment on the proposed energy conservation standard because the test procedure is not yet settled and manufacturers cannot determine how their products perform in relation to the proposed standards. Thus, we encourage DOE to consider manufacturers’ relative and cumulative research and development, testing, and certification burdens, which can be significantly higher when regulations from different agencies take effect in close proximity to each other. This can be especially problematic for industries that have access to only a small number of accredited labs, creating a “bottleneck” problem as industry is forced to comply with several largely unrelated requirements at once.

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, for example, 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 effective 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

Most importantly, DOE should include cumulative regulatory burden analysis as a factor in its decision on a proposed and final energy conservation standard. Analysis of cumulative regulatory burden should not be a stand-alone analysis with no real impact. Instead, it should be a meaningful part of the analysis with the ability to impact the final rule’s outcome.

IX. To Ensure Energy Conservation Standards Are Supported By Sound Data And Not Unnecessarily Burdensome, DOE Must Correct Assumptions In Its Economic Analysis.

DOE asked whether the methodology used in analyses supporting DOE’s regulations meet the requirements of the Information Quality Act. Manufacturers have long demonstrated that DOE’s economic analysis contains assumptions that are proven to be incorrect and skew DOE’s analysis in favor of more stringent standards. **We urge DOE to correct these assumptions, consistent with comments we have placed on the record, in order to more accurately consider the costs of proposed standards.**

Markups

Manufacturers, retailers, wholesaler/distributors, contractors, and manufacturers have objected to DOE’s use of incremental markups between manufacturers and end customers. DOE’s contractor (Lawrence Berkeley National Laboratory) persists in relying on a simplistic interpretation of economic theory that assumes only variable costs can be passed through to customers because economic returns on capital cannot increase in a competitive marketplace. Based on experience, LBNL’s conclusions are simply incorrect—percentage margins throughout the distribution channels have remained largely constant. Further, empirical studies of industry structure and other variables have only weak correlation with profitability, demonstrating that the economic theory LBNL relies upon is proven not to apply in practice. These issues have been contentious for years between manufacturers and LBNL. DOE can resolve them through a serious process of peer review using a peer review panel containing experts in environmental and energy economics and in consumer behavior and behavioral economics.

DOE should change its assumptions regarding markups to be consistent with the evidence manufacturers have placed on the record in a number of rulemakings.⁵

Discount Rates

DOE has traditionally used a real (inflation adjusted) discount rate in the LCC calculation based on averaging the various components of debt and assets. Manufacturers have commented that an average consumer discount rate is inappropriate and that DOE should use a marginal rate based on the cost of available borrowed funds, generally credit card debt.⁶ Sufficient evidence to support changing DOE's assumption is on the record.

Future Product Costs

DOE assumes that the cost of products will decline over time based on increased learning or experience. Manufacturers have commented that this analysis is unsupported by theory and frequently draws on incorrect or spurious analogies for factual data. In addition, some stakeholder commentators have used this data to imply misleadingly that manufacturers do not have real increases in product costs to achieve greater efficiency. Manufacturers have provided sufficient evidence on the record to support revisiting the concept of learning/experience and determining actual effects on costs over time.

Random Assignment of Base Case Efficiencies

The Life Cycle Cost (LCC) model has imbedded in it the assumption that consumers pay no attention whatsoever to energy costs when they purchase a new product by assigning base case efficiency levels randomly to consumers. This assumption does not make logical sense and DOE has provided no justification other than to say that it has no ability to develop an actual choice model. Instead, DOE has selected the most extreme version of a choice model, with energy playing no role in product selection. In DOE's attempt to justify its approach it references various work arounds. These are of limited applicability and do not solve the underlying problem. There has been extensive discussion of this topic on the record over many rulemakings and DOE has even commented on the record that there are concerns with this approach.⁷ DOE needs to abandon random assignment and address a choice model directly based on the ample evidence in field behavior.

Installation Costs

DOE estimates installation costs for products using an engineering build-up approach. It is well recognized in the engineering and contracting communities that cost build-ups need to be calibrated with actual field experience. DOE, itself, does this for its product cost analyses. Manufacturers and contractors have now shown on several occasions, on the record, that the

⁵ See, e.g., EERE-2013-BT-STD-0007-0068, Incremental Markups - A Critical Review of Theory and Practice. Other comments on this topic are included in EERE-2008-BT-STD-0012-0037, EERE-2014-BT-STD-0021-002, EERE-2014-BT-STD-0021-002, EERE-2014-BT-STD-0031-0159.

⁶ See, e.g., EERE-2014-BT-STD-0021-002, EERE-2014-BT-STD-0031-0159.

⁷ See, e.g., EERE-2014-BT-STD-0031-0303, EERE-2014-BT-STD-0031-0301.

DOE installation cost estimates are well below actual marketplace experience.⁸ In addition, the DOE estimates do not encompass the wide range of actual installation costs that occur in the field. DOE should develop a more robust installation cost methodology based on actual field experience.

The Joint Commenters appreciate the opportunity to submit these comments on DOE's Regulatory Burden Reduction RFI and would be glad to discuss these matters in more detail should you so request.

Respectfully Submitted,



Joe Trauger
Senior Vice President, Policy & Government Relations
Air-Conditioning, Heating, and Refrigeration Institute



Kevin Messner
Senior Vice President, Policy & Government Relations
Association of Home Appliance Manufacturers



Ryan Carroll
Vice President—Government Affairs
Hearth, Patio & Barbecue Association



Kyle Pitsor
Vice President, Government Relations
National Electrical Manufacturers Association

⁸ See, e.g., EERE-2014-BT-STD-0031-0159.

Attachment B



March 2, 2018

By E-mail

Mr. Daniel Simmons
Principal Deputy Assistant Secretary
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
1000 Independence Avenue, SW
Washington, DC 20585-0121

Regulatory.Review@hq.doe.gov

Re: Joint Comments on DOE's Process Rule RFI

Dear Mr. Simmons:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI), the Air Movement and Control Association (AMCA) International Inc., American Lighting Association (ALA), Association of Home Appliance Manufacturers (AHAM), Hearth, Patio & Barbecue Association (HPBA), Heating Air-conditioning & Refrigeration Distributors International (HARDI), the National Association of Manufacturers (NAM), National Electrical Manufacturers Association (NEMA), and Plumbing Manufacturers International (PMI) (collectively, the Joint Commenters) respectfully submit the following comments to the Department of Energy (DOE or Department) on its Process Rule Request for Information (RFI), 82 Fed. Reg., 59992 (Dec. 18, 2017).

The Joint Commenters thank the Department for issuing a request for information to receive feedback on modernizing the Process Improvement Rule. *See* 10 C.F.R. 430, Subpart C, Appendix A. That rule, which was adopted in 1996 through a joint stakeholder effort, has been an important roadmap for DOE rulemaking that, until somewhat 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 Improvement Rule to continue to allow transparent, consistent, data-driven rule development with the early and frequent input from stakeholders the original rule was designed to achieve. A modernized rule must recognize that, over the last few decades, there have been multiple standards for over 60 categories of products. Our members' innovations over the last few decades have provided tremendous energy savings for consumers. The efficiency gains over the decades have been dramatic and undeniable, but, for many products, the future opportunities for additional cost effective savings beyond those already achieved are severely diminished as products are nearing maximum efficiency under available technology. DOE's 1996 Process Improvement Rule, published at a time when the appliance efficiency standards regulatory program was just getting started, does not contemplate this circumstance,¹ and should be updated to take advantage of more than 20 years of rulemaking experience under EPCA.

To be clear, the Joint Commenters support a continued Appliance Standards program that is driven by data, to ensure a national marketplace, which reduces consumer and manufacturing costs. And we are not suggesting that amended standards are at an end for all product categories. Nevertheless, reforms are needed and modernizing the Process Rule can achieve a great many of them. 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 recommend and respectfully request that a modernized Process Rule:

- Be binding on DOE and apply to both consumer products and commercial equipment;
- Require a “quick hard look” during the initial phase of a rulemaking in order to determine whether amended standards may be or are not justified.²
- 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

¹ Recent DOE rulemakings have recognized that the regulatory end game is at hand and that additional energy savings through regulation under EPCA cannot be economically justified. In three completed rulemakings where DOE has concluded higher energy conservation standards could not be economically justified—high intensity discharge lamps, certain incandescent reflector lamps, and recently dishwashers—it took a full rulemaking cycle over three years—to reach that conclusion. *See* 80 Fed. Reg. 76355 (December 9, 2015) (high intensity discharge lamps); 80 Fed. Reg. 4042 (Jan. 26, 2015) (certain incandescent reflector lamps); 81 Fed. Reg. 90072 (Dec. 13, 2016) (residential dishwashers). A fourth DOE rulemaking on standards for direct heating equipment reached the same conclusion in much a shorter period of time. *See* 81 Fed. Reg. 71325 (Oct. 17, 2016).

² As discussed in Section II below, a “quick hard look” would entail an assessment of whether significant market or technological changes have occurred since the publication of the most recent rulemaking for the product at issue. Because, for consumer products, DOE is required to have selected the maximum trial standard level that is economically justified and technologically feasible, without significant market or technological changes, the implicit assumption is that increased standards are not required.

- Update DOE’s economic analysis.

I. The Appliance Standards Program Is Effective, But Reforms Are Needed.

The Energy Conservation Program was designed to establish minimum energy conservation standards for consumer products, including home appliances and certain commercial and industrial equipment nationwide. For many products, EPCA requires a never-ending churn of DOE rulemakings—every six years after the issuance of a final rule (establishing or amending standards) DOE must go through another regulatory process to consider changing the standard, followed by the exact same processes in six more years.³

Over the last few decades, there have been multiple standards for over 60 categories of products, with 44 new or updated standards in the last Administration. The Joint Commenters and our members have many times negotiated these rules so they were economically and technically justified, and to advance the national interest in saving energy. The efficiency gains over the decades have been dramatic and undeniable, but, for many products, the future opportunities for additional cost effective savings beyond those already achieved are severely diminished as products are nearing maximum efficiency under available technology. Many products have undergone two, three, or even four rulemakings on standards and, for some products, recent rulemakings have shown diminishing returns beyond the current standard. For some products, further amended standards may no longer be economically justified or technically feasible—as discussed below, more and more consumers are experiencing net costs, loss to industry net present value has been significant, and further changes could, in some cases, impact product utility.

The cumulative regulatory burden of these standards, along with related Environmental Protection Agency (EPA) refrigerant bans, for example, can adversely affect U.S. appliance manufacturing employment. DOE proposed standards have even threatened to imperil the functioning of basic products such as dishwashers.

Manufacturers support a continued but reformed Appliance Standards Program that is driven by data to ensure a national marketplace, which reduces manufacturing and consumer costs. The current national system creates a federal energy standard program that preempts states from creating a patchwork of differing energy standards around the country. Congress has the authority to regulate interstate commerce, and the Joint Commenters strongly support this system of federal preemption, which promotes and protects the national marketplace.⁴

³ Of course, DOE has the authority to make a determination that amended standards are not justified, and has made such determinations recently for product classes such as oil-fired commercial water heaters and residential dishwashers.

⁴ The members of AMCA (which is supportive of the Joint Comments) have not yet been subject to a federal energy conservation standard or a labeling and testing rule; despite having spent the last several years working with the DOE and other stakeholders to achieve that outcome. It is now being subjected to the type of balkanized state by state regulation, beginning with California, the avoidance of which helped give birth to EPCA.

Although the Joint Commenters support the Appliance Standards Program, there are opportunities to modernize EPCA and the related regulations, including the Process Improvement Rule, and we call on the Administration to seize those opportunities. A modernized program should limit unnecessary, lengthy, unending rulemakings, focus on priorities, return to properly sequencing test procedures and standards, and evaluate cumulative regulatory burden while improving transparency and stakeholder engagement. Most of these proposals merely reflect DOE practices under the Process Improvement Rule abandoned over the last eight years.

II. The Process Rule Should Engage Stakeholders Early And First Make A Preliminary Determination About Whether Amended Standards May Be Justified.

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. As time goes on and DOE continues to set more stringent standards, consumers are experiencing a net cost. The table below shows the high percentage of consumers experiencing a net cost, according to DOE’s analysis, from a handful of recent energy conservation standards.

Appliance Standard	Percent of Consumers Experiencing Net Cost Per DOE’s Analysis
2015 Clothes Dryer	Up to 32
2019 Dehumidifier	Up to 28.7
2010 Direct Heating Equipment	Up to 25
2013 Dishwasher	19 for standard size
2014 Furnace Fans	Up to 32 for owners of manufactured homes (up to 30 for standard)
2010 Residential Water Heaters	Up to 33
2014 Room Air Conditioner	Up to 33.6
2014 Refrigerator/Freezer	Up to 45.7
2015 Single Package Vertical Units	39 (for SPAC)

Not only are many consumers experiencing a net cost to achieve minimal savings, but the payback periods for those who will experience a benefit are long. For example, 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, which is approximately two-thirds the life of the product.

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 rulemakings across industries.

Appliance Standard	Loss in Industry Net Present Value (%)
2015 Clothes Washer	33
2010 Direct Heating Equipment	Up to 23.6
2013 Dishwasher	13.3
Proposed Dishwasher (not finalized)	17.7-34.7
2016 Dehumidifier	20.9
2014 Furnace Fans	16.9
2011 Fluorescent Ballast	36.7
2009 General Service Fluorescent Lamp	15
2015 General Service Fluorescent Lamp	21.5
2014 Metal Halide Fixtures	26.7
2016 Package AC	Up to 26.8
Proposed Portable Air Conditioner	30.6
2014 Refrigerator/Freezer	21.7 for standard size refrigerator-freezers
2010 Residential Water Heaters	Up to 13.9
2014 Room Air Conditioner	18.6
2015 Single Package Vertical Units	Up to 17.9

Although the manufacturer impact is measured within the product scope of a particular rulemaking, many manufacturers make a number of covered products within a broader industry of appliances, air conditioning, or lighting, and those manufacturers are feeling these impacts both cumulatively and repeatedly. DOE does not meaningfully account for that in its analysis as we discuss further below.

In addition to these costs, there is burden associated with participation in the never ending churn of rulemaking. Manufacturers are forced to divert resources away from research and development and other activities in order to participate in and respond to rulemaking. Given the frequent, required churn of rules amending standards, almost as soon as one rulemaking for a product ends and a standard is set, another rulemaking to amend that standard begins. Manufacturers do not have time to catch their breath. Moreover, due to the overlapping rule-development and compliance timelines, DOE has, at times, promulgated rules without market, consumer, energy, or impact data from the implementation of the previous rule. In addition, manufacturers must continually redesign and retool in order to comply with a series of ever-tightening standards. The result is that losses in industry net present value are more significant and, in some cases, threaten domestic employment.

Energy savings through mandatory regulation should be pursued because of product developments and innovations, not because of statutorily mandated schedules based on the mere passage of time. Given the maturity of the Appliance Standards Program and understanding that DOE must abide by the current mandatory review schedule EPCA requires, DOE should develop a process to do a “quick hard look” at whether a standard needs to be amended early in the rulemaking process, leveraging previous rulemakings and updated information from

stakeholders. DOE can use this information to focus its full resources on the rulemakings that will offer significant energy savings. And, for new or amended standards where opportunities for energy savings are not presented by a significant shift in the market or technologies, DOE can consider moving to a determination not to amend standards.

Of course, any process should ensure DOE adheres to its statutory obligations for standards as well as for the timing of rules. In fact, adherence to the spirit and language of the current Process Improvement Rule can help DOE adhere to statutorily mandated timelines by requiring DOE to prioritize its resources. **The Process Improvement Rule already requires DOE to develop, through notice and comment, a plan for upcoming rulemakings.** See 10 C.F.R. 430, Appendix A, Section 3(b). That plan should account for the necessity to make coverage determinations before initiating standards or test procedure rulemakings and to finalize test procedures before initiating standards rulemakings. Section 3(d) of the Process Improvement Rule contemplates that rulemaking efforts are reserved for those rules that are most likely to yield significant energy savings without harm to consumers, manufacturers, or product utility, features, and performance—DOE should abide by these common-sense provisions.⁵

In concert with a planning and prioritization process, the Joint Commenters specifically recommend the following process for a modernized Process Rule, which we depict in Appendix A:

1. For newly covered products, a modernized Process Rule should require that before any standards or test procedure rulemaking begins, a coverage determination is finalized. This is discussed more fully in Section III below.
2. For all products, DOE must ensure that valid, repeatable, reproducible test procedures that are not unduly burdensome to conduct are finalized before any work on new or amended standards begins. This is discussed in more detail in Section VII below.
3. After allowing sufficient time for manufacturers to test products using a new or amended test procedure, DOE should begin its rulemaking process by publishing in the Federal Register a Notice of Six Year Review Assessment,⁶ which would be a request for

⁵ Section 3(d) of the Process Rule states “**Factors for priority-setting.** The factors to be considered by DOE in developing priorities and establishing schedules for conducting rulemakings will include: (1) Potential energy savings. (2) Potential economic benefits. (3) Potential environmental or energy security benefits. (4) Applicable deadlines for rulemakings. (5) Incremental DOE resources required to complete rulemaking process. (6) Other relevant regulatory actions affecting products. (7) Stakeholder recommendations. (8) Evidence of energy efficiency gains in the market absent new or revised standards. (9) Status of required changes to test procedures. (10) Other relevant factors.”

⁶ The Joint Commenters acknowledge that Section 4 of the Process Improvement Rule currently contemplates early stakeholder engagement and an initial RFI. Our recommendations build on the spirit of that engagement; however, we would prefer to modernize and refine the currently published process and criteria outlined in Section 4 to reflect years of regulatory experience.

information (RFI) on whether new or amended standards may be justified based on the criteria in 42 U.S.C. § 6295(n)(2)(A)–(C).⁷

The RFI should be informed by pre-rulemaking stakeholder engagement that investigates what, if anything, has changed since the last rulemaking. The RFI should not simply assume that new or amended standards are inevitable, but should seek information that will assist the Department in taking a “quick hard look” at whether anything has changed since the last final rule that would necessitate amended standards.⁸ The responses to the RFI should also assist DOE in its planning and prioritization process. In particular, the Notice of Six Year Review Assessment should:

- Present data and information DOE has gathered during the pre-rulemaking stakeholder engagement effort;
- For amended standards, seek and provide information on what, if anything, has changed since the latest final rule that might or might not justify amended standards;
- Seek and provide information on the factors in 42 U.S.C. § 6295(n)(2)(A)–(C);
- Identify and seek comment on existing design options;
- Identify and seek comment on the opportunity for or existence of voluntary non-regulatory action;
- Identify and seek comment on significant subgroups of consumers and manufacturers that merit analysis;
- Seek comment on cumulative regulatory burden; and
- Seek comment on whether, if DOE determines that new or amended standards may be warranted, DOE should initiate negotiated rulemaking.

DOE’s 1996 Process Improvement Rule was adopted at a relatively early stage of the appliance efficiency rulemaking program, before amendments to EPCA required reviews of standards on a six-year cycle. DOE should not mechanically assume full rulemaking and an amended standard is necessary and should not apply the same amount of resources to every mandatory review. The idea is that this early, formal, quick initial assessment will allow DOE to focus its priorities while meeting all statutory requirements.

EPCA envisions this quick review process and does not require periodic amendment of standards. It requires periodic review of standards and contemplates that the result of the review could either be a determination that the standards do not need to be amended or a proposed rule to amend standards. *See* 42 U.S.C. § 6295(m)(1). When supported by data, DOE should exercise its authority to make determinations that no amended standard

⁷ (A) amended standards will result in significant conservation of energy; (B) amended standards are technologically feasible; and (C) amended standards are cost effective as described in subsection (o)(2)(B)(i)(II) of this section.

⁸ For newly covered products, the RFI would evaluate whether there is likely to be sufficient justification for a new standard to necessitate continuing with a negotiated rulemaking or notice and comment process.

is justified. And DOE need not conduct a full-scale rulemaking to do so. EPCA does not require that DOE evaluate each of the factors in 42 U.S.C. § 6295(o) when making a determination not to amend standards. Instead, EPCA requires only that DOE conduct a quicker, though still thorough and data-supported, analysis under 42 U.S.C. § 6295(n)(2), as incorporated by reference in 42 U.S.C. § 6295(m)(1)(A) (regarding the “Amendment of Standards”).

4. Based on the data and information gathered in response to the initial RFI, DOE should decide whether to pursue potential new or amended standards.⁹ If, based on the data and information it receives through pre-rulemaking stakeholder engagement and the RFI, DOE decides that new or amended standards are unlikely to be justified based on the factors in 42 U.S.C. § 6295(n)(2), DOE should issue a final determination not to amend standards. Under EPCA, no additional rulemaking steps are necessary.

DOE may want to clarify just how it balances the various factors that lead to a conclusion that proposed standards are economically justified under 42 U.S.C. § 6295(o)(2)(B). In prior rulemakings, NEMA documented a number of final rules where DOE found that there was a significant negative impact on industry net present value attributable to a final rule, and a very low projection of energy savings over a 30 year period from that final rule.¹⁰ These represent instances where the balance may not have been weighted in the manner that Congress would have expected and the “need for national energy and water conservation”, 42 U.S.C. §6295(o)(2)(B)(VI), not properly assessed in light of the impact on domestic manufacturing

If DOE determines that more information or analysis is needed to determine whether new or amended standards are justified, DOE can move forward with a rulemaking process. Based on the information it receives in the RFI and any other necessary stakeholder engagement, DOE should, at this point, decide whether it is best to pursue potential new or amended standards through a negotiated rulemaking or through a notice and comment rulemaking process.

5. If DOE believes that a negotiated rulemaking is the best path for determining whether new or amended standards are justified, DOE should initiate the Appliance Standards and Rulemaking Advisory Committee (ASRAC) process. We note, however, that nothing should preclude negotiated rulemaking from starting earlier in the process if initiated by

⁹ Section 4(c) of the current Process Improvement Rule envisions a screening analysis and assessment of candidate standards to assess whether amended standards will eventually lead to a justified standard amendment. The Joint Commenters agree with the underlying policy of early engagement, but are proposing an even more streamlined early assessment based on the presumption that standards do not need amendment unless DOE or stakeholders identify significant changes since the last rulemaking.

¹⁰ See NEMA Comments dated June 30, 2014 in Docket 2011-STD-0006 at pages 4-5 (discussing Graph I and Table 1 in Appendix 1).

interested parties. And, similarly, nothing should preclude interested parties from engaging in informal negotiation at any point in the process.

6. If, after receiving feedback from the RFI and discussing the potential for negotiated rulemaking with interested parties, DOE believes that negotiated rulemaking would not be fruitful, DOE should proceed with normal notice and comment rulemaking by publishing a notice of data availability notifying stakeholders of the availability of a preliminary technical support document (pre-TSD) and provide an opportunity for comment. This step should be mandated by the updated Process Rule. While DOE has frequently provided a pre-TSD, there have been instances where this vital step was skipped, to the detriment of stakeholders and the Department. The pre-TSD initiates a vital exchange of information early in the rulemaking process. After considering comments on the pre-TSD, DOE could proceed with a proposed rule (accompanied by a technical support document) and provide the public with the opportunity to comment. A 75 day comment period on a proposed rule would provide commenters with a better opportunity to provide meaningful comments and data to DOE than the typical 60 day comment period.
7. After engaging in negotiated rulemaking or formal notice and comment rulemaking (or a hybrid of the two as has happened on several occasions), DOE should issue a final rule.¹¹ It is possible that, after engaging in negotiated or notice and comment rulemaking, DOE could still determine that new or amended standards are not justified. It is also possible that DOE would establish new or amended standards in the final rule.

III. A Modernized Process Rule Should Specifically Address Products Identified as “Covered Products” by Rule.

The Process Rule should specifically address several issues with respect to coverage determinations creating new “covered products” pursuant to 42 U.S.C. § 6292(b) and the initial regulation of such products.

The burdens imposed by EPCA regulation—indeed, even the burdens associated with the development of energy conservation standards—are considerable. EPCA specifically identifies a wide range of products for which Congress considered these burdens to be justified. In addition, EPCA grants DOE the authority to identify additional appropriate targets for EPCA regulation by rule. In exercising this authority, DOE should recognize that EPCA regulation is strong medicine that was not intended to be administered lightly. As a result, DOE’s authority to identify new “covered products” by rule does not extend to any or all energy-consuming products that have escaped Congressional notice; it extends only to products for which EPCA regulation is “necessary or appropriate” to the achievement of EPCA’s purposes. 42 U.S.C. § 6292(b)(1)(A). In addition, DOE’s authority to identify new “covered products” is limited to products that consume at least enough energy to satisfy a stated minimum energy consumption criterion. *See* 42 U.S.C. § 6292(b)(1)(A).

¹¹ DOE asked for comment on the use of direct final rules and we address direct final rules in more detail below in Section VI.

The nature of the express constraints on DOE’s authority to identify new covered products by rule make it clear that coverage determinations can only be made on a product-specific basis, with each new covered product being defined separately—and with sufficient clarity to ensure that products serving different purposes are not treated as a single covered product—and with each product individually satisfying the minimum energy consumption criterion and qualifying as a “necessary or appropriate” target for regulation as EPCA requires. In view of DOE’s failure to satisfy these requirements in the past,¹² the Process Rule should be amended to require that proposed and final coverage determinations under 42 U.S.C. § 6292(b) specifically identify each of the products at issue and provide a separate justification for the coverage of each.

The Process Rule should also be amended to require that coverage determinations be finalized before any labeling, standards, or test procedure rulemaking begins. This approach is necessary, because it is virtually impossible to address issues of substantive regulation until the products at issue have been clearly defined. At best, lack of clarity as to coverage produces unnecessary confusion and results in an enormous waste of resources as DOE and stakeholders seek to identify and address issues relating to products that are not ultimately covered; at worst, it can lead to a failure to address critical issues relevant to “covered products” that are not clearly identified as such.¹³ In any event, it is impossible for DOE to prepare a proper regulatory analysis—or for stakeholders to properly assess the merits of proposed regulatory action—until the products at issue have been clearly identified. Accordingly, a final coverage determination must be in place before rulemaking to impose substantive regulation on test procedures or energy conservation standards is commenced. The Process Rule should specifically require a reopening of comment on the justification for a coverage determination in the first rulemaking in which substantive regulation is imposed, but the scope of coverage must already be clear, and—should DOE conclude that broader coverage is warranted—a new coverage determination must be proposed and finalized before rulemaking to regulate the broader range of products is initiated.

IV. DOE Need Not Conduct Retrospective Review Of Current Standards.

DOE requested comment on whether, and if so how, DOE should perform a retrospective review of current standards and associated costs and benefits as part of any pre-rule process. The Joint Commenters understand that the actual impact and energy savings attributable to the current standard is highly relevant. That said, we do not support a separate process to do a retrospective review of current standards. Such a review will essentially be another rulemaking and will significantly draw out the regulatory process.

¹² For example, DOE’s now-withdrawn proposed coverage determination for “hearth products” was so broadly-stated that it would have combined products as diverse as indoor fireplaces, gas lights, and patio heaters to create a single “covered product.” *See* 78 Fed. Reg. 79638 (December 31, 2013).

¹³ In the absence of DOE action to cover a product, where there is a broad interest at the state level to regulate this same product, it is often in the national interest for the Federal government to occupy the field and preempt state action to avoid patchwork of state standards before DOE has the opportunity to act.

For a retrospective review of current standards to be meaningful, it would need to evaluate consumer impact, energy savings in the field, and manufacturer impact. This would mean collecting data on actual implementation costs from manufacturers which will impose an additional burden. In addition, it will be difficult to evaluate the opportunity cost of manufacturers' devotion of resources to energy efficiency (including regulatory compliance costs) as opposed to other options, including product utility innovation, investments to access new markets, and other responses to domestic and international competition. And collecting accurate energy cost-savings data from consumers presents a particularly onerous challenge. In addition to manufacturer and consumer data, DOE would also need to somehow determine whether the projected energy savings were achieved which would also present a significant challenge. Thus, regular, mandatory retrospective review will add burden, cost, and delay to the rulemaking process and will serve no real benefit.

Importantly, commenters always have the ability to comment on the current standards' associated costs and benefits and DOE must respond to comments it receives. Thus, commenters can always raise views on the impact of current standards and DOE can respond without the need to dedicate its limited resources to obtaining the necessary data to support a retrospective review on its own. There will certainly be times when this analysis will be necessary in whole or in part.

What the Joint Commenters do support is an inquiry at an early stage of a DOE regulatory action about what if anything has changed since a previous DOE appliance efficiency standards final rule was adopted. The DOE's statement in the Direct Heating Equipment rule suggested the value of such an approach:

DOE has determined that energy conservation standards should not be amended for direct heating equipment (DHE). DOE has concluded that the DHE market characteristics are largely similar to those analyzed in the previous rulemaking and the technologies available for improving DHE energy efficiency have not advanced significantly since the previous rulemaking analyses In addition, DOE believes the conclusions reached in the April 2010 Final Rule regarding the benefits and burdens of more stringent standards for DHE are still relevant to the DHE market today. Therefore, DOE has determined that amended energy conservation standards would not be economically justified.¹⁴

V. The Process Rule Should Reflect A Strong Preference For Negotiated Rulemaking.

DOE sought comment on whether the Process Rule should be amended to include the use of the negotiated rulemaking process.

The Joint Commenters support the negotiated rulemaking process and believe that the current process is operating well. To the extent that DOE addresses negotiated rulemaking in the amended Process Rule, we suggest that the status quo be memorialized and formally

¹⁴ 81 FR 71325 (October 17, 2016).

incorporated into the broader context of rulemaking procedure. While the Joint Commenters do not find it necessary to formalize the negotiated rulemaking process, and because a preference for negotiated rulemaking is currently expressed in the language of the Process Improvement Rule, we recognize value in a clarifying how negotiated rulemaking fits in to the overall procedure of the updated Process Rule.

The current language of the Process Rule alludes to a consensus rulemaking process. One of the prologue “Objectives” includes the following support for consensus standards:

“Support efforts to build consensus on standards. The Department seeks to encourage development of consensus proposals for new or revised standards because standards with such broad-based support are likely to balance effectively the economic, energy, and environmental interests affected by standards. Under the guidelines in this appendix, DOE will support the development and submission of consensus recommendations for standards by representative groups of interested parties to the fullest extent possible.”

The Process Improvement Rule currently contains several provisions codifying support for negotiated rulemaking. Section 4 “Process for Developing Efficiency Standards” requires that DOE consider consensus stakeholder recommendations. Section 5 states that DOE **will** propose a consensus recommendation submitted by a breadth of interested parties. Section 8 “Joint Stakeholder Recommendations” sets forth the process by which the DOE will accept consensus recommendations, giving “substantial weight” to consensus recommendations. The Joint Commenters support the current Process Rule’s strong support and preference for negotiated rulemaking and we strongly urge DOE to retain these provisions in a modernized Process Rule.

DOE also sought feedback on how it can improve its current use of the process as envisioned by the Negotiated Rulemaking Act.

If DOE intends to address negotiated rulemaking in the updated Process Rule, DOE should rely heavily on the current processes and procedures that are already established by the ASRAC and should incorporate this reliance into the Process Rule. At the time that the 1996 Process Improvement Rule was drafted, the ASRAC had not yet been convened, but the underlying principles and policies that informed the original language of the Process Improvement Rule are currently embodied in the formal process that has subsequently developed under ASRAC: a breadth of participation from interested parties, effective and efficient proceedings, support from agency staff, all intended to result in a balanced and informed recommendation to the Department. For avoidance of any doubt, a balanced recommendation from interested parties should include the manufacturers of the candidate products for regulations at issue. This will ensure the most informed and impacted parties have a seat at the table.

The underlying principles should remain intact, but the language of the updated Process Rule may have to be amended to acknowledge both the formalized ASRAC negotiated rulemaking process as well as informal negotiations that result in consensus recommendations.

Section II of these comments address the Joint Commenter’s comprehensive recommendation for a multi-step process for the development of energy conservation standards, and negotiated

rulemaking is one potential step in that process. Included in our recommendation is the basic framework that:

1. DOE publishes a Notice of Six-Year Review Assessment, inquiring whether standards should be amended; and
2. In response to comments on that Notice, DOE can decide either to publish a notice of determination not to amend standards or to pursue amended standards. In the event DOE selects the latter, there are two general paths to promulgate amended standards (a) initiate traditional notice-and-comment rulemaking or (b) conduct a negotiated rulemaking pursuant to the ASRAC process. At the point that DOE is deciding the best path, the following factors should militate in favor of ASRAC-led formal negotiated rulemaking:
 - Stakeholders commented in favor of negotiated rulemaking in response to the initial rulemaking notice;
 - The rulemaking analysis or underlying technologies in question are complex, and DOE can benefit from external expertise and/or real-time changes to the analysis based on stakeholder feedback, information, and data;
 - Standards that have already been amended one or more times;
 - Stakeholders from differing points of view are willing to participate; and
 - DOE believes that the parties may be able to reach an agreement.

If DOE determines that a negotiated rulemaking is viable, then DOE should make a recommendation to the ASRAC or support an interested party's recommendation to the ASRAC that the committee form a working group to negotiate a term sheet that will be submitted to DOE as a consensus recommendation.

As can be seen in more detail in Section II and described in Appendix A, one of the underlying policies that should inform the updated Process Rule is stakeholder engagement during the initial data-development phase. The face-to-face negotiations of the ASRAC working group would satisfy the requirements of early stakeholder engagement. Therefore, if DOE were to accept a term sheet from the ASRAC committee, then the next procedural step would be for DOE to take that term sheet and either draft a notice of proposed rulemaking for comment, or to move forward with a Direct Final Rule, if suggested by the ASRAC working group.

DOE sought feedback on a variety of other issues which are addressed below:

- a. *Should the Process Improvement Rule be amended to provide for use of facilitator for each negotiated rulemaking?*

While the use of a facilitator is generally helpful, we have not identified the failure to assign a facilitator to be a problem that requires addressing in the updated Process Rule. Our observations have been that qualified, engaged facilitators lend substantial value to the negotiations, but an unqualified or unskilled facilitator can be a hindrance.

- b. *Should the Process Improvement Rule be amended to ensure that all reasonable alternatives are explored in the negotiated rulemaking process, including amending standards as well as not amending standards, and alternatives that would affect different stakeholders differently?*

The current state of negotiated rulemakings already provides for the possibility of considering all reasonable alternatives to amended standards. There is nothing to prevent the parties to a negotiation from raising all possible options during the course of discussions. From a practical perspective, the Joint Commenters foresee a framework where DOE more readily uses its authority to issue Notices of Determination that no amended standard is required. DOE has the statutory authority to issue such a notice early in the six-year review assessment process under 42 U.S.C. §6295(m)(1)(A). If DOE properly uses such authority to efficiently address those products for which no-amended standards are the appropriate outcome, then it is likely that negotiations will be conducted for those products where an amended standard is at least one possible, if not likely, result of the negotiation. However, a vital element of a negotiation is that each party participate in good faith, which involves a willingness to hear all possible options and to be willing to compromise to reach consensus. Possible options will include circumstances where the efficiency minimums for at least some product classes or subgroups of a category of equipment will not increase. Product classes were created to support the principle that not all products can meet consumers' needs as efficiency minimums rise. This is an important factor to be preserved during the course of negotiated rules.

- c. *Should the Process Rule be amended to include the use of the Direct Final Rule mechanism at the end of the negotiated rulemaking option?*

The Direct Final Rule mechanism is an important aspect of negotiated rulemakings. Negotiations can take two forms: formal ASRAC working group recommendations and informal consensus recommendations made by interested parties, as is contemplated by the statutory provision addressing Direct Final Rules. *See* 42 U.S.C. 6295(p)(4) (“On receipt of a statement that is submitted jointly by interested parties... [, which] contains recommendations with respect to an energy efficiency or water conservation standard--...). In both cases, the parties have negotiated, compromised, and come to a consensus to make a recommendation to DOE about a rulemaking. As is currently stated in the Process Improvement Rule, consensus proposals are preferred “because standards with such broad-based support are likely to balance effectively the economic, energy, and environmental interests.” The Joint Commenters support the principle that stakeholders can engage directly with DOE and each other during negotiations, and if the parties agree, the Direct Final Rule is a valuable method by which stakeholders can have a direct influence on those regulations that will directly impact them. If DOE includes a reference to the Direct Final Rule in the updated Process Rule, it should acknowledge that the Direct Final Rule is a valuable potential option available to both ASRAC working groups as well as other parties engaged in informal negotiations.

VI. Direct Final Rules Are A Useful Mechanism To Promulgate Rules Upon Which Representative Stakeholders From A Variety Of Different Viewpoints Agree.

The means by which the Secretary can establish a final rule for an energy conservation standard through the Direct Final Rule process authorized at 42 U.S.C. §6295(p)(4) *can* be an efficient, cost-effective regulatory process for both the government as well as the stakeholders who participate in the rulemaking process when the statutory text is followed. Pursuant to that process, a group of “interested persons that are fairly representative of relevant points of view (including representatives of manufacturers of covered products, States, and efficiency advocates) as determined by the Secretary” (42 U.S.C. § 6295(p)(4)) will have taken the time in advance of or during the rulemaking process to exchange views and reach a common or “joint” understanding of the maximum energy use or minimum energy efficiency metric that reasonably strikes a balance between the benefits and burdens of mandating that metric, the maximum improvement in energy savings, and technological feasibility in the manner envisioned by 42 U.S.C. § 6295(o). That joint understanding should carry substantial weight with the Secretary given the competing interests that are likely to have been involved in submitting a Statement to the Secretary. At a minimum, the “relevant points of view” are likely to reflect the views of the persons who will bear the heaviest burden of implementing the regulatory mandate and the responsibility for certifying compliance (manufacturers, specifically those who make and use the covered product), the persons who are active in promoting the maximum improvement in energy savings (energy efficiency advocates), and representatives of the country’s citizens who are expected to realize net benefits (benefits net of burdens) from a mandatory rule (States).

The statutory text still requires the Secretary to make a number of judgments before proposing to and ultimately establishing the “recommended standard” in the joint statement as “the standard established in the final rule”:

- That the Statement has been “submitted jointly by interested persons that are *fairly representative of relevant points of view* (including representatives of manufacturers of covered products, States, and efficiency advocates)”
- “[T]hat the recommended standard contained in the statement is in accordance with subsection (o) of this section or section 6313(a)(6)(B) of this title, as applicable”
- Whether to “withdraw the direct final rule if the Secretary receives one or more *adverse public comments relating to the direct final rule under subparagraph (B)(i) or any alternative joint recommendation*” because “based on the rulemaking record relating to the direct final rule, the Secretary determines that *such adverse public comments or alternative joint recommendation may provide a reasonable basis for withdrawing the direct final rule under subsection (o) of this section*” (emphasis added).

While the Direct and Final Rule process actually begins with a Joint Statement from interested persons that are “fairly representative of relevant points of view,” it does not end there. There is a statutory pathway for the Secretary to receive all points of view, including persons that did not participate in submitting the Joint Statement. If the Secretary concludes that the Joint Statement is meritorious, the proposed Direct Final Rule is “published simultaneously with a notice of

proposed rulemaking that proposes a new or amended energy conservation standard that is identical to the . . . recommended standard.” 42 U.S.C. §6295(p)(4)(A)(i). By this means, the Direct Final Rule process takes advantage the Notice and Comment mechanism enshrined in the Administrative Procedure Act, and ultimately the benefits of this process depend to a significant degree on the merits of the Joint Statement in satisfying the Secretary that the “statement is in accordance with subsection (o)” of section 6295 of Title 42 and the merits of any “adverse public comment.” See 42 U.S.C. §6295(p)(4)(B)(“The Secretary shall solicit public comments with respect to each direct final rule . . .”).

The Joint Commenters do not see any unique weaknesses associated with direct final rules. The weaknesses of the process are indistinguishable from the weaknesses inherent in any rulemaking process under the Administrative Procedure Act: non-participation in the rulemaking by ostensibly interested members of the public or error of judgment or legal error by the Secretary.

DOE sought comment on what constitutes the “recommended standard contained in the Joint Statement” and the scope of any Direct Final Rule. The Joint Statement should include proposed text reflecting how the standard would be written or amended. The Joint Statement should include references to types or classes of covered product to which the proposed standard would apply and any definitions for those types or classes of covered product. The Joint Statement could come in different forms, such as in the form of a term sheet from an ASRAC working group or a submission/petition to DOE from joint stakeholders resulting from an informal negotiation.

DOE employs a balancing test when considering adverse comments in response to a Direct and Final Rule that weighs the substance of all adverse comments received against the anticipated benefits of the Consensus Agreement and the likelihood that further consideration of the adverse comments would change the result of the rulemaking. DOE sought comment on the balancing test and what would constitute a change in results sufficient to withdraw the direct final rule. DOE is correct that it is the “substance” or quality, not quantity of adverse comments received that should determine whether to withdraw a Direct Final Rule. This is true whether there is one adverse comment or several. However, it is not the “anticipated benefits of the Consensus Agreement” against which these adverse comments must be measured, but whether the adverse comments traverse the conclusion that “the statement is in accordance with subsection (o) of [section 6295] or section 6313(a)(6)(B) of this title, as applicable.” So just as the Direct Final Rule process depends upon the merits of the Joint Statement in satisfying the Secretary that the “statement is in accordance with subsection (o)” of section 6295 of Title 42, the adverse comments must merit concluding that the joint statement is not “in accordance with subsection (o) of [section 6295] or section 6313(a)(6)(B) of this title, as applicable.”

At a certain level, the Secretary could consider the adverse comments in the analysis underlying the joint Statement, and conclude that, even considering the adverse comments, the proposed standard in the joint Statement remains economically justified “in accordance with subsection (o).” In this way the statutory text in paragraph 42 U.S.C. § 6295(p)(4), which governs direct final rules, is consistent with the question whether the adverse comments would change the result of the rulemaking. The Secretary would be obliged under the Supreme Court’s *State Farm*

decision,¹⁵ which requires regulatory agencies to respond to comments, to explain the “reasoned decision making” that led to the agency’s conclusions.

DOE sought comment on what the nature and extent of adverse comments should be that would provide a reasonable basis for withdrawing a Direct Final Rule and lead to further rulemaking.

The statutory text indicates that the adverse comments must necessarily address some component of subsection (o) of Section 6295, and that primarily, if not exclusively, refers to the components of section 6295(o)(2)(B)(i) that lead to the determination that a standard is “economically justified” and whether the proposed standard represents the maximum improvement in energy savings that can be economically justified. As manufacturers are—at a minimum—included in the group submitting the joint Statement, it is unlikely, though not impossible, that “technological feasibility” will be part of an adverse comment.

There are certain types of comments which, though negative or unresponsive in nature, should not rise to the level of an adverse comment. Examples include comments that were already discussed and addressed in a negotiated rulemaking or in a petition, comments that are not directly related to the issues, and comments that are not supported by data.

DOE also sought comment on what the composition of the group of interested persons that are “fairly representative of relevant points of view” should be that would qualify it to submit a Joint Statement with Recommendations for consideration as a Direct Final Rule. DOE also asked whether it should ensure that all relevant points of view are taken into account before issuing a Direct Final Rule

At a minimum, the relevant points of view include “representatives of manufacturers of covered products, States, and efficiency advocates”,¹⁶ but as noted above, the Secretary is ultimately responsible for determining whether relevant points of view have been heard. The statutory text specifies that the group of interested persons must be “*fairly representative* of relevant points of view,” and, by dictionary standards, “fairly” means “for the most part” or “to a high degree.” It cannot practically mean “every point of view;” otherwise there would be no need to seek public comment on the proposed standard as required by the statute. *See* 42 U.S.C. § 6295(p)(4)(B). Thus, by its text, the statute does not require the Secretary to ensure that “*all* relevant points of view be taken into account before” *proposing* “a new or amended standard that is identical to the standard established in the final rule to establish the recommended standard.” 42 U.S.C. § 6295(p)(4)(A)(i). The Secretary can make an initial determination of how “fairly” the group represents the relevant points of view based on the identity of the persons submitting the Joint

¹⁵ *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29 (1983).

¹⁶ We submit that Congress expressly identified these groups at a minimum for the reasons stated in our opening paragraph: these are representatives of “the persons who will bear the heaviest burden of implementing the regulatory mandate and the responsibility for certifying compliance [manufacturers], the persons who are active in promoting the maximum improvement in energy savings [energy efficiency advocates], and the country’s citizens who are expected to realize net benefits (benefits net of burdens) from a mandatory rule [States].”

Statement, and can reassess that initial determination after the public comment period has expired.

Moreover, it is not always possible or practical for all parties that may have relevant points of view to participate in the development of a joint statement that is submitted to DOE. Nevertheless, as discussed above, there are several points at which other parties not included in a joint statement can participate in the process.

VII. Proper Development, Application, And Sequencing Of Test Procedures Greatly Reduces Regulatory Burden And Ensures Energy Conservation Standards Are Supported By Sound Data.

DOE sought comment on whether the provisions of the Process Rule regarding the issuance of a final test procedure rule before issuing a proposed standards rule should be amended to further ensure that the Department follows this process in developing test procedures and standards. DOE specifically asked about the development of a schedule for considering whether to amend a particular standard, and whether that schedule should include consideration of any test procedure changes that would result in the finalization of any changes prior to the issuance of the proposed standards rule.

Never-ending regulatory churn is not limited to standards rulemakings under EPCA—test procedures must be reviewed every seven years. Just as standards do not always need to be amended, test procedures do not always need to be revised.¹⁷ EPCA does not require test procedure amendment every seven years. It requires test procedure review every seven years. And EPCA contemplates that a result of that review could be that DOE determines no revision is necessary—42 U.S.C. § 6293(b)(1) provides that, after reviewing the test procedure for a covered product, DOE could amend the test procedure if it “determines that amended test procedures would more accurately or fully comply with the requirements of paragraph (3),” or it could publish a “determination not to amend the test procedure.”

Accordingly, in the early phases of rulemaking, DOE should seriously consider whether or not a test procedure requires amendment and, if it does not appear to require amendment should make a determination not to amend it early in the rulemaking process. Similar to the process we described above for standards amendments, DOE should take a quick look at whether test procedures need to be amended based on the criteria in 42 U.S.C. § 6293(b)(1). In deciding whether to amend test procedures an updated Process Rule should place a strong focus on the additional test burden amendments would place on manufacturers and whether the burden is balanced by accuracy as well as the technical need for the amendments.

¹⁷ We note that manufacturers can seek test procedure waivers to address new technology or instances in which the test procedure does not accurately portray energy efficiency, energy use, or water use. It would be useful if DOE could introduce an industry-wide waiver process for issues that are common across manufacturers. An example is the expansion of the clothes washer load size table which has had to be done on a case-by-case basis to date.

EPCA requires that compliance with a new or amended standard must be measured using a defined test procedure, and the current Process Improvement Rule requires test procedures to be complete before standards are proposed. Nevertheless, DOE has failed to publish final test procedures before proposing standards. Minimally acceptable engineering analysis and sound policy conclusions can only be based on a known and final test procedure that government, manufacturers, and other stakeholders have had the opportunity to use in evaluating design options and proposed standard levels.¹⁸ Otherwise, all parties face a veritable Tower of Babel and are not able to meaningfully communicate with each other. This requirement is meaningless if a test procedure is not finalized well before a proposed rule is issued, much less finalized, so that all stakeholders can evaluate the significance and the meaning of the possible standards.

Specifically, an updated Process Rule should continue to require that DOE finalize test procedures before beginning a standards rulemaking. If test procedures are amended, the Process Rule should only allow a standards rulemaking to be initiated six months after publication of a final test procedure rule. (For new test procedures, especially for newly covered products, more time—perhaps one year—is likely needed between the finalization of the test procedure and the start of a standards rulemaking). That time is critical for manufacturers to gain experience with the new test procedure and to test products so that they can meaningfully participate in the early phases of the rulemaking process and assess the stringency of any proposed standards.¹⁹ We note that these requirements are meaningless if DOE does not abide by them. Accordingly, these requirements, and indeed the full Process Rule, should be binding on DOE.

The Joint Commenters understand that it can be difficult to finalize test procedures before initiating a standards rulemaking and still comply with EPCA’s regular regulatory review mandates, particularly because the mandatory standards and test procedure review timelines are on different schedules. That is why, as discussed above in Section II, the Process Rule should require DOE to engage in a planning and prioritization process through notice and comment. Only by determining early on which test procedures and standards to dedicate its limited resources and planning a timeline on which test procedures are completed well in advance of the publication of a request for information on energy conservation standards can DOE provide the regulated community with certainty and meet its statutory obligations.

DOE also asked how it can incorporate any potential cost and benefit impacts of the test procedure requirements in the decision making for any new or amended energy conservation standards levels. First, as discussed above, DOE can only do this if it engages in standards rulemaking based on a final and known test procedure. Second, DOE must understand that, because energy conservation standards are increasingly more stringent, test-to-test, lab-to-lab, and unit-to-unit variation become more important. Test procedure and manufacturing variation

¹⁸ Likewise, DOE should not allow more than one test procedure to demonstrate compliance as that undermines EPCA’s intent to allow consumers to compare products.

¹⁹ In the rare case that a test procedure must be revised before or during a standards rulemaking process, DOE should ensure that manufacturers have an appropriate amount of time to discover any impact those changes may have on a proposed standard.

mean that manufacturers are likely to conservatively rate products to ensure they comply with the standards. This has two results. First, as standards become more stringent, it is increasingly difficult to rate conservatively. This means that the risk of non-compliance is higher, which increases costs for manufacturers. Second, because of the need to conservatively rate, standards effectively become more stringent in practice. DOE needs to understand and account for these realities which impact not only cost, but technical feasibility, as it considers whether new or amended standards are justified and, if it proposes standards, which levels are justified. The best way for DOE to understand the particulars of these impacts is through pre-rulemaking stakeholder engagement with manufacturers of impacted products.

We also note that there are cases where test procedure amendments are required outside of a process to also amend the related energy conservation standard—either because of a technology development or in order to comply with EPCA’s seven year review schedule for test procedures which does not align with its six year review schedule for standards. In such cases, DOE should conduct statistically significant testing to analyze the impact of a test procedure change on measured energy or efficiency and exercise the flexibility EPCA provides per 42 U.S.C. § 6293(e) to adjust the standards to account for such changes. To do this, DOE should define a step in the modernized Process Rule for this analysis and should expressly reverse its interpretation that adjusting a standard to account for test procedure changes is prohibited by EPCA’s anti-backsliding provision.²⁰ That interpretation makes no sense—by definition the standards are to be adjusted in order to ensure that the change to the test procedure does not adjust their stringency.

VIII. Reliance on Voluntary Consensus Test Procedures Reduces Duplication And Burden.

DOE sought comment on whether the Process Rule should be amended to specify under what circumstances DOE would consider using an industry standard without modification for a given product type.

This question would be better crafted to inquire under which circumstances DOE should deviate from an industry consensus based standard test procedure—because adherence to the test procedure should be the norm, not the exception. First, consensus based test procedures are developed by engineering experts who can fairly evaluate the practicality of executing hundreds of tests with the necessity that the results of that test are repeatable, reproducible, and

²⁰ See, e.g., Energy Conservation Program for Consumer Products: Association of Home Appliance Manufacturers Petition for Reconsideration, Docket No. EERE-BT-PET-0053, 78 Fed. Reg. 21215 at 21218 (Apr. 10, 2013) (“Even if DOE had determined that the change in measured energy use as a result of test procedure provisions for the measurement of standby and off mode energy use were not *de minimis*, DOE could not adjust the standard to account for the increase in measured energy use, which would result in lowering the current standard by a corresponding amount. Such an adjustment would be prohibited by EPCA’s anti-backsliding provision, set forth in 42 U.S.C. 6295(o)(1). DOE’s authority to amend energy conservation standards in 42 U.S.C. 6293(e) specifically does not affect DOE’s obligation to issue any final rules as described in 42 U.S.C. 6295, including adherence to the anti-backsliding provision in 695(o)(1). 42 U.S.C. 6293(e)(4).”).

representative. When DOE takes a consensus test procedure and amends it before adopting it, DOE's end goal is to make the test procedure more accurate. While laudable, this goal overlooks the fact that the burden of conducting the tests rests squarely on the manufacturers and that consensus standards, such as those that go through the ANSI process, have been developed with broad and open participation. Frequently DOE's amendments have a negligible impact on the test results while significantly increasing the burden of executing the test. For example, simple adjustments add up to burdensome waste, such as for the Commercial Boiler Test Procedure where stakeholders submitted updated consensus standard AHRI Standard 1500-2015 to DOE for adoption, and DOE made multiple changes to the test procedure over the objection of stakeholder comments.²¹ Amendments included impractical adjustments such as tightening restrictions on inlet water temperature, despite the fact that manufacturers have no control over this data point because the water comes from municipal pipes. These requirements are resource intensive and burdensome but render little benefit in energy savings or accuracy.

As is contemplated by EPCA for commercial and industrial test procedures, DOE should only amend consensus based test procedures in narrow circumstances, supported by clear and convincing evidence. DOE's goal should not be to take an industry consensus based test procedure and make it "better"—rather, unless DOE can demonstrate that a consensus test procedure is scientifically unsound, then DOE should not replicate the work of expert engineers who execute the tests, and the open process that results in consensus procedures. The goal of the test procedure is not to extract every last residual potential energy savings—EPCA requires only that the test procedure be "reasonably" designed to measure energy efficiency/use. Energy savings are a boon, but the test procedure should be sound, repeatable, reproducible, and manageable to execute. Instead, of reworking consensus-based industry test procedures, DOE should participate in the development of the consensus based standard early on, if possible, and should adopt the test procedure as written.

Second, in many cases, relative comparability among products is more important than the degree to which the measurement reflects actual usage in the field. Accuracy is important, but the Joint Commenters are concerned about the influence of some stakeholders' unrelated interests on the energy conservation standard test procedure development.

Ultimately, the test procedure that DOE adopts should be the one that is developed by engineering experts, primarily manufacturers who conduct more tests than anyone else, bear the burden of conducting the testing, and benefit most from a repeatable test that provides comparable results and is manageable to conduct. Importantly, consumers also benefit from this process because repeatable and reproducible test procedures provide the most accurate results, allowing consumers to better compare products based on energy efficiency or energy use while keeping down the cost of regulatory compliance imposed by burdensome testing requirements.

Finally, as discussed below in Section XII regarding energy efficiency standards for commercial and industrial products, DOE has a statutory mandate to abide by the industry test procedure for commercial and industrial products and is prohibited from amending those test procedures. In

²¹ EERE-2014-BT-TP-006-051, 81 Fed. Reg. 89276 (December 9, 2016).

recent history, DOE has not complied with this statutory requirement, as was evident in the Commercial Water Heater, Commercial Refrigeration and Walk-in Cooler and Freezer, and Commercial Package Boiler Test Procedures.²² The update of the current Process Improvement Rule is a good opportunity to review and interpret the language of the law regarding industry consensus test procedures and DOE's mandate to adopt them so that DOE's procedures in the future more accurately track the intent of the statute.

42 U.S.C. § 6314(a)(4)(A) states: “With respect to [certain commercial and industrial equipment] the test procedures shall be those generally accepted industry testing procedures or rating procedures developed or recognized by the Air-Conditioning and Refrigeration Institute or by the American Society of Heating, Refrigerating and Air Conditioning Engineers.” Section (B) goes on to say that if the applicable consensus rating procedure is amended, then “the Secretary shall amend the test procedure for the product as necessary to be consistent with the amended industry test procedure or rating procedure.” The narrow exception to this requirement mandates that DOE demonstrate by clear and convincing evidence that the consensus test procedure does not “reasonably” reflect energy efficiency and is “unduly burdensome to conduct.” If the consensus standard “reasonably” measures efficiency and is manageable to execute, then DOE shall adopt it without modification.

This provision of EPCA is important because it is a direct mandate to DOE to adopt ASHRAE and AHRI consensus standards for certain commercial and industrial equipment as written and supports the policy of adopting consensus standards for all products. DOE is only permitted to change such test standards under narrow circumstances. As discussed above, the industry consensus standards are less likely to be burdensome to conduct because it is those who bear the burden of testing the equipment who are developing the testing methods. Notably, exacting accuracy for the test results is not mandated, rather the results need only be reasonably designed to produce test results which reflect energy efficiency. In order for DOE to deviate from the ASHRAE and AHRI standards for the above-listed products it must show by clear and convincing evidence that the AHRI or ASHRAE standard has failed both of the above tests. It is highly unlikely that any industry test standard developed by ASHRAE or AHRI would fail one of those tests—however; this particular provision was written merely in the event that such an anomaly was to transpire. One circumstance where DOE may be able to meet the high standard of clear and convincing evidence is if the stakeholders who developed the standard make a direct request to DOE to make amendments under extenuating circumstances. Otherwise, DOE should not duplicate the efforts of consensus standard development.

The statutory language is clear: “the test procedure shall be those” adopted by industry, and if such test standards are amended DOE “shall amend the test procedure for the product as necessary to be consistent” with the industry test procedure. The only time such discretion arises

²² Docket No. EERE–2014–BT–TP–0008 (Proposed Rule); EERE–2013–BT–TP–0025; EERE-2014-BT-TP-006-051

is after DOE has demonstrated by clear and convincing evidence²³ that the AHRI or ASHRAE test procedure does not reasonably measure energy efficiency and is burdensome to conduct.²⁴

DOE has a history of making amendments where it should have deferred to a consensus standard. An updated amended Process Rule should create a process that fairly incorporates the language and intent of the statute. The same policies and principles apply to consumer products because the rationale is the same—the consensus procedures have gone through a thorough process that is open and transparent and manufacturers have experience with the test. Even absent statutory mandate to do so, DOE can and should apply the same level of reliance on consensus based standards for consumer products. The updated Process Rule should reflect this policy.

IX. DOE Should Meaningfully Consider Cumulative Regulatory Burden.

DOE asked whether criteria should be added to an updated Process Rule for consideration of voluntary, non-regulatory, and market based alternatives instead of establishing standards.²⁵

The Process Rule should include cumulative regulatory burden analysis as a factor in DOE’s decision on a proposed and final energy conservation standard. Analysis of cumulative regulatory burden should not be a stand-alone analysis with no real impact. Instead, it should be a meaningful part of the analysis with the ability to impact the final rule’s outcome.

Manufacturers are subject to many, often simultaneous, regulatory requirements from not only DOE, but also EPA, the Federal Trade Commission, the Consumer Product Safety Commission, and the Federal Communications Commission among others. For example, the table below lists the proposed, final, and upcoming regulations for refrigerator/freezers from just these agencies, which are further complicated by court cases and decisions:

²³ See Section XII for an in-depth assessment of the high bar that the “clear and convincing” evidence standard sets for DOE.

²⁴ AHRI and ASRAE standards are specifically incorporated by reference into 42 U.S.C. § 6314(a)(4)(A), but the Joint Commenters note that the underlying policy of adopting consensus test procedures from ANSI accredited bodies should be reflected in the updated Process Rule, including test procedures promulgated by AHAM, NEMA, AMCA, and others.

²⁵ The Joint Commenters will address the question of whether market based standards should be considered in response to DOE’s separate RFI on Energy Conservation Standards Program Design; Docket No. EERE-2017-BT-STD-0059 and we incorporate those comments by reference here. In short, the Joint Commenters urge DOE to focus its resources on modernizing the Process Rule rather than on overhauling the Appliance Standards Program as contemplated in the RFI for Energy Conservation Program Design.

Agency	Regulation	Expected Compliance Date
EPA	SNAP,* Foam Blowing Agent	2020 (court decision requiring changes)
EPA	SNAP,* Refrigerant	2021 (pending court case)
EPA	ENERGY STAR (voluntary)	2014, 2017 update
DOE	Test Procedure Revision	2022
DOE	4 th Standards Update	2022
FTC	Revised EnergyGuide Label	2016, and again 2017

*Significant New Alternatives Policy Regulation to ban or allow certain hydrofluorocarbons as acceptable alternatives.

And that is just in the United States. DOE should remember and consider that manufacturers also must comply with international regulations and, in cases where the products are the same across the globe, these regulations also contribute to cumulative regulatory burden. Although DOE often lists rules impacting manufacturers in its analysis, it does not take the close look at the cumulative impact that we believe is warranted.

A true cumulative regulatory burden analysis should not only consider the sheer number of rulemakings to which appliance manufacturers are subject, but should also account for the timing and technical and economic relationship of those rulemakings. For example, DOE’s recent practice of amending the test procedure while at the same time proposing amended standards increases the burden on manufacturers in responding to DOE’s proposed rules. When the rulemakings parallel each other, it is difficult, if not impossible, to comment on the proposed energy conservation standard because the test procedure is not yet settled and manufacturers cannot determine how their products perform in relation to the proposed standards. Thus, we encourage DOE to consider manufacturers’ relative and cumulative research and development, testing, and certification burdens, which can be significantly higher when regulations from different agencies take effect in close proximity to each other. This can be especially problematic for industries that have access to only a small number of accredited labs, creating a “bottleneck” problem as industry is forced to comply with several largely unrelated requirements at once.

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, for example, 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 effective 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

In addition, DOE should consider voluntary, non-regulatory options in its analysis. DOE should not, however, assume that labeling is a less burdensome approach. Labeling and other forms of providing information, even without energy conservation standards, can require the same amount of testing and can have similar compliance risks.

X. To Ensure Energy Conservation Standards Are Supported By Sound Data And Not Unnecessarily Burdensome, DOE Must Correct Assumptions And Revisit Its Economic Analysis.

DOE sought specificity in the ways in which the Process Rule could be amended to improve DOE’s analyses and models, and to achieve burden reduction and increased transparency for regulated entities and the public. DOE sought comment on how to make the analysis and models more accessible to the public. DOE also sought comment on increasing the accuracy of the projections it makes within its analysis.

The Joint Commenters propose that this can be done by:

1. Beginning the analytical process with a more open discussion of key variables and model inputs;
2. Reevaluating the DOE analytical models so that they are:
 - a. Simpler and more directly focused on the key variables driving the selection of standard levels; and
 - b. Open in a way that commentators from industry, environmental groups, and other affected parties can test alternative assumptions and, therefore, make more informed comments
3. Developing a method to adjudicate conflicting modeling assumptions in a manner that is open, transparent and involves expert review; and
4. Using effectively the peer review processes already called for in the Process Rule.

The current DOE process suffers from an excessive focus on detailed economic modeling and a deficiency in thought about what will really affect the adoption of more efficient technologies. As a result, DOE gets trapped into a narrow view of options in a way that is virtually impossible to correct later in the process. This is not a flaw in the major models used by DOE, although they do have significant flaws, but in the framing of the right questions before any modeling starts. We provide some examples of this below with respect to the Life Cycle Cost model.

The DOE analytical approach relies on three principle models (Life Cycle Cost, National Impact Analysis and Manufacturer Impact or GRIM) as well as several subsidiary models, such as a shipment forecasting approach embedded in the National Impact Analysis, a national employment model and others. The National Impact Analysis (NIA) and the GRIM are

relatively straightforward models whose structure changes little across regulations. There are multiple improvements that can be made in these two models, but their basic structures are reasonable.

The Life Cycle Cost (LCC) model, on the other hand, is excessively complex, built in such a way that it constrains the options available for all parties to consider, published in a manner that makes checking it virtually impossible and replete with questionable assumptions. Yet the question of effects on consumers is at the core of DOE's decision process. Given the limitations of the current LCC model, DOE needs to start over with a blank page and reconsider how to do consumer analysis. **We recognize that this will take time, and we do not wish to suggest that all rulemakings stop while this is being done. DOE is obligated to meet certain statutory deadlines and we are not proposing that this lengthy process delay DOE's ongoing work.** That said, because this is important work and will undoubtedly impact standards rulemakings, we respectfully request that DOE initiate the process quickly and engage in making changes as expeditiously as possible.

Consumer Analysis

The core analytical logic of the DOE consumer analysis is to start with a Screening Analysis of technical options, flowing through to estimated product costs and related unit energy consumptions. These costs and energy levels are then used to project economic effects on consumers. There are multiple other key inputs into the actual LCC model (operating hours, extrapolation from factory costs to retail prices, discount rates, equipment lifetimes, etc.) but the core logic is driven by the engineering option focus.

Early on in the history of DOE energy efficiency regulation, this structure may have made sense. It no longer does. In several recent regulations the critical issues affecting consumer economics and consumer impact were not driven by straightforward engineering and product cost analyses. For example:

1. The critical issue in the residential furnace rulemaking was whether a mandatory condensing standard made sense. The core factors in play are and remain the differential cost of installation for condensing versus non-condensing furnaces and the percentage of homes where there is no realistic opportunity to vent a condensing furnace. These two questions overwhelmed the product costs such as extra heat exchangers or specialty materials. The answers to those installation questions were to be found in analyzing the distribution of venting options in houses, probably through surveys; analyzing carefully of actual field experience in venting; understanding the reasons for the vast difference in actual usage rates of condensing furnaces in different climate regions; and understanding why or whether there seemed to be a natural plateau for condensing furnace share. Without an understanding of those issues, the LCC modeling was irrelevant and, ultimately, misleading.
2. The critical issue in the recent dishwasher rulemaking was how well potentially more efficient designs could clean dishes. First, the marketplace had already settled on the ENERGY STAR efficiency as the effective standard. Second, a quick review of possible

efficiency options above the ENERGY STAR level would have shown that almost all of the options would use significantly less water than current dishwashers, to the point where cleaning performance came into question. The economics of those options had been reviewed in previous rulemakings. The real issue was whether a dishwasher using those options would clean dishes acceptably. Again, rather than LCC modeling, the appropriate analytical task was to test cleaning performance.²⁶

3. In many cases, the economics are bimodal and the question is which side of that break is a reasonable base for setting a standard. In the recent central air conditioner and heat pump negotiation, the critical issue was whether to set a standard that effectively required multi-capacity or multi-speed systems. The answer to this came down to two critical issues: the portion of the housing inventory that would have air handlers capable of taking advantage of multi-capacity or multi-speed compressor units. Secondarily, the decision rested on the actual cost premium for such multi-speed or multi-capacity units. Answering the first question required understanding the inventory of furnaces and how that was likely to evolve given furnace fan standards. The answer to the second question required careful discussion of the engineering drivers to be sure that they were analyzed correctly. The first pass LCC analysis did neither of these and wound up being of little value in the negotiation.

The solution for all three of these cases would have been to have an open discussion of the issues *before* anyone had begun to touch any form of consumer economic model. DOE has let the structure of its model dictate the parameters of its analysis, rather than letting the key questions drive the structure and modeling approach.

Determining how best to fix this process should be done in a consensus manner integrating the views, perspectives and capabilities of all parties. The outline of one approach for rulemaking cycles after the initial one is:

1. During the pre-rulemaking stakeholder engagement phase discussed in Section II above, establish the critical issues likely to affect energy savings, consumer utility, economics or other factors:
 - a. Determine whether there are changes to the technical analysis performed for the prior rulemaking. This should include some combination of interviews with manufacturers and comments by other parties. Peer review is likely not possible here since virtually all “peer” experts are involved in the relevant industry in one form or another. Further, many manufacturers are constrained to maintaining the confidentiality of future technical directions in public.
 - b. Identify the key issues for further analysis, if any such analysis is warranted. This should be through some form of open, consensus-seeking process rather than review and comment where the decisions are made *in camera*.

²⁶ This is not to suggest that DOE should institute a cleaning performance test for dishwashers, but merely to indicate that DOE should have done a more thorough analysis of the proposed standards’ potential impact on cleaning performance during the proposed rule phase.

DOE should include what it has learned from pre-rulemaking stakeholder engagement in the Notice of Six Year Assessment so that it can receive further feedback to inform its decision on whether or not standards may need to be amended.

2. If DOE proceeds with a rulemaking for amended standards, DOE should develop and implement a research plan to provide data on the critical issues.
3. Create a model sufficient to analyze the relevant consumer data. This may or may not bear any resemblance to the current LCC.
4. If DOE proceeds with a rulemaking for amended standards, DOE should perform such other analyses as DOE requires, such as national and manufacturer impact.
5. When appropriate, use consensus-building negotiations to arrive at a recommended standard based on a shared understanding of the key issues and an expanded range of standards, other regulatory and marketplace initiatives. The Joint Commenters and DOE have found that consensus-driven approaches often yield better and more thoughtful conclusions.

Consistent with the Process Improvement Rule's goal of increasing the use of outside expertise, DOE should determine, on a case-by-case basis, the most appropriate experts and consultants to perform the research and analysis described in Steps two and three above.

The proposed approach, or some variant derived from a consensus process, will facilitate consensus building among interested parties by providing more realistic answers to relevant questions. It may not yield results that will drop seamlessly into traditional DOE Technical Support Documents or the DOE standard decision process. This, however, is a feature, not a bug. DOE will be well served by thinking harder and more creatively about non-standard based approaches as called for in the Process Rule's objective "(5) fully consider non-regulatory approaches."

Other Models

The other two main DOE models, the NIA and GRIM, have somewhat different issues from the LCC analysis and can be improved without wholesale redesign. First, the shipments analysis should be separated from the NIA and treated as a distinct model so that it can be more easily reviewed and commented on. Second, the models themselves should be designed to allow interested parties to modify assumptions and perform their own analyses. Thirdly, the linkages between the models should be made readily apparent to users so that modifications in one model can easily flow through into another. For example, changes to the current LCC model are not easily transported by users into the NIA, so it is difficult to determine the implications of, for example, changes in product costs, on national impacts. Similarly, changes in shipment assumptions do not flow easily into the GRIM making it difficult to assess the effects of those changes on manufacturer impact. These changes would increase transparency, as desired in the current Process Improvement Rule's objective (7).

The current shipment analysis is frequently based on an aging of the stock of products in the field. It has produced results that appear suspicious to manufacturers and that are out of sync with market conditions. It would be helpful to have a clearer, distinct shipment model so that it is easier for interested parties to test the actual implications of changes in shipment assumptions on national and manufacturer impact, in some circumstances, on life cycle cost.²⁷

Creating working spreadsheet models is one task; creating them so that they are readily usable by others is considerably more difficult. However, that difficulty is no excuse for opaque models that cannot be used by outsiders to test critical assumptions. Publishing a model that can be viewed but not really used is not “using transparent and robust analytical methods.” There are relatively straightforward steps that DOE can use to make its models accessible and usable by third-parties without excessive effort by DOE or its contractors.

The key is to begin by defining what variables interested parties are going to want to test. While this is a somewhat recursive process—it is difficult to know everything that should be examined until some results are available—there is now sufficient accumulated experience to make intelligent choices before modeling begins. DOE does recognize that some variables should be changed, for example it may offer options to change the rate of product cost reduction over time (learning curve) or differential energy cost scenarios. However, it never offers options to change product costs, discount rates, markups between manufacturers and the end customers, shipment levels, unit energy consumption, operating hours, etc. All of these are factors that various interested parties have commented on in past rulemakings. Those interested parties have no way of determining the degree of impact from any proposed changes in assumptions. Some of these items are visible in the models themselves, others (such as cycles per year for dishwashers) were buried in calculation formulas.²⁸ With minor effort, it will be possible to build LCC, NIA and GRIM models that explicitly recognize key variables of concern to interested parties and make it possible to test the effects of changes in those variables. The decision on what variables to make testable should rest with the interested parties, not solely with DOE or its contractors.

The standard version of the GRIM is a special case. It is routinely published in a locked form so that interested parties can make virtually no changes. DOE should simply end this practice and make a fully usable version of the GRIM.

Finally, the linkages between the models are not readily available to outside users. The LCC feeds data into the NIA and the GRIM and the NIA feeds shipment data into the GRIM. These linkages are virtually impossible to achieve by outside parties and are not readily duplicated.

²⁷ In the recent fan rulemaking, the fixed costs of developing and manufacturing a new fan were derived, in part, by allocating those costs over forecasted production volumes. The volume projections were drawn from a fan data base, not from the projected shipment volumes from the NIA. DOE needs an internally consistent process where shipment and other assumptions are shared between models and where users and commentators can test the implications of those assumptions.

²⁸ AHAM, Comments on Notice of Proposed Rulemaking for Energy Conservation Standards for Residential Dishwashers, Docket EERE-2014-BT-STD-0021, p.14.

Therefore, interested parties cannot understand the implications of product cost changes on national energy savings after those product cost changes work their way through the shipments analysis (to the extent there are elasticities built into the shipment model) and through the energy calculations. Recently the environmental advocates have pointed out that the manufacturer margin scenarios do not link back to the retail price calculations and, therefore, the lifecycle cost calculations for consumers. In some instances, it is not at all obvious that the data has transferred properly between the models.²⁹ DOE should make the linkages clear and open to effective public review and comment.

Conflict Resolution

Many of the Joint Commenters have long commented that there are serious problems with several key assumptions, especially in the LCC model including consumer discount rates, markups between the manufacturer and the consumer, fuel-switching assumptions, and the decision process implicit in the random assignment of base cases through the Monte Carlo process. In addition, some of the Joint Commenters have taken issue with the learning curve approach to future costs in the NIA and with the computation of the social cost of carbon. There has been no discernible progress in resolving these issues. The Joint Commenters recognize that the DOE staff is in a difficult position where its consultants say one thing and the commentators say another. Continually reiterating past arguments, however valid or invalid, is not going to resolve these questions.

DOE needs an outside, third-party process for resolution when it becomes necessary, drawing on the current Process Improvement Rule's strong recommendation for peer review. These issues have been contentious for years between manufacturers and DOE's contractors. DOE can resolve them through a serious process of peer review using a peer review panel jointly selected by advocates and manufacturers containing experts in environmental and energy economics and in consumer behavior and behavioral economics. To date, DOE's peer review has focused on the process undertaken by DOE's contractors, its efficiency and productivity, etc. These reviews have not focused on the actual content of analysis. To the extent that DOE has focused on the actual assumptions, it received comments:

“Reviewers do express some concern regarding “checks and balances,” in particular on the “economists’ selection of assumptions;” one reviewer would like to see more information on “where in the process (and how) these reality checks” are applied. Another reviewer notes that it is “very important to cross-check and apply industry experience to the review and verification of the data.””³⁰

²⁹ While not final, the data transferred from the LCC to the NIA model for the ASRAC Fan Working Group (Docket EERE-2013-BT-STD-0006-0192). The note to sheet “LCC Inputs” describes how the data transferred from the LCC model. However, the data in that sheet does not correspond to any data in the actual LCC model.

³⁰ DOE, Energy Conservation Standards Peer Review Report, February 2007, p. 18

These checks and balances are precisely what is missing in DOE's work. A sound peer review process where affected parties select the reviewers and where the focus is on content, not administrative process would be a huge step forward. The Joint Commenters are supportive of a regulatory process that is efficient, while also being informed and accurate. The Joint Commenters do not envision that a peer review process would be a necessary step the rulemaking process for each standard promulgated by the DOE. Now is the time to revisit the perennial questions that have been raised about DOE's assumptions and allow for outside experts to assess the validity of those assumptions and analyses and to make suggestions on improving models and the decision making process for future rules.

Peer Review

The current Process Improvement Rule specifically calls for a combination of peer review and review by experts.³¹ In practice, DOE has used the comment periods as a substitute for peer review and review by experts. This is a violation of the intent of the Process Improvement Rule. The rule intends that DOE rely on these experts to provide independent validation or guidance to DOE. Rather, DOE relies on its contractors, not the experts. DOE has not sought out independent experts to review the work of its contractors. Whenever outside commenters have questioned the work, DOE has routinely either ignored the substance of the comments or regurgitated its past explanations without reference to the substance of the comment.

It is time for DOE to follow the clear intent of the current Process Improvement Rule and establish true peer review panels to evaluate all information from DOE's contractors and the various commenting parties and provide some level of adjudication of these comments. DOE needs to open this process up substantially.

Ultimately, DOE has considerable discretion in the level at which it sets standards. Changing how the data is developed and how it is analyzed does not impinge on that discretion. However, DOE should be looking at correct analyses when it exercises its discretion. Bringing in additional outside economic and other expertise to advise DOE will only improve the bases on which DOE chooses to set standards.

XI. Certification, Compliance, And Enforcement Requirements Should Be Known Before Standards Rulemakings Are Promulgated.

DOE asked whether new or amended certification, compliance or enforcement rulemaking should be proposed and finalized at the same time as energy efficiency standards so that the agency can consider the full compliance costs when choosing the energy efficiency standards.

³¹ The Process Improvement Rule, Section 4(a)(2) calls for "DOE, in consultation with interested parties, will identify a group of independent experts and other interested parties who can provide expert review of the results of the engineering analysis and the subsequent impact analysis." And there are continuing references to comments by experts.

The Joint Commenters respond: Not necessarily. This reads like a make-work project proposal that may be unnecessary for the government to undertake, particularly in connection with many amendments (*i.e.*, proposing amended certification, compliance or enforcement rulemaking to be finalized at the same time as energy efficiency standards).

The better question, we believe, is under what circumstances would it make sense to finalize a certification compliance enforcement (CCE) rule at the same time that energy conservation standards are finalized? New standards that are not prescribed by Congress are likely one candidate for this proposal; amended standards that significantly expand the scope of products to which standards apply are probably another candidate for this proposal. A change in the parameter(s) by which energy use or energy efficiency is measured may be another candidate. However, a mere improvement in energy savings by lowering the maximum energy use or increasing the minimum energy efficiency with an amended standard probably does not warrant changes to the certification, compliance, and enforcement rules.

Early resolution of the CCE rule for covered products or equipment is desirable for other reasons as well, although it does not necessarily have to be at the same as a final energy conservation rule. Early resolution would enable DOE to quickly set up the templates used to provide certification and compliance information. Too many times these templates are made available on the eve of the compliance date of a final rule, and this delay, attributable to agency inertia, creates a separate set of burdens for companies who have to certify and comply. DOE should impose an obligation upon itself to have these templates up and ready for use no less than 6 months before a compliance date.

XII. The Process Rule Should Be Binding And Should Apply To Both Consumer Products And Commercial Equipment.

DOE asked whether it should make its compliance with the Process Improvement Rule mandatory. The short answer is ‘yes.’ The Joint Commenters appreciate that DOE has recently committed to following the current Process Improvement Rule. But it is too easy for DOE to unilaterally decide whether or not to follow the rule. As an example, in November 2010, DOE issued, without any notice or opportunity to comment, a unilateral statement (buried on DOE’s website) that waives portions of the Process Improvement Rule by indicating that, in “appropriate cases,” DOE will eliminate the early phases of the rulemaking process and move directly to notices of proposed rulemaking. To provide certainty to all stakeholders spanning across different administrations and staff, a modernized Process Rule should be binding on DOE (and, in the interim, DOE should treat the existing Process Improvement Rule as binding).

DOE sought comment on whether the Process Improvement Rule should be amended to clarify that it applies to commercial equipment.

Yes. First, we note that the language of the current Process Improvement Rule implies its application to commercial and industrial products and that to the extent that DOE has historically applied the Process Improvement Rule at all it has done so for energy conservation standards for both commercial and residential products. Thus, applying an updated Process Rule to commercial and industrial products would not significantly change how DOE currently operates.

Clarity on this point would be helpful for manufacturers and interested stakeholders for stability and consistency in the rulemaking process. The amended Process Rule should not only apply to both consumer products and commercial equipment, but it should also be binding on DOE for both product types as discussed above.

The manufacturers who must abide by energy efficiency regulations for consumer products are frequently the same entities who make regulated commercial equipment. There are fine distinctions between the statutory considerations for consumer products and commercial equipment, but the procedures for developing the energy efficiency standards are largely the same. Therefore, it makes sense to have one set of expectations for the development of energy conservation standards, regardless of whether the regulated product has residential or commercial applications. With the exception of ASHRAE 90.1 products, discussed below, there is no reason why the process for the development of commercial and residential energy conservation standards should be different. Notably, we cannot foresee any disadvantages to applying the current Process Improvement Rule or an amended Process Rule to commercial and industrial products.

DOE asked how ASHRAE products should be addressed if DOE amends the Process Improvement Rule to clarify that it applies to commercial equipment.

ASHRAE Standard 90.1 is an energy efficiency standard for certain commercial equipment drafted by a coalition of heating, air-conditioning, and refrigeration engineers, generally considered to be experts in their field. ASHRAE 90.1 commercial products have a unique place under EPCA. The language and intent of the statute reflects the underlying policy that the stakeholder-driven process of ASHRAE 90.1 is working and that DOE should defer to that process. *See* 42 U.S.C. §§ 6313, 6314. The Department should not be duplicating the efforts of industry engineering experts, and this principle is embodied in 42 U.S.C. § 6313, which states that 18 months after ASHRAE 90.1 amends its energy efficiency standards, “the Secretary shall establish an amended uniform national standard for the product at the minimum level specified in the amended ASHRAE/IES Standard 90.1.” ASHRAE Standard 90.1 represents a de facto consensus of a broad base of interested parties with experience and expertise. Amendments to the Process Improvement Rule should set apart ASHRAE 90.1 products and acknowledge the expectation that DOE will codify the uniform national industry consensus standards adopted in that Standard. As discussed in Section II, a general framework for regulations should consistently require some form of early stakeholder engagement for impacted parties. As with negotiated rulemakings, it would make sense that the development ASHRAE Standard 90.1 satisfies that requirement. Therefore, if ASHRAE Standard 90.1 is amended to increase minimum efficiency requirements for covered equipment, then DOE should act promptly to publish a Notice of Proposed Rulemaking with the expectation that the applicable ASHRAE Standard 90.1 levels will be adopted as a final rule within 18 months.

Under certain circumstances, DOE has the authority to amend energy efficiency standards for ASHRAE 90.1 products above the minimums set forth in the standard. Such inflation, however, is expressly discouraged by the language of the statute which requires DOE to demonstrate “clear and convincing evidence” that a more stringent standard will result in significant additional conservation of energy, is technologically feasible and economically justified. The

amendment of the Process Improvement Rule presents an opportunity for DOE to develop a cohesive interpretation of what the higher bar of “clear and convincing evidence” means for the promulgation of energy conservation standards. Without question, “clear and convincing evidence” is a significantly higher legal standard than the low bar of “arbitrary and capricious” to which all other agency discretionary determinations are made. Yet, in recent years, DOE has published rules inflating the national uniform consensus ASHRAE 90.1 energy efficiency standards developed by a body of stakeholder experts and has not taken any steps to demonstrate that their findings meet a higher threshold. For example, DOE increased the minimum efficiency for Single Package Vertical Units above the ASHRAE minimums contrary to copious comments to the contrary. The Single Package Vertical Unit (SPVU) rule is an example of an unnecessarily burdensome standard that has had a disproportionate effect on industry and small manufacturers in particular.³²

The amended Process Rule should acknowledge that the “clear and convincing standard” written into legislation is an express discouragement of using section 6313(a)(6)(A)(ii)(II) to inflate energy efficiency minimums above the ASHRAE minimums. The statute is clear. It states that DOE “shall” adopt ASHRAE 90.1 minimums. But if the Secretary wants to increase those minimums, it must first pass the significantly higher hurdle of demonstrating “clear and convincing evidence” to do so. In short, EPCA provides a statutory presumption that standards more stringent than those required by ASHRAE 90.1 are not necessary and that presumption can be rebutted only on the basis of clear and convincing evidence.

“Clear and convincing evidence” means that “the party must present evidence that leaves you with a firm belief or conviction that it is highly probable that the factual contentions of the claim ... are true. This is a higher standard of proof than proof by a preponderance of the evidence.” (Federal Civil Jury Instructions). The relevance of this standard cannot be overstated given that the primary bases for DOE’s analysis are not facts in evidence that are “highly probable ... [to be] true,” but assumptions, projections, and estimations. While the “clear and convincing” standard is more demanding than the “reasonable” standard required for non-ASHRAE rulemakings, it is worth noting that **an assumption is not even “reasonable” in the absence of any evidence of its validity (i.e., unless it is supported by “substantial evidence,” EPCA requires this even in the case of standards for consumer products under 42 U.S.C. § 6306(b)(2)).** The bottom line is that DOE needs evidence to support its assumptions in every case; and it needs more evidence when the “clear and convincing” standard applies.

In the SPVU rulemaking,³³ DOE promulgated a rule to exceed ASHRAE standards, concluding that the inflated minimums would save a total of 0.15 quads over thirty years, which amounted to a four percent increase over the ASHRAE minimums.³⁴ Stakeholders commented that DOE had not presented “clear and convincing evidence” because its shipment projections were inaccurate,

³² EERE-2012-BT-STD-0041-0031

³³ EERE-2012-BT-STD-0041-0031

³⁴ Even if all of DOE’s assumptions that led to that conclusion were accurate, it is not “clear and convincing” that 4% constitutes “significant” energy savings over the ASHRAE standard.

the physical size data was incorrect and the net employment impacts were unsubstantiated. DOE's response to these comments was not to present more evidence, but to reiterate projections and assumptions leading to conclusions. DOE put forward no evidence in support of its assumptions and projections and expressly refused to conduct a revised employment impact analysis. Rather, DOE conducted the same assessment and analysis for the SPVU rulemaking as it had for all other consumer product rulemakings, and the higher bar of "clear and convincing evidence" was reduced to a meaningless trope recited in the rule as a box-checking exercise. Ultimately, all of this matters because the SPVU rulemaking has had a disproportionate impact on small manufacturers, as was anticipated in stakeholders' comments. If DOE had heeded relevant comments and developed the required evidence, then DOE would have reached a different, and better, result.

XIII. The Joint Commenters

AHRI is the trade association representing manufacturers of heating, cooling, water heating, commercial refrigeration equipment, and refrigerant producers. More than 300 members strong, AHRI is an internationally recognized advocate for the industry, and develops standards for and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the HVACR industry is worth more than \$20 billion. In the United States alone, our members employ approximately 130,000 people, and support some 800,000 dealers, contractors, and technicians.

AMCA International is a not-for-profit trade association with more than 380 member companies worldwide representing more than \$3 billion in annual revenue. Member companies are manufacturers of fans, dampers, louvers, air curtains, and other air-system products for commercial HVAC; industrial process; and power-generation applications. AMCA's mission is to advance the health, growth, and integrity of the air-movement-and-control industry with programs such as certified ratings, laboratory accreditation, verification of compliance, and development of international standards.

ALA is a trade association representing over 3,000 members in the residential lighting, ceiling fan and controls industries in the United States, Canada and the Caribbean. Our member companies are manufacturers, manufacturers' representatives, retail showrooms and lighting designers who have the expertise to educate and serve their customers.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's more than 150 members employ tens of thousands of people in the U.S. and produce more than 95% of the household appliances shipped for sale within the U.S. The factory shipment value of these products is more than \$30 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.

Based in Arlington, VA, HPBA is the principal trade association representing the hearth products and barbecue industries in North America. HPBA's members include manufacturers, retailers, distributors, manufacturers' representatives, service installation firms, and other companies and individuals who have business interests related to the hearth, patio, and barbecue industries. HPBA's core purpose is to promote the welfare of the industries it serves, and one of its critical roles is to serve as an advocate representing the interests of these industries and of its individual members in matters involving the development or implementation of laws or regulations that affect them.

HARDI is a trade association comprised of nearly 1,000 member companies, nearly 500 of which are U.S.-based wholesale distribution companies. More than 80 percent of HARDI's distributor members are classified as small businesses that collectively employ over 35,000 U.S. workers, representing more than \$35 billion in annual sales and an estimated 80 percent of the U.S. wholesale distribution market of heating, ventilation, air-conditioning and refrigeration (HVACR) equipment, supplies, and controls.

The NAM is the largest manufacturing association in the United States, representing over 14,000 manufacturers small and large in every industrial sector and in all 50 states. Manufacturing employs more than 12 million women and men across the country, contributing more than \$2.17 trillion to the U.S. economy annually.

NEMA represents nearly 350 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.

PMI is the nation's leading trade association for plumbing product manufacturers. Its members produce 90 percent of the plumbing products sold in the United States and employ thousands of workers in over 70 locations in 25 states. Our member companies' plumbing products are found in the majority of homes, commercial buildings, schools, restaurants, manufacturing facilities, hospitals, and hotels across the nation. Examples of these products include, but are not limited to kitchen and bathroom faucets, toilets, showerheads, urinals, fixture fittings, sinks, whirlpools/tubs, water fountains, and waste disposal systems. PMI member companies continue to raise the bar in developing the most advanced water-efficient plumbing products.

The Joint Commenters appreciate the opportunity to submit these comments on DOE's Process Rule RFI and would be glad to discuss these matters in more detail should you so request.

Respectfully Submitted,



Joe Trauger
Senior Vice President, Policy & Government Relations
Air-Conditioning, Heating, and Refrigeration Institute



Michael Ivanovich
Senior Director, Industry Relations
AMCA International



Eric Jacobson, CAE
President/CEO
American Lighting Association



Jennifer Cleary
Senior Director, Regulatory Affairs
Association of Home Appliance Manufacturers



Ryan Carroll
Vice President—Government Affairs
Hearth, Patio & Barbecue Association



Palmer Schoening
Vice President of Government Affairs
Heating, Air-conditioning, & Refrigeration Distributors International



Ross Eisenberg
Vice President, Energy and Resources Policy
National Association of Manufacturers

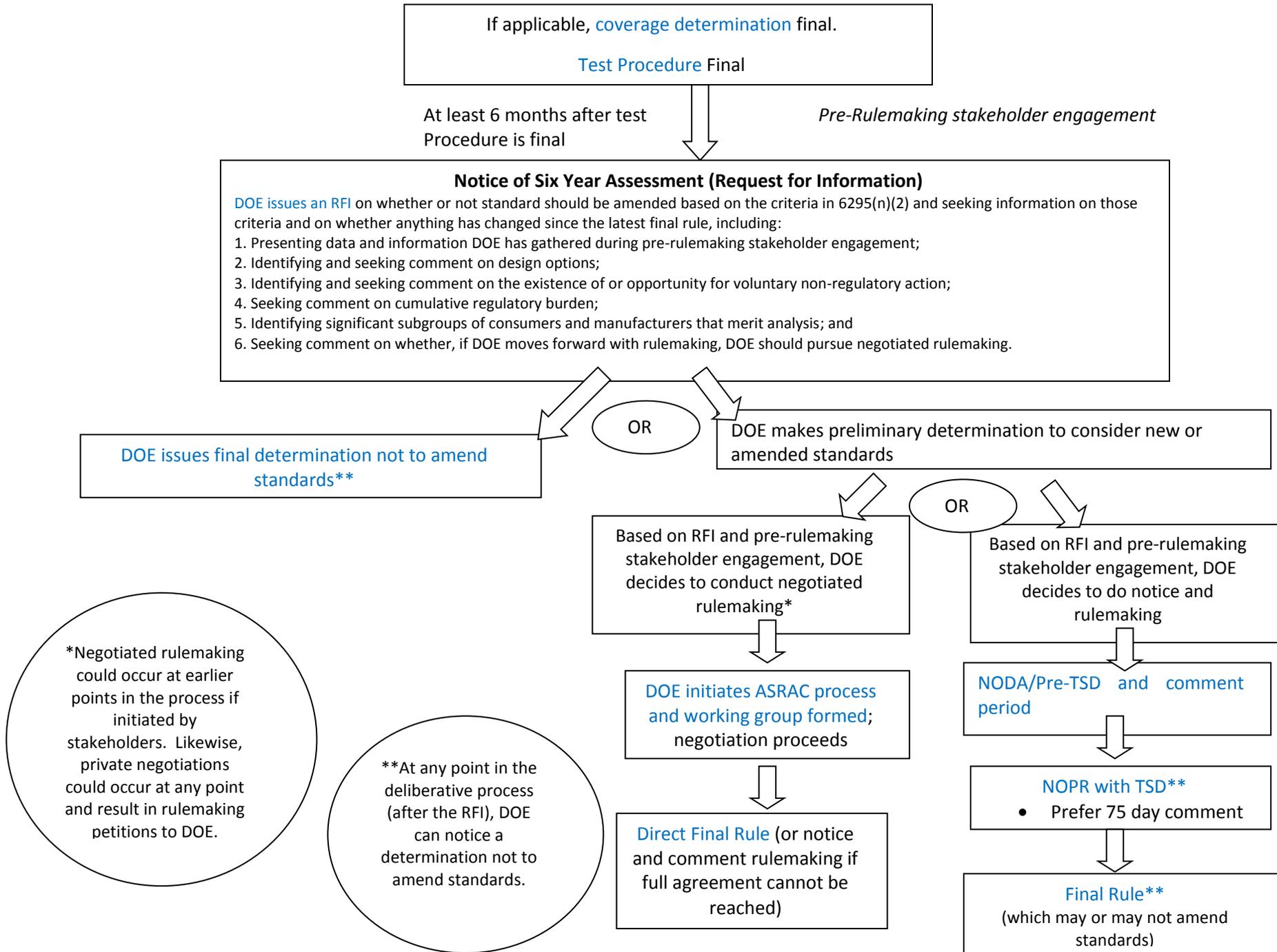


Kyle Pitsor
Vice President, Government Relations
National Electrical Manufacturers Association



Matt Sigler
Technical Director
Plumbing Manufacturers International

Appendix A



*Negotiated rulemaking could occur at earlier points in the process if initiated by stakeholders. Likewise, private negotiations could occur at any point and result in rulemaking petitions to DOE.

**At any point in the deliberative process (after the RFI), DOE can notice a determination not to amend standards.

Blue text indicates a necessary publication in the Federal Register.