From:	Margaret Song
To:	Erin Linney
Cc:	Rose, Kevin; Lauren Davis; Bijit Kundu
Subject:	RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter
Date:	Friday, July 14, 2017 4:35:23 PM
Attachments:	image002.jpg FINAL DRAFT Regulatory Reform Comments Mass 11July2017_CLEAN_minorMAedits mms.docx

*****CAUTION**: This email was sent from an EXTERNAL source. Think before clicking links or opening attachments.*****
I apologize as I thought that I attached it in the last email.

Please see attached!

From: Erin Linney [mailto:elinney@energy-solution.com]
Sent: Friday, July 14, 2017 7:01 PM
To: Margaret Song <msong@capelightcompact.org>
Cc: Rose, Kevin <Kevin.Rose@nationalgrid.com>; Mary Anderson <M3AK@pge.com>; Lauren Davis <ldavis@energy-solution.com>; Bijit Kundu <BKundu@energy-solution.com>
Subject: RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

Margaret,

I wanted to check in as Kevin mentioned you'd be sending a new version with your comments/edits and I have not seen it yet. We want to make sure your edits are included before we docket the letter.

Thanks,
Erin

Erin Linney, LEED AP BD+C | Project Manager | elinney@energy-solution.com | (510) 482-4420 x287

From: Margaret Song [mailto:msong@capelightcompact.org]
Sent: Friday, July 14, 2017 2:11 PM
To: Rose, Kevin <Kevin.Rose@nationalgrid.com>; Erin Linney <elinney@energy-solution.com>; Boucher, Francis B. <Francis.Boucher@nationalgrid.com>; Anderson, Mary <M3AK@pge.com>; Vavak, Amy B. <Amy.Vavak@nationalgrid.com>; david.giza-sisson@eversource.com; Gail Azulay <gazulay@capelightcompact.org>; Phil Moffitt <pmoffitt@capelightcompact.org>; lberger@nisource.com; 'Trish Walker' <Trish.Walker@libertyutilities.com>; andrea.villamaino@berkshiregas.com; Reynolds, Meera <reynoldsm@unitil.com>; aimee.powelka@eversource.com; Blake, William R. <William.Blake@nationalgrid.com>; Coughlin, Thomas J. Jr. <Thomas.Coughlin@nationalgrid.com>; Maggie Downey <mdowney@capelightcompact.org>
Cc: Anderson, Mary <M3AK@pge.com>; Bijit Kundu <BKundu@energy-solution.com>; Lauren Davis <ldavis@energy-solution.com>
Subject: RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

Kevin

I am not sure what happened, but some of my edits got lost that made sure that Cape Light Compact could be included (ie. not just utilities). I have made those edits as well provided the customer counts for just Cape Light Compact and added our name. I will send logo and signature to Erin in just a moment.

Thanks
Margaret

From: Rose, Kevin [mailto:Kevin.Rose@nationalgrid.com]
Sent: Friday, July 14, 2017 12:00 PM
To: Erin Linney <elinney@energy-solution.com>; Boucher, Francis B. <Francis.Boucher@nationalgrid.com>; Anderson, Mary <M3AK@pge.com>; Margaret Song <msong@capelightcompact.org>; Vavak, Amy B. <Amy.Vavak@nationalgrid.com>; david.giza-sisson@eversource.com; Gail Azulay <gazulay@capelightcompact.org>; Phil Moffitt <pmoffitt@capelightcompact.org>; lberger@nisource.com; 'Trish Walker' <Trish.Walker@libertyutilities.com>; andrea.villamaino@berkshiregas.com; Reynolds, Meera <reynoldsm@unitil.com>; aimee.powelka@eversource.com; Blake, William R. <William.Blake@nationalgrid.com>; Coughlin, Thomas J. Jr. <Thomas.Coughlin@nationalgrid.com>; Maggie Downey <mdowney@capelightcompact.org>
Cc: Anderson, Mary <M3AK@pge.com>; Bijit Kundu <BKundu@energy-solution.com>; Lauren Davis <ldavis@energy-solution.com>
Subject: RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

Hi Erin- Please see attached for our final MA letter. Note that it includes the following minor changes from the version you distributed in the preceding message:

- Removed/edited sections related to ASRAC participation (all signing parties were either never part of this committee or are no longer members)
- A few additional syntax edits, word replacements, and formatting changes that do not change the content of the letter

Each singing party will now provide you with their signatory information and logos individually (as well as number of customers served). Let me know if you have any further questions or if I can help coordinate further.
-Kevin

From: Erin Linney [mailto:elinney@energy-solution.com]
Sent: Tuesday, July 11, 2017 7:33 PM
To: Boucher, Francis B.; Anderson, Mary; Margaret Song; Vavak, Amy B.; david.giza-sisson@eversource.com; Gail Azulay; Phil Moffitt; lberger@nisource.com; 'Trish Walker'; andrea.villamaino@berkshiregas.com; Reynolds, Meera; aimee.powelka@eversource.com; Blake, William R.; Coughlin, Thomas J. Jr.; Rose, Kevin
Cc: Anderson, Mary; Bijit Kundu; Lauren Davis
Subject: RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

All,

On behalf of Mary Anderson, I have attached for the updated version of the comment letter (in both tracked changes and clean). We highlighted a few areas of text regarding the number of customers the Energy Coalition serves, the logos, whether the Energy Coalition participates in ASRAC, and the signatories. Please let me know how you'd like to proceed in these areas and I will update the final version.

Let me know if you any further comments.

Thank you,
Erin

Erin Linney, LEED AP BD+C | Project Manager | elinney@energy-solution.com | (510) 482-4420 x287

From: Anderson, Mary [mailto:M3AK@pge.com]
Sent: Tuesday, July 11, 2017 12:01 AM
To: Erin Linney <elinney@energy-solution.com>
Subject: FW: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

---

From: Rose, Kevin [mailto:Kevin.Rose@nationalgrid.com]
Sent: Monday, July 10, 2017 2:23 PM
To: Margaret Song; Downes, Mary; Boucher, Francis B.; Anderson, Mary; Vavak, Amy B.; 'david.giza-sisson@eversource.com'; Gail Azulay; Phil Moffitt; 'lberger@nisource.com'; 'Trish Walker'; 'andrea.villamaino@berkshiregas.com'; Reynolds, Meera; 'aimee.powelka@eversource.com'; Blake, William R.; Coughlin, Thomas J. Jr.
Cc: 'Bijit Kundu'
Subject: RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

*****CAUTION**: This email was sent from an EXTERNAL source. Think before clicking links or opening attachments.*****
All- Please see attached for my comments which build off the previously sent versions. As a reminder, Mary has set a deadline of tomorrow COB for our comments on this.

I made the following edits to the document:

- Rearranged narrative to elevate one important section (EPCA safeguards) that, IMO, was previously a bit buried
    - In doing so, added section titles and supporting language to improve readability/flow
- Underscored key points in question response section
- Took care of a few grammatical/consistency/typo fixes (but thank you to Mary (Downes) and Margaret for taking care of most of these already).

~~~~~~~~~~~~~~~~~~~~~

Kevin Rose
Senior Program Manager, Mass./R.I. Codes & Standards
781.907.3595
National**grid**
~~~~~~~~~~~~~~~~~~~~~

From: Margaret Song [mailto:msong@capelightcompact.org]
Sent: Thursday, July 06, 2017 2:47 PM
To: Downes, Mary; Boucher, Francis B.; Anderson, Mary; Vavak, Amy B.; 'david.giza-sisson@eversource.com'; Gail Azulay; Phil Moffitt; 'lberger@nisource.com'; 'Trish Walker'; 'andrea.villamaino@berkshiregas.com'; Reynolds, Meera; 'aimee.powelka@eversource.com'; Blake, William R.; Coughlin, Thomas J. Jr.; Rose, Kevin
Cc: 'Bijit Kundu'
Subject: RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

Please see my edits for consideration.

From: Downes, Mary [mailto:downesm@unitil.com]
Sent: Monday, July 3, 2017 11:16 AM
To: Boucher, Francis B. <Francis.Boucher@nationalgrid.com>; Anderson, Mary <M3AK@pge.com>; Margaret Song <msong@capelightcompact.org>; Vavak, Amy B. <Amy.Vavak@nationalgrid.com>; 'david.giza-sisson@eversource.com' <david.giza-sisson@eversource.com>; Gail Azulay <gazulay@capelightcompact.org>; Phil Moffitt <pmoffitt@capelightcompact.org>; 'lberger@nisource.com' <lberger@nisource.com>; 'Trish Walker' <Trish.Walker@libertyutilities.com>; 'andrea.villamaino@berkshiregas.com' <andrea.villamaino@berkshiregas.com>; Reynolds, Meera <reynoldsm@unitil.com>; 'aimee.powelka@eversource.com' <aimee.powelka@eversource.com>; Blake, William R. <William.Blake@nationalgrid.com>; Coughlin, Thomas J. Jr. <Thomas.Coughlin@nationalgrid.com>; Rose, Kevin <Kevin.Rose@nationalgrid.com>
Cc: 'Bijit Kundu' <BKundu@energy-solution.com>
Subject: RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

I had time to go through this and have made some suggested edits.

Mary Downes
Manager
Energy Efficiency Administration & Compliance

Unitil Corporation
325 West Road
Portsmouth, NH 03801

T 603.294.5122 | E downesm@unitil.com

www.unitil.com

From: Boucher, Francis B. [mailto:Francis.Boucher@nationalgrid.com]
Sent: Monday, July 03, 2017 8:59 AM
To: Anderson, Mary <M3AK@pge.com>; 'Margaret Song' <msong@capelightcompact.org>; Vavak, Amy B. <Amy.Vavak@nationalgrid.com>; 'david.giza-sisson@eversource.com' <david.giza-

sisson@eversource.com>; 'Gail Azulay' <gazulay@capelightcompact.org>; 'Phil Moffitt' <pmoffitt@capelightcompact.org>; 'lberger@nisource.com' <lberger@nisource.com>; 'Trish Walker' <Trish.Walker@libertyutilities.com>; 'andrea.villamaino@berkshiregas.com' <andrea.villamaino@berkshiregas.com>; Downes, Mary <downesm@unitil.com>; Reynolds, Meera <reynoldsm@unitil.com>; 'aimee.powelka@eversource.com' <aimee.powelka@eversource.com>; Blake, William R. <William.Blake@nationalgrid.com>; Coughlin, Thomas J. Jr. <Thomas.Coughlin@nationalgrid.com>; Rose, Kevin <Kevin.Rose@nationalgrid.com>
Cc: 'Bijit Kundu' <BKundu@energy-solution.com>
Subject: RE: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

This is pretty dense reading for sure. There is one thing that caught my attention and that was the comment that there should be some focus on water efficiency due to the severe droughts we have been experiencing. There is another angle that could be promoted here. Electric generation consumes tremendous amounts of energy in the country so it would seem we could quantify water savings being achieved already even from those appliances that don't have water consumption directly.

Fran Boucher
Senior Engineer
New Products and Services
National Grid
40 Sylvan Rd
Waltham, MA 02451

781 907-1571
francis.boucher@nationalgrid.com

From: Anderson, Mary [mailto:M3AK@pge.com]
Sent: Monday, July 03, 2017 12:34 AM
To: 'Margaret Song'; Vavak, Amy B.; Boucher, Francis B.; 'david.giza-sisson@eversource.com'; 'Gail Azulay'; 'Phil Moffitt'; 'lberger@nisource.com'; 'Trish Walker'; 'andrea.villamaino@berkshiregas.com'; 'Mary Downes (downesm@unitil.com)'; 'Meera Reynolds (reynoldsm@unitil.com)'; 'aimee.powelka@eversource.com'; Blake, William R.; Coughlin, Thomas J. Jr.; Rose, Kevin
Cc: 'Bijit Kundu'
Subject: EXT || DOE Regulatory Reform RFI DRAFT Comment letter

We have a DRAFT RFI comment letter for your review. We have modified the comments based upon feedback from Eversource as a beginning point. Please review the comment letter and provide your input by COB July 11, 2017. The revised comment letter out on July 12th for final review and approval. Final approvals will be due by COB July 13th along with the appropriate logo for use on the letter, signatory name and signature. Please let me know if you have any questions or would like to talk through the comments or the process. Thanks for your help!

Mary Anderson
PG&E | Expert Program Manager
3401 Crow Canyon Road, Building 414 | San Ramon, CA 94583 | Mail Code: BLDG 414
Phone: 415.603.1817 |

Learn about California's leading model for energy efficiency and how PG&E works with customers and partners to achieve success in saving energy. www.CAEnergyEfficiencyModel.com

We respect your privacy. Please review our privacy policy for more information.
http://www.pge.com/en/about/company/privacy/customer/index.page

This e-mail, and any attachments are strictly confidential and intended for the addressee(s) only. The content may also contain legal, professional or other privileged information. If you are not the intended recipient, please notify the sender immediately and then delete the e-mail and any attachments. You should not disclose, copy or take any action in reliance on this transmission.

You may report the matter by contacting us via our UK Contacts Page or our US Contacts Page (accessed by clicking on the appropriate link)

Please ensure you have adequate virus protection before you open or detach any documents from this transmission. National Grid plc and its affiliates do not accept any liability for viruses. An e-mail reply to this address may be subject to monitoring for operational reasons or lawful business practices.

For the registered information on the UK operating companies within the National Grid group please use the attached link:
http://www.nationalgrid.com/corporate/legal/registeredoffices.htm
We respect your privacy. Please review our privacy policy for more information.
http://www.pge.com/en/about/company/privacy/customer/index.page

[Space for Logos]

August 1, 2017

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

ID Number: DOE_FRDOC_0001-3375

Dear Mr. Cohen:

This letter comprises the comments of National Grid, Cape Light Compact, list participating utilities/energy efficiency service providers in response to the Department of Energy's (DOE's) Request for Information (RFI) as part of its implementation of Executive Order 13771 (The Office of the White House 2017). These recommendations focus specifically on DOE's Appliance and Equipment Standards Program as well as the energy efficiency standards and test procedure regulations developed and implemented by this program.

The signatories of this letter, collectively referred to herein as the Energy Coalition, represent a diverse range of utility companies and energy efficiency service providers in the United States, serving (seven million for National Grid, roughly 200,000 for Cape Light Compact) million customers combined. As energy companies and efficiency organizations, we understand the potential of DOE's regulations, developed and updated by the Appliance and Equipment Standards Program, to cut costs and reduce energy consumption for our customers while maintaining or increasing the value of covered products and appliances. We have witnessed the implementation of existing appliance standards developed by DOE over the past two decades and seen their effectiveness through significant energy savings from covered products. These standards have been an effective and critical tool in reducing energy use in homes and businesses nationwide, freeing up economic resources for alternate uses.

We appreciate DOE's efforts to solicit input from stakeholders on how best to implement Executive Order 13771 to achieve meaningful burden reduction while continuing to meet DOE's statutory responsibilities in accordance with the Energy Policy and Conservation Act of 1975 (EPCA), as amended (Energy Conservation Standards n.d.). The Energy Coalition asks DOE to carefully consider the following comments in response to this RFI.

EPCA Requirements

DOE's regulatory reform task force is also tasked with identifying regulations that impose costs that exceed benefits. EPCA has safeguards in place to ensure efficiency regulations do not violate this requirement as detailed in the following provisions (Energy Conservation Standards n.d.):

(B)(i) In determining whether a standard is economically justified, the Secretary shall, after receiving views and comments furnished with respect to the proposed standard, determine whether the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering—

(I) the economic impact of the standard on the manufacturers and on the consumers of the products subject to such standard;

(II) the savings in operating costs throughout the estimated average life of the covered product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the covered products which are likely to result from the imposition of the standard;

(III) the total projected amount of energy, or as applicable, water, savings likely to result directly from the imposition of the standard.

Specifically, EPCA requires that the cumulative benefits of every energy efficiency standards regulation promulgated by DOE exceed their cumulative costs. As discussed below, energy efficiency advocates and Lawrence Berkeley National Laboratory found that DOE overestimated numerous appliance product prices and life cycle costs post-regulation, and thereby underestimated economic benefits.

As directed by Executive Order 13777, the regulatory reform task force shall also identify regulations that are "outdated" (The Office of the White House 2017). EPCA provides statutory requirements to ensure that efficiency standards and test procedures are reviewed on a periodic basis. Since DOE has expanded the Appliance and Equipment Standards Program to cover a larger share of home, commercial, and industrial energy use, it is increasingly important for DOE to retain its ability to update current energy efficiency standards and test procedure regulations on a periodic basis to ensure standards remain relevant.

The remainder of this letter is divided into two main sections: in the first, we elaborate on the high-level impacts and benefits of DOE's Appliance and Equipment Standards Program; and in the second we respond to each of the specific questions in the RFI.

Program Impacts

Program Impacts: Nationwide

As directed by Executive Order 13777 (The Office of the White House 2017), the regulatory reform task force will identify regulations that, among other things, are "ineffective." The Energy Coalition believes DOE's appliance and test procedure regulations are among the most impactful and effective policy tools in reducing energy consumption and driving technology innovation. DOE currently develops, updates, and implements energy efficiency regulations and test procedures for more than 60 appliances. These products represent about 90 percent of home energy use, 60 percent of commercial building energy use, and 30 percent of industrial energy use. Nationally, the cumulative positive impacts of these regulations are massive: by 2020 an estimated $1 trillion will have been saved on consumers' utility bills and 71 quadrillion British thermal units (quads) of energy will have been avoided (U.S. Department of Energy 2017). DOE efficiency standards have significantly impacted energy demand since the mid-1990s. Figure 1 depicts the cumulative annual energy savings, in quads, from DOE energy efficiency regulations since the first standards took effect.

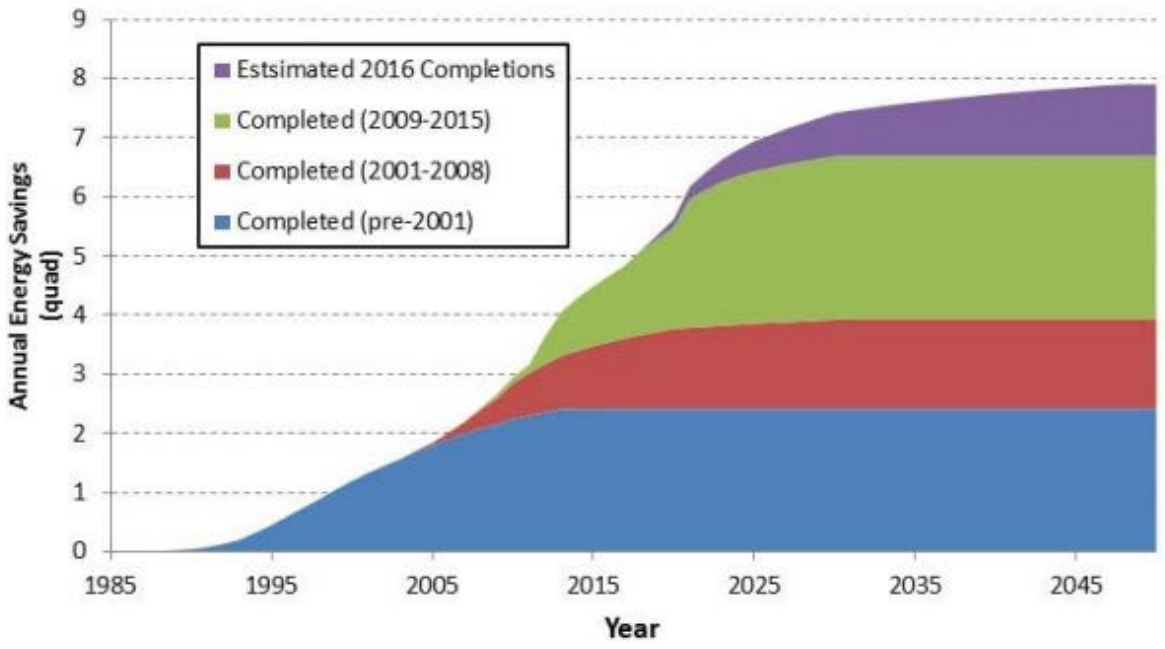

Figure 1: Energy savings as a result of DOE appliance efficiency regulations[1].

Source: U.S. Department of Energy, 2016.

Program Impacts: States and Utilities/Energy Efficiency Service Providers

Many states have compelling needs for advanced appliance efficiency standards, either due to energy costs, state policy goals, regional differences, or other factors. Federal appliance

[1] Typo in legend is from original report. Legend label for purple wedge should read "Estimated 2016 Completions".

standards can be one of the strongest policy tools for reducing energy use in existing buildings. For example, in California, the California Public Utility Commission (CPUC) established an energy goal for zero net energy (ZNE) performance in new residential construction by 2020 and in new commercial construction by 2030 (California Public Utility Commission 2008). Advanced appliance efficiency standards will play a significant part in achieving these goals.

Utility and energy efficiency service provider rebate and other voluntary programs that incentivize efficient products, such as the Environmental Protection Agency (EPA) ENERGY STAR® program, are critical to achieving economies of scale that drive costs down for advanced efficiency technologies. These programs rely on energy consumption metrics based on DOE test procedure regulations: test procedures often make it possible to set fair, consistent, and accurate baseline for products, which increases the accuracy of savings calculations and the amount of products that utility and energy efficiency service provider program administrators can incentivize. Thus, it is critical to periodically review and update test procedures, as prescribed in EPCA, to ensure the energy metrics are representative of new features, technologies, and actual performance.

Program Impacts: Driving Innovation

DOE energy efficiency regulations advance innovation in energy efficiency technology. Voluntary programs support commercialization of emerging technologies by incentivizing the adoption of promising technologies in the early phase of market introduction and rapid increase of market adoption. Adoption into regulation stimulates the appliance manufacturers to develop new, differentiated products in response to their high-margin, high-efficiency products becoming the new baseline when new DOE standards take effect. For example, lighting efficiency regulations adopted in 2007 signaled a shift away from traditional incandescent light bulbs. At the time, compact fluorescent light bulbs (CFLs) were considered the prime candidate to fill the void; but over the next ten years, a significant amount of investment and innovation in this industry resulted in the introduction of several new product types that provided improved efficiency without the apparent quality or performance issues plaguing CFLs. These innovations included halogen light bulbs, and later LED light bulbs that are dimmable, have very good color quality, and are virtually indistinguishable from traditional products. This process continues cyclically, as efficiency regulations are adopted and updated periodically, driving products toward more cost-effective energy efficiency innovations with each cycle (Eilert, et al. 2012).

In a retrospective study looking at the effect of DOE efficiency regulations, the study authors found that for each of the ten different products examined, manufacturers introduced and expanded the availability of new features as efficiency regulations took effect (Mauer, et al. 2013).

Figure 2 depicts a DOE summary of the above and other benefits of the Appliance Standards regulations.

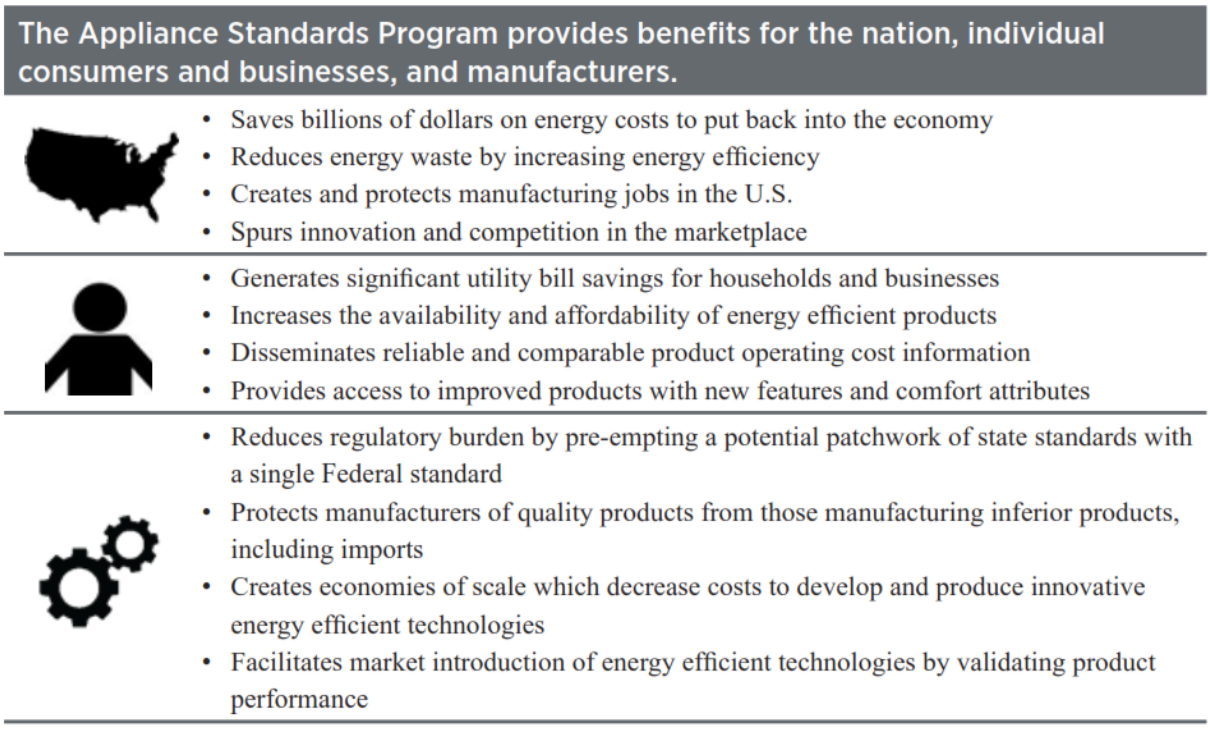

Figure 2: Summary of benefits from appliance standards.

Source: U.S. Department of Energy, 2017.

Responses to Specific DOE Questions

Below are the Energy Coalition's responses to some of the specific questions listed in the RFI.

Question 1:	*How can DOE best promote meaningful regulatory cost reduction while achieving its regulatory objectives, and how can it best identify those rules that might be modified, streamlined, or repealed?*

- Regarding streamlining regulations, the Energy Coalition supports the efforts of the Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC) established by DOE to improve the process of establishing and updating certain energy efficiency regulations by facilitating stakeholder engagement, collecting data, and building consensus among impacted stakeholders. Some of the signatories of this letter have previously served as members of the ASRAC.

  The ASRAC working group process implemented by DOE should continue to be used for other products, where it makes sense, as a way to shorten rulemaking timelines, thereby reducing overall regulatory costs for both stakeholders and DOE. This process streamlines certain efficiency regulations – reducing the overall time to finalize a rulemaking as compared to a typical "notice and comment" rulemaking. For example, the commercial package air conditioners final rule, which was negotiated through an ASRAC working group, was finalized in eight months from the establishment of the ASRAC working group to a DOE direct final rule.[2] The process would have taken significantly more time, likely several years, had it gone through a non-negotiated rulemaking.

  In addition to the reduced costs associated with the regulatory process, another major advantage of the ASRAC process is the possibility to establish multi-tier standards. This approach provides manufacturers with regulatory certainty over a longer period of time, enabling them to invest and plan for multiple rounds of standards. Multi-tier (or multi-phase) standards can enhance the efficiency and cost-effectiveness of rulemaking activities by having one analysis that leads to two future standards updates. The first tier would follow DOE's statutory requirements in establishing the level that is technically feasible, economically justified, and results in the most energy savings. The second tier could be an aspirational level, such as the maximum technologically feasible level.

  DOE accepted this multi-tier approach from the outcome of the ASRAC working group for the commercial package air conditioners final rule, which updated standard levels with a compliance date of January 1, 2018 for the first tier and January 1, 2023 for the second tier (Energy Efficiency and Renewable Energy Office, Department of Energy 2016). This multi-tier approach was strongly supported by industry, efficiency advocates, consumer groups, and utilities/energy efficiency service providers for this product category.

[2] DOE published the intent to establish the working group in April 2015, the working group finalized a term sheet in June 2015, and DOE published a direct final rule in December 2015.

Question 2: What factors should DOE consider in selecting and prioritizing rules and reporting requirements for reform?

- DOE should prioritize promulgating efficiency regulations that account for different regional impacts. In 2011, DOE finalized regional regulations for residential central air conditioners and heat pumps, the first standards promulgated by DOE that differed due to varying efficiency needs for this equipment in different regions of the United States. Based on levels agreed to by a coalition of stakeholders, the standards set efficiency levels for three regions based on the number of heating degree days and the climate zone. DOE should seek legislative changes that prioritize the promulgation of regional energy and water efficiency regulations for products where there is an opportunity to address the unique needs of a location, such as severe drought conditions or increasingly severe winter storms.

- In promulgating new or updated efficiency regulations, DOE should leverage existing voluntary standards, such as the ENERGY STAR Program, and relevant information associated with the voluntary standards (e.g., shipment data, technology adoption, etc.) to help form the basis of new or updated mandatory standards. Leveraging existing data could potentially reduce the costs of undergoing certain efficiency regulations.

- DOE should prioritize rules based on the specific development cycles of each unique appliance industry. EPCA prescribes a five-year gap between the publication of the final rule and the compliance date for standards of newly-covered products. In prioritizing the establishment of new energy efficiency regulations for currently uncovered products, the Energy Coalition believes DOE should seek legislative changes that provide it more flexibility in setting earlier effective dates for products where the market is rapidly changing, such as lighting products and electronics equipment.

  One study suggests that consumer product development cycles typically take just under 2.5 years for new-to-the-world products (i.e., highly innovated products). Figure 3 is a graphical representation of the study results. For products and product lines with major revisions, (i.e., those potentially affected by a DOE standard), the average product development cycle is approximately 15 months. According to this study, on average, industrial firms have been taking 2.25 years to develop their more innovative projects.

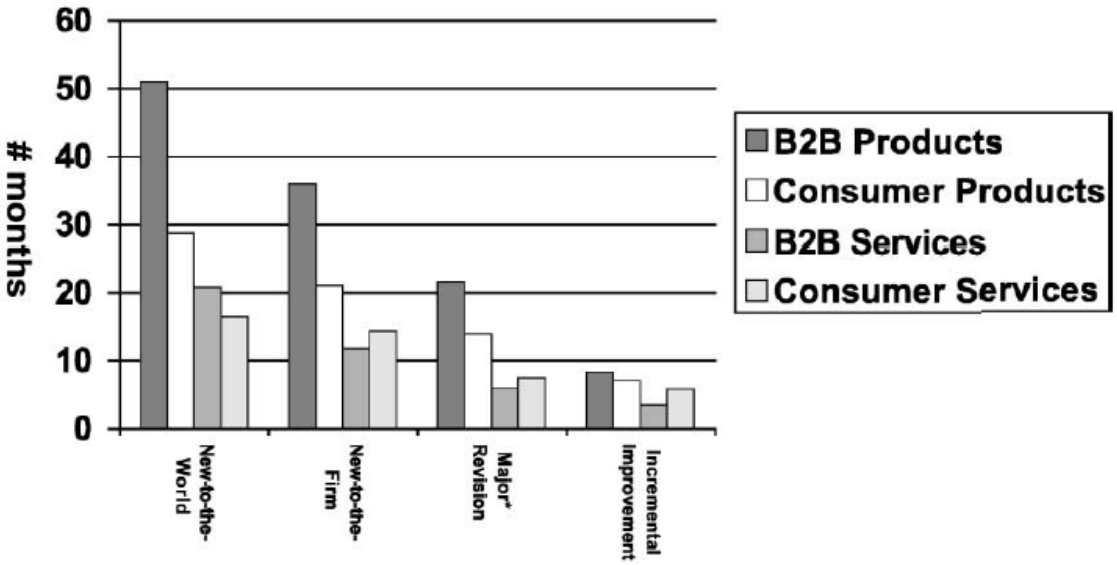

Figure 3: Average product development cycles by product type[3].

Source: Griffin, 2002.

With this compelling evidence that product development cycles are significantly shorter than five years, we urge DOE, with stakeholder input, to consider a shorter period between the final rule and compliance dates on a case-by-case basis for each rulemaking. Additionally, this would ensure that standards are applicable to products on the market at the time of compliance.

Question 3:	*How can DOE best obtain and consider accurate, objective information and data about the costs, burdens, and benefits of existing regulations? Are there existing sources of data DOE can use to evaluate the post-promulgation effects of regulations over time? We invite interested parties to provide data that may be in their possession that documents the costs, burdens, and benefits of existing requirements?*

- There are a number of retrospective studies that have reviewed the impacts of DOE efficiency regulations, which are cited below. Energy efficiency regulations have provided significant economic benefits for consumers through saving energy and freeing up funds for other use, which culminates in broader macroeconomic benefits to both local and national economies.

  One study examined the impacts of energy efficiency standards on ten residential and commercial lighting products. The study concluded that as efficiency regulations take effect performance of the products improves and products become more feature-rich (Mauer, et al. 2013). Figure 4 provides a graphical representation of price declines for

[3] B2B (Business to Business)

residential clothes washers paired with capacity increases and increased energy efficiency as each new standards update takes effect.

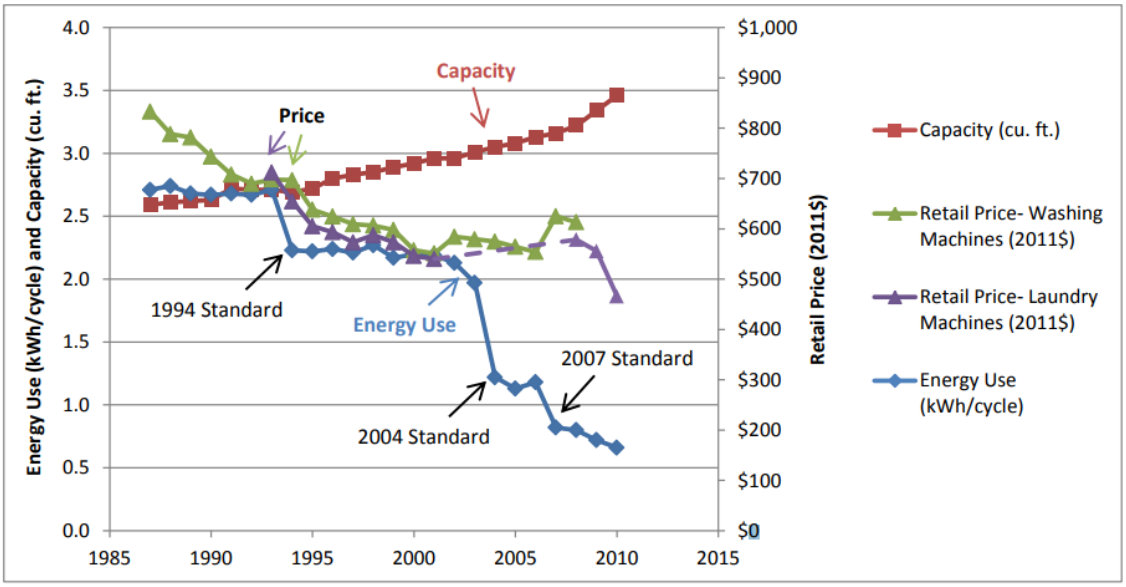

Figure 4: Clothes washer energy use, volume, and retail price from 1987-2010[4].

Source: Mauer, deLaski, Nadel, Fryer, & Young, 2013.

Another report examines the job increases through 2030 due to utility bill savings associated with current and prospective energy efficiency standards. Based on the report's analysis, an average of 318,000 jobs are created annually for historic standards with an expected additional 47,000 jobs created annually for prospective standards (Gold, et al. 2011). A paper published in the Energy Policy Journal estimates 0.38 job-years are created for every GWh of electricity saved due to energy efficiency measures (Wei, Patadia and Kammen 2010). One of the goals of DOE's regulatory reform task force is to identify regulations that "eliminate jobs, or inhibit job gains", and this research shows that impacts of energy efficiency regulations on jobs may have been underestimated. Based on multiple studies, efficiency regulations have a positive impact on jobs.

These impacts will likely be greater than predicted in the future as there is evidence that DOE has overestimated price increases for appliances after standards implementations. Based on one study, looking at ten products the median price increase of an appliance after regulation was $10, significantly less than the median DOE estimate of $108 (Nadel and deLaski 2013). Another report further supported this concept citing that "the positive economic impacts of MEPS [Minimum Efficiency Performance Standards] on consumers may have been underestimated" (Taylor, Spurlock and Yang 2015). These results show

[4] "Price data were available from 1987-2008 for washing machines and from 1993-2001 and 2008-2010 for laundry machines (washers & dryers)" (Mauer, et al. 2013).

that job creation and consumer savings may likely be greater than predicted by DOE in the future, making future efficiency regulations even more critical for the macroeconomic health of the nation.

Question 4:	*Are there regulations that simply make no sense or have become unnecessary, ineffective, or ill-advised and if so what are they? Are there rules that can simply be repealed without impairing DOE's statutory obligations and, if so, what are they?*

- In regards to regulations that can be repealed, statutory requirements explicitly prohibit any existing efficiency standards or test procedures from being repealed by DOE. The Energy Coalition highlights the following anti-backsliding provision in EPCA, which prevents DOE from updating existing regulations that result in either an increase in the maximum allowable energy use or a decrease in the minimum required energy efficiency of a covered product (Energy Conservation Standards n.d.):

> *The secretary may not prescribe any amended standard which increases the maximum allowable energy use, or, in the case of showerheads, faucets, water closets, or urinals, water use, or decreases the minimum required energy efficiency, of a covered product.*

Question 5:	*Are there rules or reporting requirements that have become outdated and, if so, how can they be modernized to better accomplish their objective?*

- No comment.

Question 6:	*Are there rules that are still necessary, but have not operated as well as expected such that a modified, or slightly different approach at lower cost is justified?*

- Associated with our comments on Question 1 regarding ASRAC, the Energy Coalition believes that the stakeholder negotiation approach should be considered for other rulemakings where appropriate. The streamlined process of ASRAC reduces the regulatory costs for both stakeholders and DOE in the long-term. Additionally, ASRAC could be used to help address test procedures and standards that may need to be updated based on technological innovations outside of the scheduled review cycle to ensure the regulations are still relevant. Having a nimbler process to update regulations would be helpful for utility and energy efficiency service provider incentive programs, which are based on the test procedures and standard regulations developed by DOE.

Question 7:	*Are there rules of the Department that unnecessarily obstruct, delay, curtail, or otherwise impose significant costs on the siting, permitting, production, utilization, transmission, or delivery of energy resources?*

- No comment.

Question 8:	*Does DOE currently collect information that it does not need or use effectively?*

- The Energy Coalition supports DOE's extensive efforts to collect information and work with stakeholders, such as trade organizations and others, in support of establishing and updating efficiency regulations. We support an increase in data collection efforts to expand public knowledge of appliance shipment information due to the gaps in the data provided by manufacturers and their associations. DOE's efforts to collect and effectively use the information ensure rulemakings are data-driven. In terms of compliance and enforcement, the information DOE collects ensures the proper implementation of the efficiency regulations promulgated by DOE and the realization of the massive associated consumer benefits previous cited in response to Question 3.

  In order to make this collection process more seamless and robust, DOE should provide more advance notice about its own planned data collection activities in support of future standards and test procedures rulemakings. If DOE's stakeholders, both manufacturers and non-manufacturers, had a better understanding of DOE's future plans for data collection for rulemakings, they would be better able to effectively contribute to the process, while simultaneously strengthening DOE's analyses and reducing DOE's regulatory costs. Examples of product data that could be provided to DOE by stakeholders include: energy performance data; market shipment data; testing data on product prototypes; data on retail, installation, and maintenance costs; and energy consumption data of installed equipment.

Question 9:	*Are there regulations, reporting requirements, or regulatory processes that are unnecessarily complicated or could be streamlined to achieve statutory obligations in more efficient ways?*

- DOE should consider staging test procedure and standard rulemaking updates for a given product category so that the test procedure regulations are completed before the standards rulemaking. Staging the rulemakings in this way would be sensible to ensure standards regulations are based on updated metrics and data from a new or modified test procedure.

- DOE should work closely with other agencies, such as the EPA, the California Energy Commission (CEC), and the European Commission, to share, where feasible, reported product data. Agency collaboration could reduce duplicative reporting burden for manufacturers. Each of the agencies noted manages public-facing product databases displaying information on product efficiency, among other attributes. Given the overlap of reported data required by these agencies, a standardized test template and single product submission to one entity, such as the CEC's Modernized Appliance Efficiency Database System (MAEDBS), that would be shared with other applicable databases could reduce costs for manufacturers.

- DOE should also consider updating its current compliance certification database to allow stakeholders to more easily search for information on complying products and access test reports. Since utility and energy efficiency service provider incentive programs, aimed at increasing adoption of efficient products, establish program requirements based on certified product data, having better access to DOE's database could potentially reduce additional manufacturer reporting burden for products eligible for incentive programs.

Question 10: Are there rules or reporting requirements that have been overtaken by technological developments? Can new technologies be leveraged to modify, streamline, or do away with existing regulatory or reporting requirements?

- As mentioned previously in comments to Question 9, DOE should work closely with other agencies that manage product databases to reduce duplicative reporting burden for manufacturers by sharing product data when applicable. This could reduce costs for manufacturers and could potentially reduce administration costs for DOE. In addition, the reported product data would be clearer and more consistent for consumers and other stakeholders, such as utilities/energy efficiency service providers, that use the product databases.

Question 11: Does the methodology and data used in analyses supporting DOE's regulations meet the requirements of the Information Quality Act?

- No comment.

The members of this Energy Coalition thank DOE for the opportunity to be involved in this process and encourage DOE to carefully consider the recommendations outlined in this letter.

Sincerely,

Signature
First Name
Position
Company

Signature
Second Name
Position
Company

Signature
Third Name
Position
Company

Signature
Fourth Name
Position
Company

References

California Public Utility Commission. 2008. "California Long Term Energy Efficiency Strategic Plan ."

Eilert, Pat, Doug Naaf, Joanthan McHugh, Alex Chase, and Yanda Zhang. 2012. "Code Driven Portfolios." *ACEEE Summer Study on Energy Efficiency in Buildings* .

Energy Conservation Standards. n.d. "42 U.S.C. § 6295."

Energy Efficiency and Renewable Energy Office, Department of Energy. 2016. "Energy Conservation Program for Certain Industrial Equipment: Energy Conservation Standards for Small, Large, and Very Large Air-Cooled Commercial Package Air Conditioning and Heating Equipment and Commercial Warm Air Furnaces; Direct final rule." *EERE-2013-BT-STD-0007-0113*.

Gold, Rachel, Steven Nadel, John A Laitner, and Andrew deLaski. 2011. *Appliance and Equipment Efficiency Standards: A Money Maker and Job Creator.* ACEEE & ASAP.

Griffin, Abbie. 2002. "Product development cycle time for business-to-business products." *Industrial Marketing Management* 291-304.

J.D. Power. 2014. *Company Impact Report: Energy Efficiency Programs and Awareness.* J.D. Power and Associates, McGraw Hill Financial.

Mauer, Joanna, Andrew deLaski, Steven Nadel, Anthony Fryer, and Rachel Young. 2013. *Better Appliances: An Analysis of Performance, Features, and Price as Efficiency Has Improved.* ACEEE & ASAP.

Nadel, Steven, and Andrew deLaski. 2013. *Appliance Standards: Comparing Predicted and Observed Prices.* ACEEE & ASAP.

Pacific Gas & Electric. 2017. "PG&E's Energy Efficiency Business plan 2018-2025."

Taylor, Margarat, C. Anna Spurlock, and Hung-Chia Yang. 2015. *Confronting Regulatory Cost and Quality Expectations: An Exploration of Technical Change in Minimum Efficiency Performance Standards.* Berkeley: Lawrence Berkeley National Lanoratory.

The Office of the White House. 2017. "Executive Order 13771." *Reducing Regulation and Controlling Regulatory Costs.* January 30.

—. 2017. "Presidential Executive Order 13777: Enforcing the Regulatory Reform Agenda." February 24.

U.S. Department of Energy. 2016. "Building Technologies Office Multi-year Program Plan." February.

—. 2017. "Saving Energy and Money with Appliance and Equipment Standards in the United States." January.

US Department of Energy. 2017. "Reducing Regulation and Controlling Regulatory Costs: Request for Information (RFI)." *Federal Register*, May 20: 24582-24583.

VanBuskirk, R D, C LS Kantner, B F Gerke, and S Chu. 2014. "A retrospective investigation of energy efficiency standards: policies may have accelerated long term declines in appliance costs." *Environmental Research Letters* 9 (11).

Wei, Max, Shana Patadia, and Daniel M Kammen. 2010. "Putting renewables and energy efficiency to work: How many jobs can the clean energy industry generate in the US?" *Energy Policy*.