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WASHINGTON, DC

Public Interest Comment<sup>1</sup> on

The Department of Energy's Request for Information

Procedures, Interpretations, and Policies for Consideration of New or Revised  
Energy Conservation Standards for Consumer Products

“Process Rule RFI”

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Sofie E. Miller, Senior Policy Analyst<sup>2</sup>

The George Washington University Regulatory Studies Center

The George Washington University Regulatory Studies Center improves regulatory policy through research, education, and outreach. As part of its mission, the Center conducts careful and independent analyses to assess rulemaking proposals from the perspective of the public interest. This comment on the Department of Energy's request for information does not represent the views of any particular affected party or special interest, but is designed to evaluate the effect of DOE's process rule on overall consumer welfare.

## Introduction

The Department of Energy (DOE) is seeking comment on potential modifications to its “Process Rule,” which outlines the Department's approach to establishing new or revised energy efficiency standards for consumer appliances. The comment provides DOE with a public interest perspective on its Process Rule and potential improvements in the areas of direct final rulemaking, negotiated rulemaking, retrospective review, and the analysis that supports the Department's rules.

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<sup>1</sup> This comment reflects the views of the author, and does not represent an official position of the GW Regulatory Studies Center or the George Washington University. The Center's policy on research integrity is available at <http://regulatorystudies.columbian.gwu.edu/policy-research-integrity>.

<sup>2</sup> Sofie E. Miller is Senior Policy Analyst at the George Washington University Regulatory Studies Center. She can be reached at [sofiemiller@gwu.edu](mailto:sofiemiller@gwu.edu) or (202) 994-2974.

## Direct Final Rules

The Energy Policy and Conservation Act (EPCA) currently grants DOE the authority to issue energy efficiency standards via direct final rule (DFR), which allows the Department to issue a standard in final form without going through the traditional notice-and-comment process. This authority is limited to circumstances where DOE receives a jointly-submitted statement containing recommendations for an energy or water conservation standard.<sup>3</sup> In such a case, the Department may issue a DFR to establish the jointly recommended standards.

## Rulemaking Process

As far as direct final rules are concerned, EPCA is a statutory exception to the rule. As Susan Dudley and Jerry Brito explain in *Regulation: A Primer*:

The [Administrative Procedure Act] provides “good cause” exemptions to the informal rulemaking notice-and-comment requirements if the regulatory agency can show that traditional procedures are “impracticable, unnecessary, or contrary to the public interest”... Agencies will also sometimes use Direct Final Rules (DFRs) to issue regulations considered “routine or noncontroversial,” relying on the “unnecessary” component of the “good cause” exception. For example, the EPA routinely issues DFRs to approve revisions to state implementation plans under the Clean Air Act, and these generate little or no public comment. DFRs become effective on a certain date unless the agency receives adverse public comment. If it does, it must withdraw the rule, but it may commence regular informal notice-and-comment rulemaking to promulgate the regulation.<sup>4</sup>

The public comment period has been an integral part of the U.S. regulatory process since the passage of the Administrative Procedure Act in 1946, and it serves an essential purpose by providing the public with an opportunity to weigh in on regulations that affect them. No matter how carefully an agency may have considered its options, it cannot possess all the knowledge and experience that may be relevant to its actions.<sup>5</sup> This public comment process tries to ensure regulations are accountable and well-reasoned by welcoming input from any interested party.

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<sup>3</sup> Public Law 94–163, as Amended. “ENERGY POLICY AND CONSERVATION ACT,” §325 (p)(4)(A).  
<http://legcounsel.house.gov/Comps/EPCA.pdf>

<sup>4</sup> Susan E. Dudley & Jerry Brito. Chapter 4, “The Regulatory Process: How the Sausage is Made” in *Regulation: A Primer*, 2<sup>nd</sup> Ed. *Mercatus Center at George Mason University and the George Washington University Regulatory Studies Center*. 2012.

<sup>5</sup> “While the Department promulgates rules in accordance with the law and to the best of its analytic capability, it is difficult to be certain of the consequences of a rule, including its costs and benefits, until it has been tested. Because knowledge about the full effects of a rule is widely dispersed in society, members of the public are likely to have useful information and perspectives on the benefits and burdens of existing requirements and how

Although agencies use exemptions to avoid notice and comment,<sup>6</sup> this is not good regulatory practice. James Yates argues that the notice and comment is a better method of rulemaking “because of the benefits it endows upon agencies and regulated parties.”<sup>7</sup> Yates explains:

N&C [notice and comment] democratizes rulemaking in an administrative system where decisions go relatively unchecked by the public... These procedures also reflect a legislative judgment that prepromulgation participation produces better rules and furthers the idea of fundamental fairness to regulated parties. It follows that rules promulgated outside of these procedures are inferior to rules promulgated pursuant to them.<sup>8</sup>

## Large Rules with Large Impacts

Between 2010 and 2014, DOE used this mechanism to implement standards for dishwashers,<sup>9</sup> residential central air conditioners and heat pumps,<sup>10</sup> clothes washers,<sup>11,12</sup> and room air conditioners.<sup>13</sup> DOE estimates that together these rules would result in \$1.15 billion in costs to consumers and \$4.25 billion in benefits (2010\$).<sup>14</sup> These are large rules that merit careful consideration and review rather than a direct final rulemaking that diverges from the traditional rulemaking process.

Over the years, scholars affiliated with the George Washington University Regulatory Studies Center (including this author) have filed comments on various direct final rulemakings and raised concerns about their potential negative impacts on consumers. For example, DOE’s 2012

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regulatory obligations may be updated, streamlined, revised, or repealed to better achieve regulatory objectives, while minimizing regulatory burdens, consistent with applicable law.” 82 FR 24583. *See also*, 81 FR 28736

<sup>6</sup> U.S. Government Accountability Office, “FEDERAL RULEMAKING: Agencies Could Take Additional Steps to Respond to Public Comments.” Report No. GAO-13-21. Publicly released January 22, 2013. <https://www.gao.gov/products/GAO-13-21>

<sup>7</sup> Yates, James, ‘Good Cause’ Is Cause for Concern (December 17, 2017). Available at SSRN: <https://ssrn.com/abstract=3089469> or <http://dx.doi.org/10.2139/ssrn.3089469>

<sup>8</sup> Yates, James, ‘Good Cause’ Is Cause for Concern (December 17, 2017). Available at SSRN: <https://ssrn.com/abstract=3089469> or <http://dx.doi.org/10.2139/ssrn.3089469>

<sup>9</sup> 77 FR 31917

<sup>10</sup> 76 FR 37407

<sup>11</sup> 77 FR 32307

<sup>12</sup> 76 FR 22453

<sup>13</sup> 76 FR 22453

<sup>14</sup> See the totals for RINs 1904-AC64, 1904-AA89, 1904-AB90, and 1904-AC06 in Appendix B of: Sofie E. Miller, “Whose Benefits Are They, Anyway? Examining the Benefits of Energy Efficiency Rules 2007 – 2014.” *The George Washington University Regulatory Studies Center*, September 2, 2015. <https://regulatorystudies.columbian.gwu.edu/whose-benefits-are-they-anyway-examining-benefits-energy-efficiency-rules-2007-2014>

DFR for dishwashers had many problems noted in our other writings,<sup>15</sup> including unreasonable assumptions about product lifetime and disproportionate distribution of consumers who experience net costs versus net benefits.<sup>16</sup> Another recent example is the 2017 DFR for central air conditioners and heat pumps, which DOE’s own analysis shows left a significant share of households bearing a net burden.<sup>17</sup> DOE projected that between 25% and 45% of households will bear a net cost as a result of the efficiency standards, depending on the affected region.<sup>18</sup> Although less stringent regulatory alternatives were available—and were projected by DOE to provide consumers with greater benefits at a lower cost—DOE did not deviate from the high cost standard provided in its DFR, despite receiving adverse comment.

Although DOE determined that the negotiated rulemaking committee’s recommendations on which the air conditioner and heat pump DFR was based “was submitted jointly by interested persons that are fairly representative of relevant points of view,”<sup>19</sup> there was no point of view within the committee that represented the interests of consumers, who are directly affected by the rule.

### “Balancing Test” for Adverse Comment

Direct final rules can reduce agency resource use by expediting rulemaking. In a 2013 report, the Government Accountability Office explained that such expedited rulemaking involves “a trade-off between obtaining the benefits of advanced notice and comment and the goal of issuing the rule quickly. The consequences of such trade-offs could be most significant for major rules issued without an NPRM [notice of proposed rulemaking], given their substantial annual effects on society.”<sup>20</sup> Advocates of direct final rulemaking further make clear that such processes should only be used “in situations in which a rule is considered so noncontroversial that the most

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<sup>15</sup> For a full review of these writings, see Sofie E. Miller, “Reforming the Energy Policy and Conservation Act: Learning from Experience on Energy Efficiency,” Working Paper, *The George Washington University Regulatory Studies Center*. June 27, 2017. <https://regulatorystudies.columbian.gwu.edu/reforming-energy-policy-and-conservation-act-learning-experience-energy-efficiency>

<sup>16</sup> DOE estimated that 18.7% of consumers would bear net costs, while only 17% of consumers would experience a net benefit (with 64.1% of consumers feeling no impact). 77 FR 31956, *Table V.20—Summary of Results for Residential Dishwasher Trial Standard Levels: Consumer and Manufacturer Impacts*.

<sup>17</sup> See Sofie E. Miller, “Public Interest Comment on [DOE’s Energy Conservation Standards for Residential Central Air Conditioners and Heat Pumps](#),” Submitted April 25, 2017. *The George Washington University Regulatory Studies Center*. <https://regulatorystudies.columbian.gwu.edu/public-comment-does-energy-conservation-standards-residential-central-air-conditioners-and-heat>

<sup>18</sup> 82 FR 1832, *Table V-3—LCC Impacts Relative to the No-New-Standards Case for Split-System Central Air Conditioners*.

<sup>19</sup> 82 FR 1791

<sup>20</sup> U.S. Government Accountability Office, “FEDERAL RULEMAKING: Agencies Could Take Additional Steps to Respond to Public Comments.” Report No. GAO-13-21. Publicly released January 22, 2013. <https://www.gao.gov/products/GAO-13-21>

minimal procedures should be adequate,” and that “the agency undertakes to withdraw its rule if *anyone* objects”<sup>21</sup> (italics in original).

Unlike other agencies that use DRFs, DOE uses a “balancing test” to weigh the substance of any adverse comments received against the benefits of relying on jointly recommended standards. However, the regulations that DOE promulgates via DFR are rarely routine or noncontroversial, and they have impacts that are felt well beyond the immediately regulated parties who participate in the development of jointly recommended standards. While in keeping with statute, DOE’s use of DFRs is a departure from well-established regulatory best practices and distinct from how other agencies use direct final rules. Although the statute authorizes DOE to use DFRs, it does not require them, and DOE should use that authority only in rare circumstances—particularly since the Department does not routinely withdraw those that receive adverse comment.

## **Tension between Negotiated Rulemaking & Regulatory Analysis**

The Department is seeking comment on negotiated rulemaking, a process wherein affected parties collaborate to reach consensus on a regulatory approach to set appliance standards. Administrative law experts, such as those at the Administrative Conference of the United States, have recognized the benefits to an agency of using negotiated rulemaking.<sup>22</sup> From DOE’s perspective, negotiated rules “yield better and more thoroughly vetted outcomes and may in some cases decrease the likelihood of costly litigation.”<sup>23</sup>

However, the empirical evidence on this front, though dated, suggests that in general negotiated rulemaking neither decreases the length of time devoted to rulemaking nor affects the rate of litigation.<sup>24</sup> Though it is *viewed* as a potentially effective tool for expeditious rulemaking, negotiated rulemaking has both procedural and analytical drawbacks that the Department should carefully consider before codifying it into the Process Rule. These shortcomings are as follows:

1. In a negotiation context, regulatory decisions are based on consensus rather than net welfare optimization. Agencies are instructed to select regulatory approaches that maximize net benefits to society; while group dynamics may lead regulations that are palatable to the negotiators, they are unlikely to lead to regulations that maximize net benefits.

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<sup>21</sup> Ronald M. Levin, “Direct Final Rulemaking,” 64 *George Washington Law Review* 1 (1995), page 2.

<sup>22</sup> Administrative Conference of the United States, Recommendation 85-5: Procedures for Negotiating Proposed Regulations. (Adopted December 13, 1985)

<sup>23</sup> 82 FR 59994

<sup>24</sup> Cary Coglianese, *Assessing Consensus: The Promise and Performance of Negotiated Rulemaking*, 46 *DUKE LJ.* 1255, 1276 (1997). Further discussed in William Funk, *Bargaining Toward the New Millennium: Regulatory Negotiation and the Subversion of the Public Interest*. *Duke Law Journal* Vol. 46:1351

2. Benefit-cost analysis is intended to inform the development of regulation at the outset by illustrating the potential tradeoffs of various policy approaches. With this information, regulators are well positioned to make regulatory choices that maximize the net benefits to society. In the case of negotiated rulemaking, regulatory choices are made without the benefit of this analysis, which comes *after* the adoption of a joint recommendation rather than before.
3. DOE recognizes that public participation is a fundamental component of the rulemaking process. In cases where rules are negotiated in advance, there is a risk that comments submitted by outside parties may receive less than due consideration because the policy approach has already been decided. In these cases, both the negotiating parties and the Department may be reluctant to modify a rulemaking to depart from a jointly submitted statement.
4. The school of public-choice economics finds contexts in which special interests may find common ground on regulatory approaches that appear to serve the general interest but in fact are intended to disadvantage competitors.<sup>25</sup> In these cases, competitors and consumers may be worse off despite the regulation. Because of the unique composition of its negotiated rulemaking committees, the Department should be particularly attuned to the risk of implementing jointly recommended standards that harm competition or prefer one manufacturer at the expense of others (and at the expense of consumers).<sup>26</sup>

## Negotiation vs. Analysis as a Base for Policy Decisions

Regulatory policy decisions should be made based on authorizing statute, public input, analysis of public welfare impacts, and examination of alternative approaches. While negotiated rules have the benefit of consensus among interested parties, they do not tend to provide these important decision-making inputs.

President Clinton’s Executive Order 12866 (EO 12866) outlines the regulatory philosophy that governs executive branch agency rulemaking:

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<sup>25</sup> See Susan E. Dudley & Jerry Brito’s discussion of public choice and “Bootleggers and Baptists.” Chapter 2, “Theories of Regulation: Why Do We Regulate?” in *Regulation: A Primer*, 2<sup>nd</sup> Ed. *Mercatus Center at George Mason University and the George Washington University Regulatory Studies Center*. 2012.

<sup>26</sup> For more on how negotiated rulemaking can affect the public interest, see William Funk: “... while negotiated rulemaking may formally satisfy current legal requirements, the principles, theory, and practice of negotiated rulemaking subtly subvert the basic, underlying concepts of American administrative law—an agency’s pursuit of the public interest through law and reasoned decision making. In its place, negotiated rulemaking would establish privately bargained interests as the source of putative public law.” William Funk. *Bargaining Toward the New Millennium: Regulatory Negotiation and the Subversion of the Public Interest*. *Duke Law Journal* Vol. 46:1351

Federal agencies should promulgate only such regulations as are required by law, are necessary to interpret the law, or are made necessary by compelling public need, such as material failures of private markets to protect or improve the health and safety of the public, the environment, or the well-being of the American people. In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating.<sup>27</sup>

This welfare-maximizing philosophy is consistent with EPCA’s statutory mandate governing DOE’s development of appliance standards, particularly the requirement that such standards be “economically justified.”<sup>28</sup>

Although these considerations are meant to be foremost in rulemaking, they are not necessarily part of the negotiated rulemaking process. Regulatory analyses, including benefit-cost analysis, are intended to precede—and to inform—regulatory decisions, not to justify them after the fact.<sup>29</sup> Regulatory analysis weighs the benefits of a regulatory action against the costs, and EO 12866 instructs agencies to “select those approaches that maximize net benefits” when choosing among regulatory alternatives.

But in the case of negotiated rulemaking, the interested parties may reach a policy conclusion well before analysis can suggest such an approach. As a result, it is not clear that regulatory policies reached via negotiation are based on analysis of their potential impact, particularly their impacts on populations who are not parties to the negotiation (such as consumers or low-income Americans). Such negotiations are unlikely to answer the key questions of a sound regulatory analysis:

- What problem is the agency trying to solve with this regulation?
- Is the problem caused by a market failure?
- Is the problem caused by government failure?
- Do the standards proposed by the agency address the problem at hand?
- Is there a clear linkage between what the agency is proposing and what the agency hopes to accomplish?

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<sup>27</sup> Exec. Order No. 12866, Regulatory Planning and Review, §1(a).

<sup>28</sup> The EPCA, as amended, authorizes DOE to establish energy conservation standards for consumer appliances that are both technologically feasible and economically justified, while also resulting in a “significant conservation of energy.” 42 U.S.C. 6295(o)(3)(B) and 6313(d)(4) (<http://www.gpo.gov/fdsys/pkg/USCODE-2013-title42/html/USCODE-2013-title42-chap77-subchapIII-partA-sec6295.htm>)

<sup>29</sup> Carrigan, C., and Shapiro, S. (2016) What’s wrong with the back of the envelope? A call for simple (and timely) benefit–cost analysis. Regulation & Governance, doi: [10.1111/rego.12120](https://doi.org/10.1111/rego.12120).

Regulatory analysis is only useful to the extent that it informs decisions by evaluating the tradeoffs of the available policy options. Society at large is not likely to benefit in cases where policy decisions are reached prior to this analysis.

## Retrospective Review

The EPCA's six year review timeframe has led to multiple occasions on which DOE has determined that updates to its energy conservation standards are necessary very shortly after implementation of its previous standards and without allowing time for an evaluation of their effectiveness. This approach does not allow the Department to learn from implementation of past standards before issuing new rules, which is particularly important given that EPCA precludes DOE from reversing the stringency of its standards once in place.<sup>30</sup>

DOE's *ex ante* analyses of its energy efficiency standards rely heavily upon assumptions about future prices of energy and other goods, opportunity costs, producer and consumer preferences, and behavior. When DOE opts to initiate new standards before the effects of previous standards are known, its *ex ante* analysis will suffer from uncertainty in baseline assumptions, as well as uncertain predictions of future effects.

In the future, it would be reasonable for DOE to review the effects of any existing energy efficiency standards before pursuing updated, more stringent standards. This will allow DOE to measure the efficacy of its assumptions and to use actual (rather than hypothesized) baselines in its *ex ante* analyses, improving the quality of analysis and regulatory outcomes. One practical step in the right direction would be to assess *ex post* how accurate the Department's assumptions were regarding consumer appliance use and actualized energy savings.

## Practical Approaches to Retrospective Review

In cases where DOE's *ex ante* analytical assumptions are incorrect, appliance standards create burdens for many households instead of the forecasted benefits. To determine whether the large cost savings that DOE forecasts actually materialize for consumers, the Department should consider ways to collect information on consumer behavior *ex post*, such as via surveys or other instruments. This information is a key component of effective retrospective review.

For example, in 2001 DOE finalized an energy conservation standard for residential clothes washers that relied on questionable assumptions about appliance usage. To calculate cost savings, the Department assumed that households used their clothes washers 392 times per year, or more frequently than once per day. While this assumption was based on data from Proctor & Gamble,<sup>31</sup> it doesn't necessarily reflect the experiences or behaviors of most households. In fact,

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<sup>30</sup> National Appliance Energy Conservation Act of 1987, codified at 42 U.S.C. 6295(o)(1)

<sup>31</sup> 65 FR 59561

a subsequent Rasmussen Research survey of 1,997 consumers found that only 15% of respondents used their clothes washer as frequently as DOE assumed, meaning that many households did not breakeven.<sup>32</sup> This survey, which was initiated by an independent university-based research center, may provide a blueprint for how DOE can collect data on consumer behavior to inform its future rules as part of its retrospective review efforts.<sup>33</sup>

DOE frequently makes use of survey data from the Residential Energy Consumption Survey (RECS), a recurring survey conducted by the Energy Information Administration. Where these data are not available or when DOE chooses to normalize these data to fit its specifications, they may not represent actual consumer behaviors. Below are three examples of assumptions about consumer behavior and energy usage that could be measured *ex post* by survey data or other measures to ensure that regulatory burdens on consumers and households are minimized.

In setting its 2011 standards for residential furnaces, air conditioners, and heat pumps,<sup>34</sup> DOE relied on an assumption that households will heat or cool their households relative to a threshold of 65 degrees Fahrenheit.<sup>35</sup> For example, DOE derived annual energy use for these appliances based on the idea that they would be running on days below/above this temperature threshold for any region. In reality, many households likely use very different heating and cooling thresholds depending on insulation, energy prices, and time of day, among other considerations. For example, many households may turn off the heat or the air conditioning during the day while the occupants are at work, regardless of temperature. If households respond differently than DOE's equation suggests the result may be lower appliance usage—and a lower payoff from increased efficiency—than DOE's analysis assumes. In such cases, an *ex post* analysis can verify which assumptions were accurate, which helps in turn to improve future *ex ante* analysis of consumer behavior and energy use.

On the other hand, DOE's 2011 standards for residential clothes dryers had access to survey data on the frequency of clothes washer use from the RECS (295 annual wash cycles, a significant decrease from the 392 annual wash cycles that DOE projected in 2001).<sup>36</sup> Despite the fact that RECS data indicate that about 84% of all washed loads are dried, the Department assumed 283

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<sup>32</sup> For example, see the survey results in: *Addendum to Public Interest Comment on the Department of Energy's Proposed Clothes Washer Efficiency Standards*. Docket No. EE-RM-94-403. Arlington, VA: Mercatus Center Regulatory Studies Program. 2000.

([http://mercatus.org/sites/default/files/publication/Clothes\\_Washer\\_Standards.pdf](http://mercatus.org/sites/default/files/publication/Clothes_Washer_Standards.pdf))

<sup>33</sup> This independently-commissioned survey was later confirmed by the findings of separate Residential Energy Consumption Surveys, which estimated that consumers on average use 282 and 269 wash cycles per year, respectively.

<sup>34</sup> 76 FR 37407

<sup>35</sup> U.S. Department of Energy (DOE), "Technical Support Document: Energy Efficiency Program for Consumer Products: Residential Air Conditioners, Heat Pumps, and Furnaces," June 2011, page 7-7, 7-15.

<sup>36</sup> U.S. DOE, "Technical Support Document: Energy Efficiency Program for Consumer Products and Industrial Equipment: Residential Clothes Dryers and Room Air Conditioners," April 2011, page 7-4.

dryer cycles per year rather than ~250 ( $295 \times 0.84 = 247.8$ ). In this case, even with survey data available DOE used other assumptions on consumer behavior that could alter whether many households benefit from increased standards.

In another case, the fundamental analytical assumptions on which the benefit-cost analysis hinged pertained to product lifespan. In its 2012 direct final rule setting energy efficiency standards for dishwashers, DOE estimated that the average product lifespan of a residential dishwasher was 15.4 years,<sup>37</sup> despite the availability of RECS and manufacturer data which put the estimated product lifespan at 9 – 10 years.<sup>38</sup> This discrepancy is particularly notable because these increases in energy and water efficiency do not pay off for the average consumer for 11 years, at which point RECS and industry data indicate that many appliances are no longer functioning.

### ***Opportunities for Reform***

In each of the cases listed above, *ex ante* verification of these behavioral assumptions would have been ideal. Retrospective review provides an opportunity for the Department to revisit these assumptions *ex post* and identify areas where incorrect assumptions created burdens for regulated households by projecting a higher, less realistic payoff from more efficient appliances.

DOE is currently required by statute to revisit the stringency of its standards at six-year intervals. The Department does not use this opportunity for review to assess whether its projected benefits for consumers actually materialized. Such review has dual benefits. First, it provides DOE with necessary information on the accuracy of its *ex ante* assumptions, which improves both future analyses and future regulatory outcomes. Second, it provides an important opportunity for the Department to reconsider the stringency of its existing standards in cases where consumers are bearing large burdens.

Scholars at the George Washington University Regulatory Studies Center recently published a *Proposed Framework for Evidence-Based Regulation* that may additionally inform the Department's approach to retrospective review. That framework is submitted as an attachment to this comment.<sup>39</sup>

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<sup>37</sup> U.S. DOE, "Technical Support Document: Energy Efficiency Program for Consumer Products and Industrial Equipment: Residential Dishwashers," May 2012, page 8-21.

<sup>38</sup> U.S. Energy Information Administration (EIA), "Home Appliance Characteristics by Type of Housing Unit," 2005 RECS Survey Data, <http://www.eia.gov/consumption/residential/data/2005/hc/pdf/tablehc2.9.pdf>.

<sup>39</sup> Marcus Peacock, Sofie E. Miller, & Daniel R. Pérez. "A Proposed Framework for Evidence-Based Regulation." The George Washington University Regulatory Studies Center. February 22, 2018. <https://regulatorystudies.columbian.gwu.edu/proposed-framework-evidence-based-regulation>

## Improving Analysis of Appliance Standards

As is true for all regulations, there is a distribution of regulatory benefits and costs across the regulated public in DOE's efficiency standards, with some consumers benefitting and others experiencing net costs. DOE typically considers what proportion of consumers will bear net costs in its determination of whether a standard is economically justified.

However, it is unclear what threshold DOE is using, if any, to determine what proportion of consumers bearing net costs is too much. For example, in a 2011 rule the Secretary determined that 56% of consumers bearing a net cost for one product class of room air conditioners was economically unjustified.<sup>40</sup> However, in 2015 the Secretary deemed economically justified a proposed standard for dishwashers which would have resulted in net costs for 53% of standard residential dishwasher consumers.<sup>41,42</sup>

One recent example is DOE's standards for split-system central air conditioners, which left a significant share of households bearing a net burden. DOE projected that between 25% and 45% of households will bear a net cost as a result of the efficiency standards, depending on the affected region.<sup>43</sup> The most adversely affected regions are the hot-dry region and the hot-humid region, which together comprise 19 states.<sup>44</sup> These regions include six of the nation's 15 most populous states which alone have a combined 29.6% of the total U.S. population.

This standard is not an outlier: many of DOE's efficiency rules pose net costs for large swaths of the regulated public, including its standards for residential dishwashers,<sup>45</sup> furnace fans,<sup>46</sup> water

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<sup>40</sup> "In particular, the fraction of consumers experiencing an LCC cost is 56 percent for room air conditioners with 8,000-13,999 Btu/h, with louvers, which is the product class with the largest market share. Based on the above findings, the Secretary has concluded that TSL 5 is not economically justified." 76 FR 22556

<sup>41</sup> DOE Proposed Rule, "Table V.3—Average LCC Savings Relative to the Base-Case Efficiency Distribution for Standard Residential Dishwashers." 79 FR 76171.

<sup>42</sup> However, as explained on page 12, due to pushback from the regulated community DOE decided not to finalize these standards.

<sup>43</sup> 82 FR 1832, *Table V-3—LCC Impacts Relative to the No-New-Standards Case for Split-System Central Air Conditioners*.

<sup>44</sup> "The Hot-Dry region is comprised of four states (CA, AZ, NV, and NM); the Hot-Humid region is comprised of 15 mid-Atlantic and Southern States (VA, DE, DC, MD, GA, NC, SC, FL, AL, KY, MS, TN, AR, LA, OK, and part of WV)." The U.S. Department of Energy, *TECHNICAL SUPPORT DOCUMENT: ENERGY EFFICIENCY PROGRAM FOR CONSUMER PRODUCTS: Residential Central Air Conditioners and Heat Pumps*. "Chapter 7: Energy Use Analysis," Footnote c, page 7-4. August 2015.

<sup>45</sup> DOE estimated that 18.7% of consumers would bear net costs, while only 17% of consumers would experience a net benefit (with 64.1% of consumers feeling no impact). 77 FR 31956, *Table V.20—Summary of Results for Residential Dishwasher Trial Standard Levels: Consumer and Manufacturer Impacts*.

<sup>46</sup> DOE estimated that between 24% and 33% consumers of the four most widely-used residential furnace fans (non-weatherized non-condensing gas, non-weatherized condensing gas, weatherized gas, and electric

heaters,<sup>47</sup> room air conditioners,<sup>48</sup> pool heaters,<sup>49</sup> and refrigerators.<sup>50</sup> This indicates that not only is DOE's current approach inconsistent, but it also can lead to net costs for significant numbers of regulated consumers. These costs are particularly pernicious because, as DOE's analyses find, they tend to be particularly burdensome for low-income and elderly households.<sup>51</sup>

In some cases, the Department took substantial net costs for consumers into account after receiving comments from the public, such as in its proposed revisions to the dishwasher standards and its proposed standards for residential gas furnaces. In both cases, DOE received comments noting the considerable costs to consumers that would result from its proposed standards. In response, DOE determined not to further pursue its revised dishwasher standards,<sup>52</sup> and issued a revised proposed rule for residential gas furnaces to reduce the burdens on consumers.<sup>53</sup>

However, these revisions occurred after significant agency resources were dedicated to developing and publishing proposed standards. A consistent standard for determining how much net cost is too much would preserve these agency resources and prevent consumers from being burdened with insufficiently tailored regulations.

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furnace/modular blower fans), which represent 80% of projected shipments through 2045, would experience net costs from the standards. 78 FR 64111 – 64113, *Tables V.2 through V.9*.

<sup>47</sup> DOE estimated that 27% and 33% of Gas-Fired Storage Water Heater and Electric Storage Water Heater consumers, respectively, would bear net costs as a result of its rule. 75 FR 20186, *Tables VI.7 and VI.8*.

<sup>48</sup> DOE estimated that half of the room air conditioner product classes regulated in this standard would result in net costs for between 22.7% and 64.6% of specific product class consumers. (Specific product classes and associated percent of consumers with net costs are as follows: Room Air Conditioners, > 11,000 Btu/h, Without Louvers - 22.7%; Room Air Conditioners, 8,000-13,999 Btu/h, With Louvers - 33.6%; Room Air Conditioners, < 6,000 Btu/h, With Louvers - 64.6%. For one additional product class, Room Air Conditioners, > 25,000 Btu/h, With Louvers, DOE estimated that only 3.5% of consumers would benefit, while 8.9% would experience net costs and 87.6% would feel no impact.) 76 FR 22531 – 3, *Tables V.9 through V.14 at TSL 4*.

<sup>49</sup> DOE estimated that 78% of consumers would either feel no effect of the standard or bear a net cost, while only 22% would benefit. 75 FR 20188, *Table VI.16—Gas-Fired Pool Heaters: LCC and PBP Results*.

<sup>50</sup> DOE estimated that 46% of consumers of top-mount refrigerator-freezers and 42% of consumers of side-by-side refrigerator-freezers would bear net costs from its standard. 76 FR 57565 – 6, *Table VI.5 and Table VI.7*.

<sup>51</sup> This point was recently emphasized in the Office of Management and Budget's Annual Draft Report to Congress on the Benefits and Costs of Federal Regulation: "For example, energy efficiency regulations tend to adversely affect lower-income consumers more than those who earn a higher income. If a regulation would disproportionately help or hurt particular groups of people, relevant law may require or authorize agencies to consider that fact. While analysis of these types of impacts is more limited, efforts to examine the distributive impacts of regulations is increasing [sic]. Additional analyses of this type could prove illuminating." [https://www.whitehouse.gov/wp-content/uploads/2017/12/draft\\_2017\\_cost\\_benefit\\_report.pdf](https://www.whitehouse.gov/wp-content/uploads/2017/12/draft_2017_cost_benefit_report.pdf)

<sup>52</sup> Department of Energy Final Rule, "Energy Conservation Program: Energy Conservation Standards for Residential Dishwashers," 81 FR 90072. December 13, 2016.

<sup>53</sup> Department of Energy Supplemental Notice of Proposed Rulemaking, "Energy Conservation Program: Energy Conservation Standards for Residential Furnaces," 81 FR 65719. September 23, 2016.

## *Opportunities for Reform*

The Department should consider using its Process Rule to establish consistent internal standards for how to regulate when significant proportions of the regulated public would bear net costs, perhaps including a threshold for consumer net costs beyond which standards are considered economically unjustified. EPCA as amended currently lists seven factors which the Secretary of Energy shall consider in determining whether a standard is economically justified, including “the economic impact of the standard on the manufacturers and on the consumers of the products subject to such standard.”<sup>54</sup> Relying on this factor, DOE may consider incorporating into the Process Rule further guidance on the type of consumer impacts that may lead to a standard that is economically unjustifiable.

## **Recommendations**

Agencies may use direct final rules to expedite rulemaking, but this is not good regulatory practice and should only be used in rare occasions. EPCA grants DOE authority to use DFRs to set appliance standards—however, these standards are neither routine nor noncontroversial, and they have impacts that are felt well beyond the immediately regulated parties who participate in the development of jointly recommended standards.

While in keeping with statute, DOE’s use of DFRs is a departure from well-established regulatory best practices and distinct from how other agencies use direct final rules. Although the statute authorizes DOE to use DFRs, it does not require them, and DOE should use that authority only in rare circumstances—particularly since the Department does not routinely withdraw those that receive adverse comment.

Though it is viewed as a potentially effective tool for expeditious rulemaking, negotiated rulemaking has both procedural and analytical drawbacks that the Department should carefully consider before codifying it into the Process Rule. First, negotiated rulemakings lead to decisions being made based on consensus rather than net welfare optimization. Second, interested parties may reach a policy conclusion well before a benefit-cost analysis can suggest an approach that would maximize net societal benefits. Third, there is a risk that comments submitted by parties not included in the negotiation may receive less than due consideration because the policy approach has already been decided. Fourth, the Department should be alert to circumstances in which jointly recommended standards harm competition or prefer one manufacturer at the expense of others—which ultimately harms consumers.

Revisiting regulatory inputs is key to effective retrospective review. Such review could help the Department to verify its *ex ante* assumptions on consumer behavior and energy prices, which

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<sup>54</sup> 42 U.S.C. §6295(o)(2)(B)(i)(I-VII)

both illustrates the costs and benefits of previous appliance standards and improves future *ex ante* analyses by providing more accurate inputs.

DOE typically considers what proportion of consumers will bear net costs in its determination of whether a standard is economically justified, but it's not clear that it has a threshold for determining what proportion of consumers bearing net costs is too much. The Department should consider establishing consistent internal standards for how to regulate when significant proportions of the regulated public would bear net costs, perhaps including a threshold for consumer net costs beyond which standards are considered economically unjustified.