

March 21, 2011

Mr. Daniel Cohen U.S. Department of Energy Office of General Counsel 1000 Independence Avenue SW Room 6A245 Washington, DC 20585

Submitted via E-mail: Regulatory.Review@hq.doe.gov

Re: Request for Information on Regulatory Burden of Department of Energy Regulations (Regulatory Burdens RFI)

Dear Mr. Cohen,

The Edison Electric Institute (EEI) appreciates the opportunity to submit comments in response to the Request for Information regarding the burden of Department of Energy (DOE or Department) regulations, which was published at 76 Fed. Reg. 6123 (Feb. 3, 2011).

EEI is the association of the U.S. shareholder-owned electric companies, international affiliates, and industry associates worldwide. Our U.S. members serve over 95 percent of all customers served by the shareholder-owned segment of the industry. They serve 70% of all customers in the United States. Many of our members are combination gas and electric companies, and provide services for both energy types.

In this response, EEI will focus on the Department's rules and regulations that are associated with appliance minimum energy efficiency standards and building codes.

Question (1): How can the Department best promote meaningful periodic reviews of its existing rules and how can it best identify those rules that might be modified, streamlined, expanded, or repealed?

As a preliminary matter, EEI notes that, with respect to appliance energy efficiency standards and building code determinations, the Department's review, modification or repeal of existing rules is constrained by "anti-rollback" provisions that were

incorporated into federal law. This limitation on DOE authority prevents the Department from conducting reviews of final standards, like the rule mandating heat pump water heaters for residential units over 55 gallons, which would demonstrate that such standards are harmful to consumers and would distort markets.

In order to ensure that there is a continued opportunity for meaningful public review of proposed appliance efficiency standards, DOE should allow input by interested parties on the Department's unilateral abandonment of the July 15, 1996, Process Improvement Rule, announced on the DOE General Counsel website on November 16, 2010. EEI supports efficient rulemaking processes, but as a matter of law, this deviation from the statutory process – which was put into place in 1996 at the urging of Congress specifically to facilitate public participation in the appliance energy efficiency standards rulemaking process – requires notice and comment before becoming effective.

EEI is very concerned that, in the name of making the process "faster" and "more efficient," this new rulemaking process for appliance energy efficiency standards could have negative impacts on consumers and affected industries. Appendix A contains a full discussion of EEI's concerns about DOE's recently announced deviation from the required rulemaking process.

# Question (2): What factors should the agency consider in selecting and prioritizing rules and reporting requirements for review?

In the case of appliance energy efficiency standards, DOE's goal should be to ensure the highest estimated total energy savings from any particular new standard or rulemaking and the highest economic benefits to consumers (using real numbers and cost projections), while promoting market neutrality (standards will not distort markets) and fuel neutrality (standards will not favor one energy type over another and will not tilt choices in favor of equipment that uses one fuel type). Rules that do not achieve these goals, such as the rule on electric storage water heaters with storage capacity over 55 gallons, should be selected for review first. Rulemakings on competing equipment such as heat pumps and gas furnaces should proceed in parallel to the extent possible to avoid the market distortions or fuel favoritism.

Consumer Products, 61 Fed. Reg. 36,974 (July 15, 1996).

<sup>&</sup>lt;sup>1</sup> EEI notes that recent federal legislation, such as Energy Policy Act of 2005 and Energy Independence and Security Act of 2007, contain requirements for periodic reviews of certain appliance energy efficiency standards and test procedures.

<sup>&</sup>lt;sup>2</sup> Energy Conservation Program: Energy Conservation Standards for Residential Water Heaters, Direct Heating Equipment, and Pool Heaters, 75 Fed. Reg. 20,112 (Apr. 16, 2010) <sup>3</sup> Procedures for Consideration of New or Revised Energy Conservation Standards for

<sup>&</sup>lt;sup>4</sup> See http://www.gc.energy.gov/1633.htm.

<sup>&</sup>lt;sup>5</sup> See n. 2, supra.

Question (3): 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 simply be repealed without impairing the Department's regulatory programs and, if so, what are they?

DOE should reconsider and not finalize the proposed policy, announced by the Office of Energy Efficiency and Renewable Energy in August 2010, which would require the Department it incorporate a full-fuel cycle analysis into the methods its uses to estimate the likely impacts of energy conservation standards for consumer products and certain commercial and industrial equipment.<sup>6</sup> For both the Department's review of existing regulations and the promulgation of new regulations, EEI opposes the use of the "full-fuel cycle" as an analytical tool because it introduces uncertainty into the process and will produce estimates of economic benefits that will not actually be experienced by consumers. DOE should continue to base energy efficiency standards for consumer products and commercial and industrial equipment on actual site energy used because this approach produces results that can be precisely measured and verified.

At the October 7, 2010, workshop on the proposed full-fuel cycle policy, DOE mischaracterized the recommendations of the National Academy of Sciences (NAS) regarding the use of the full fuel cycle analysis, made in response to the Energy Policy Act of 2005. The NAS report recommended that DOE <u>consider</u> a <u>gradual transition</u> moving to full fuel cycle estimates because of the complexities involved. In the case of appliances, the NAS also recommended, "[f]or single-fuel appliances, DOE/EERE should retain the current practice of basing energy efficiency requirements on the site measure of energy consumption."

In the *Federal Register* notice and at the workshop, there was no mention of keeping the current policy for single-fuel appliances. EEI assumes DOE's silence on this recommendation is because it recognizes that all standards must be "based on energy consumption at the point of use." 75 *Fed. Reg.* 51423 (August 20, 2010). Thus, cross fuel performance measures based on a full-fuel cycle analysis cannot be utilized, notwithstanding the general NAS recommendation.

At the workshop, the presentation slides attempted to downplay and minimize the impacts of the proposed policy, stating that "[u]sing [a full-fuel cycle] measure in lieu of primary energy would have modest effects on the environmental assessments and national impact analyses that support future standard levels."

<sup>&</sup>lt;sup>6</sup> See Energy Conservation Program for Consumer Products and Certain Commercial and Industrial Equipment; Public Meeting and Availability of Statement of Policy for Adopting Full-Fuel-Cycle Analyses Into Energy Conservation Standards Programs, 75 Fed. Reg. 51,423 (Aug. 20, 2010).

<sup>&</sup>lt;sup>7</sup> NAS, Review of Site (Point-of-Use) and Full-Fuel-Cycle Measurement Approaches to DOE/EERE Building Appliance Energy-Efficiency Standards, Letter Report (May 15, 2009).

The impacts would be far from modest. The workshop slides revealed that using the full-fuel cycle would increase purported energy savings and purported emissions reductions by 7-15 percent, and if other greenhouse gases are included, increase total GHG emission impacts by another 4-8 percent.

Although the proposed policy would not alter measures to determine point-of-use efficiency of covered products (since these are based on DOE site based test procedures), this policy could result in appliance efficiency standards that are much higher than economically justified. As the upstream energy and emissions estimates are monetized, they act like multipliers that will "tip the scales" for higher standards, even if a majority of consumers have higher life cycle costs.

In a recent notice of proposed rulemaking (NOPR) on efficiency standards for refrigerators<sup>8</sup> the monetized values of CO<sub>2</sub> are equal to anywhere from 11 to 33 percent of the total operational cost savings. Using full fuel cycle estimates as shown in the proposed policy could inflate these estimates by 7 to 17 percent, so that the monetized value range of GHG emissions could be equal to about 11.8 percent (0.11 \* 1.07 multiplier) to 38.61 percent (0.33 \* 1.17 multiplier) of operational cost savings. In other words, anywhere from about 12 percent to 40 percent of projected "cost savings" could be attributable to "savings" that a consumer would never personally experience.

In that NOPR, DOE chose Trial Standard Level 3 (TSL 3), which, according to the Department, results in a net life cycle cost <u>increase</u> for 54.9 percent of consumers that purchase a top-mount refrigerator/freezer and a net life cycle cost <u>increase</u> for 50.8 percent of consumers that purchase side-by-side units (and a median payback period of 10.9 years for consumers that purchase either top-mount or side-by-side units). DOE chose TSL 3 because:

"The Secretary tentatively concludes that at TSL 3 for standard size refrigerator-freezers, the benefits of energy savings, positive NPV of consumer benefits, generating capacity reductions, emission reductions, and the estimated value of the CO2 emissions reductions outweigh the economic burden on a significant fraction of consumers due to the increases in product cost, and the capital conversion costs and profit margin impacts that could result in a reduction in INPV for the manufacturers" (emphasis added).

It should also be noted that the "significant fraction" represents an economic burden on the <u>majority of consumers</u> who purchase top-mount and side-by-side refrigerator/freezers.

If the final refrigerator rule incorporates the proposed full fuel cycle estimates, then the estimated CO<sub>2</sub> emissions values would increase by at least 7 to 17 percent, which could result in even higher standard levels being chosen, even though <u>more</u> consumers would likely have higher life cycle costs and higher median payback periods.

<sup>&</sup>lt;sup>8</sup> See, e.g., Notice of Proposed Rulemaking for Energy Conservation Standards of Residential Refrigerators, Refrigerator-Freezers, and Freezers, 75 Fed. Reg. 59470 (Sept. 27, 2010).

<sup>9</sup> See id. at 59561.

In addition, using the full-fuel cycle analysis would require a significant change to methods used to estimate energy and emission impacts of standards. Whereas past policy had a more domestic focus for energy and emissions, the new proposed policy will require DOE to obtain estimates that are more international and much more uncertain in nature. Since the "point of extraction" for fossil fuels is likely to be overseas for certain end-use fuels (such as fuel oil and propane), DOE will need to obtain information on the extraction processes and extraction efficiencies of multiple companies or state-owned entities in dozens of countries.

EEI strongly believes that using the full fuel cycle analysis will seriously distort appliance efficiency analysis in future rulemakings. Significant uncertainty will be introduced into assessments and consumers will be presumed to benefit from cost savings that they will not actually experience.

In short, we believe that reliance on a full-fuel cycle analysis is ill-advised, based on difficult-to-obtain and unreliable estimates, and improperly distorts the analysis of cost-effective energy efficiency levels in a way that harms consumers by projecting savings levels higher than consumers will actually experience.

Question (4): Are there rules or reporting requirements that have become outdated and, if so, how can they be modernized to accomplish their regulatory objectives better?

EEI has no comment on this question.

Question (5): Are there rules that are still necessary, but have not operated as well as expected such that a modified, stronger, or slightly different approach is justified?

As noted in response to Question (1), the Process Improvement Rule is still necessary and valuable, especially in light of the March 2, 2011 *Federal Register* notice on distribution transformer energy efficiency standards. DOE should subject any deviation from the Process Improvement Rule to notice and comment rulemaking. In the interim, the Process Improvement Rule remains on the books. Any proposal to revise the Process Improvement Rule should retain its openness, transparency and stakeholder input.

Question (6): Does the Department currently collect information that it does not need or use effectively to achieve regulator objectives?

In terms of appliance energy efficiency standards, there is one particular area where DOE has collected information and is not using it effectively: discount rates for consumer decision making. As the Environmental Protection Agency (EPA) has recognized, for a household, the consumer lending rate is the most appropriate discount rate for assessing the cost-effectiveness of energy efficiency measures and programs

because it reflects the debt cost that a private individual would pay to finance an energy efficiency investment. 10

DOE has collected information on interest rates on various categories of consumer financing (such as credit cards, mortgages, personal loans, *etc.*) that shows that an appropriate discount rate for any life cycle costs analysis should be consistent with the consumer borrowing rate (or cost of credit). However, DOE consistently uses the far lower discount rate of 7 percent. The use of such a low rate is unsupported by consumer lending data:

- Typical credit card interest rates are over 13 percent (according to <a href="http://www.bankrate.com/finance/credit-cards/national-credit-card-rates-for-feb-24-2011.aspx">http://www.bankrate.com/finance/credit-cards/national-credit-card-rates-for-feb-24-2011.aspx</a> and the Federal Reserve data released on February 7, 2011, for 2006-2010 at <a href="http://www.federalreserve.gov/releases/g19/current/g19.htm">http://www.federalreserve.gov/releases/g19/current/g19.htm</a>);
  - According to a March 2, 2011, press release from the credit reporting agency Experian, the average person in the U.S. had a credit card balance of \$4,200 at the end of 2010 (see: <a href="http://press.experian.com/en/united-states/PressRelease/2011/Lingering-Holiday-Debt-Could-Have-Lasting-Financial-Effects.aspx">http://press.experian.com/en/united-states/PressRelease/2011/Lingering-Holiday-Debt-Could-Have-Lasting-Financial-Effects.aspx</a>). In 25 cities, the average bank card debt ranged from \$4,525 to \$5,177;
- A majority of consumers with credit cards carry debt over from month to month and pay interest (according to <a href="www.creditcards.com">www.creditcards.com</a>);
- People with poor credit records pay interest rates over 20 percent (according to: <a href="http://www.creditcards.com/credit-card-news/interest-rate-report-flat-credit-cards-121510-1276.php">http://www.creditcards.com/credit-card-news/interest-rate-report-flat-credit-cards-121510-1276.php</a>);

Moreover, a low discount rate is inconsistent with consumer preferences. Past and recent surveys of consumers, such as the March 2011 Consumer Federation of America (CFA) "Public Attitudes Toward Energy Efficiency and Appliance Efficiency Standards: Consumers See The Benefits and Support the Standard" survey, showed that consumers prefer shorter payback periods for higher efficiency products.<sup>11</sup>

Similarly, DOE should be using higher discount rates for commercial and industrial consumers. According to EPA, an appropriate discount rate for a commercial or industrial firm would reflect the firm's weighted average cost of capital. A typical value in recent years would be in the 10 to 12 percent range, but could be as high as 20

See EPA, Office of Air and Radiation, Understanding Cost Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods and Emerging Issues for Policy Makers at 4-8 (Nov. 2008), available at: <a href="http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf">http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf</a>.

The survey showed that 79 percent of consumer favored a 3-year payback period but only 60 percent support a pay-back period of 10 years.

percent, depending on the firm's credit worthiness and debt-equity structure. Businesses also may assume higher discount rates in recognition of limited capital and multiple attractive investment opportunities. In addition, commercial and industrial customers can have payback thresholds of two years or less, implying a discount rate well in excess of 20 percent. 12

According to a recent the Johnson Controls Institute for Building Efficiency survey, which asked participants to select the longest payback period that companies would allow for return on investment on significant investments in energy efficiency, the average preferred maximum payback period was 3.2 to 3.5 years in 2008 and 2009. In addition, 43 to 44 percent of firms wanted a payback of 3 years or less in 2008, 2009 and 2010. In the years 2008-2010, according to the survey results, 83-87% of the surveyed firms wanted a payback of less than 10 years.

Based on this information, it would be irrational for many residential or business consumers, especially those in financial stress, to use a very low discount rate when making any appliance purchase.

In its life cycle cost analysis, DOE consistently ignores how consumers <u>actually</u> decide on purchases of new appliances (and their opportunity costs), and proceeds with the analysis on how consumers <u>should</u> act, based on interest rates (such as savings accounts) that are in most cases <u>not</u> a determining factor in what the consumer pays, or the actual initial or lifetime costs of a new appliance.

Consistent with these studies, it would be appropriate for DOE to use a discount factor that, at minimum, reflects consumers' cost of borrowing and commercial and industrial borrowing and investment realities to account for how consumers actually behave in the market place. By not using this information and these studies, DOE is not using this available information effectively in its decision making process.

Question (7): Are there regulations, reporting requirements, or regulatory processes that are unnecessarily complicated or could be streamlined to achieve regulatory objectives in more efficient ways?

DOE is currently considering the use of full-fuel cycle estimates in the Department's analysis of appliance energy efficiency standards. For all of the reasons discussed above, the use of a full-fuel cycle analysis is complicated and filled with significant uncertainties that will create distorted analyses and decisions. Therefore, to help streamline the appliance energy efficiency standards rulemaking process, DOE should not consider the full-fuel cycle in any appliance energy efficiency standard rulemaking.

<sup>&</sup>lt;sup>12</sup> See n. 10, supra.

<sup>&</sup>lt;sup>13</sup> See n. 6, supra.

Question (8): 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?

For appliance energy efficiency standards and building code determinations, EEI is not aware of such technology. EEI would like to compliment DOE on the use of rule specific e-mail addresses and <a href="https://www.regulations.gov">www.regulations.gov</a> for making the testimony submittal process much easier. EEI also supports posting testimony on the website, as it allows stakeholders easily to view the comments and technical testimony of other interested parties that have submitted data.

Question (9): Are there any of the Department's regulations that fail to make a reasoned determination that its benefits justify its costs; or that are not tailored to impose the least burden on society, consistent with obtaining the regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations; or that fail to select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity)?

There are two recent examples of DOE rules that did not make reasoned determinations: the April 2010 final energy efficiency standards rule for electric residential storage water heaters above 55 gallons, <sup>14</sup> and portions of the September 2010 proposed rule on efficiency standards for residential refrigerator/freezers. <sup>15</sup>

#### Water Heaters

The water heater final rule will ban the sale of high-efficiency electric resistance storage water heaters with capacities great than 55 gallons in the US marketplace starting in 2015. This will cause a significant economic burden on many households (for both initial product costs and the possible costs of home renovations to ensure that the new water heaters will have proper space for the necessary air flow).

In terms of equity, DOE has failed to provide a reasoned justification for the decision to require a greater than 100% increase in the minimum efficiency for electric products above 55 gallons without requiring a similar efficiency increase for natural gas, propane gas, and oil water heaters. DOE also has failed to adequately justify the determination to mandate the use of a product that, at the current time, has a retail cost that is at least \$800 to \$1,500 higher than the product it is replacing (for an initial equipment only cost increase of at least 160 percent and typically 200 percent). Other competing gas or oil-fired products will not cause such a "price shock" for consumers to meet their new efficiency standards.

<sup>&</sup>lt;sup>14</sup> See n. 2, supra.

<sup>&</sup>lt;sup>15</sup> See n. 8, supra.

## Residential Refrigerator/Freezers

EEI has many concerns with the September 2010 proposed rule for residential refrigerator/freezers. Below are excerpts from our comments filed in 2010:

Based on DOE's own analysis showing that a majority of consumers will have higher life cycle costs when purchasing the most common types of residential refrigeration products, and DOE's use of the "social cost of carbon" to justify the standard and inflate the estimate annualized "benefits," EEI can only endorse the specific efficiency standards of some of the products shown in the NOPR.

The following tables highlight our support and our concerns:

Table 1 - Proposed Standards that EEI Endorses

| Product             | NOPR                | LCC % Net | LCC % No | LCC % Net | Median    |
|---------------------|---------------------|-----------|----------|-----------|-----------|
|                     | Efficiency<br>Level | Benefit   | Impact   | Cost      | Payback   |
| Upright             | TSL 2               | 81.1%     | 0.2%     | 18.7%     | 6.2 years |
| Freezers            | , 6                 | # F       |          |           |           |
| Chest<br>Freezers   | TSL 2               | 74.0%     | 0.2%     | 25.8%     | 8.7 years |
| Compact<br>Freezers | TSL 2               | 85.4%     | 4.7%     | 9.9%      | 2.5 years |

Please note that in all of these cases, from an economic point of view, the number of consumers that will have life cycle cost benefits is much higher than the number of consumers that will have net costs. EEI would usually prefer that at least 90 percent of consumers have life cycle cost benefits (as is the case with chest freezers TSL 1 with 98.2 percent of consumers having LCC benefits), but we realize that these levels represent the negotiated agreement.

EEI assumes that the "no impact" case still refers to consumers with life cycle costs that are  $\pm$ 2.0 percent of the base case scenario.

Table 2 – Proposed Standards that EEI is Concerned About

| Product                 | NOPR<br>Efficiency | LCC % Net<br>Benefit | LCC %<br>No Impact | LCC % Net<br>Cost | Median<br>Payback |
|-------------------------|--------------------|----------------------|--------------------|-------------------|-------------------|
|                         | Level              |                      |                    |                   |                   |
| Bottom-<br>Mount        | 14                 |                      |                    |                   |                   |
| Ref/Freezer             | TSL 3              | 27.7%                | 67.8%              | 4.5%              | 4.9 years         |
| Built-in<br>Bottom-     | ii:                |                      |                    |                   |                   |
| Mount<br>Ref/Freezer    | TSL 3              | 4.8%                 | 87.0%              | 8.2%              | 12.9 years        |
| Compact<br>Refrigerator | TSL 2              | 55.7%                | 1.0%               | 43.3%             | 3.9 years         |

EEI is concerned about these standards for the following reasons:

Bottom-Mount Refrigerator Freezer: Due to the high percentage of the consumers with life cycle costs in the +/- 2 percent of baseline case ("no impact"), it is not clear if an overwhelming majority of consumers will have positive life cycle economics. For example, if all of the 67.8 percent of the "no impact" cases were negative (increased life cycle costs), then the percentage of consumers with net costs would actually be 72.3 percent. If there was an "even split," then the overall numbers would be 38.4 percent of consumers with net costs and 61.6 percent of consumers with net benefits. If all of the "no impact cases" were positive, then the percentage of consumers with net benefits would be 95.5 percent.

EEI suggests that in cases where the "no impact" percentage dominates the results, DOE should show additional data with the percentage of consumers with net benefits or net costs over 0.0 percent (even if it is as low as 0.01 percent). With this information, all parties will be able to determine if the decision was economically justified, even though some of the results would be within the statistical "noise" range of +/- 2.0 percent.

<u>Built-in Bottom Mount Refrigerator Freezer</u>: EEI is concerned about this product for the same reason as the bottom-mount refrigerator freezer, as well as the length of the median payback period. At 12.9 years, the payback period is very close to the estimated life of the product, which makes the economic justification questionable.

<u>Compact Refrigerators</u>: EEI is concerned about the fact that over 43 percent of consumers will have net life cycle costs with this standard. In this case, TSL 1 produces much better results (74.2 percent net benefit, 24.4 percent net cost).

Table 3 – Proposed Standards that EEI does Not Endorse

| Product                                     | NOPR<br>Efficiency<br>Level | LCC %<br>Net<br>Benefit | LCC % No<br>Impact | LCC %<br>Net Cost | Median<br>Payback |
|---|-----------------------------|-------------------------|--------------------|-------------------|-------------------|
| Top-Mount<br>Ref/Freezer                    | TSL 3                       | 45.1%                   | 0.0%               | 54.9%             | 10.9 years        |
| Side-by-<br>Side<br>Ref/Freezer             | TSL 3                       | 49.2%                   | 0.0%               | 50.8%             | 10.9 years        |
| Built-in All<br>Refrigerator                | TSL 3                       | 21.9%                   | 9.1%               | 69.1%             | 15.9 years        |
| Built-in<br>Side-by-<br>Side<br>Ref/Freezer | TSL 3                       | 2.5%                    | 37.2%              | 60.2%             | 36.7 years        |
| Built-in<br>Upright<br>Freezer              | TSL 3                       | 21.3%                   | 0.5%               | 78.2%             | 21.1 years        |

EEI does not endorse these standards for the following reasons: In all of these cases, a <u>majority</u> of consumers (not just a "significant portion" or "significant fraction" as described in the *Federal Register* notice) will have higher life cycle costs. In addition, for all (or most) of the built-in products, the median payback period will be <u>longer</u> than the life of the appliance.

In other words, these proposed standards, based on DOE's own analysis, are <u>not</u> <u>economically justified</u> for a majority or a vast majority of consumers that purchase these products.

EEI suggests that DOE issue efficiency standards where a vast majority of consumers have net economic benefits over the life cycle period <u>and</u> where the median payback period is significantly less than the estimated life of the product. For example, for built-in all-refrigerators, TSL 2 (according to the DOE analysis) has 79.0 percent of consumers with life cycle cost benefits, only 2.6 percent with life cycle costs, 18.4 percent with no impact, and a median payback period of 3.0 years. For this product, EEI would be in favor of TSL 2.

Question (10): How can the Department best obtain and consider accurate, objective information and data about the costs, burdens, and benefits of existing regulations? Are there existing sources of data the Department 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.

For the actual impacts of standards, DOE should obtain retail cost information from enduse customers, retailers, and distributors whenever possible. In addition, as will likely be the case for larger electric water heaters, DOE should obtain information on extra costs that may be due to the new standard (e.g., room renovations needed to provide proper air flow for heat pump water heaters).

For example, below is information on retail equipment prices standard 80-gallon electric storage water heaters and 80-gallon heat pump water heaters (that will meet the upcoming standards) based on a Google search in March 2011 using the keywords "electric 80 gallon residential water heater" and "electric 80 gallon residential heat pump water heater."

- Standard water heaters Price range of \$408 to \$781
- Heat pump water heaters Price range of \$1,729 to \$2,403 (a price increase ranging from 121 to 489 percent)

As another example, consider the price increases related to incandescent light bulbs (with new federal efficiency standards starting in January 2012). Again, doing an internet search in March 2011:

- Standard 100 Watt bulbs \$1 for a 4 pack, or \$0.25 each
- Halogen 72 Watt bulbs \$4 for a 2 pack, or \$2.00 each (a 700 percent increase)

Other manufacturers have also been quoted as to retail prices. In the March 10, 2011, issue of *E&E Daily*, a story entitled "Spotlight will shine on light bulb controversy at Senate hearing today," the retail prices of higher efficiency incandescent light bulbs was provided:

Philips so far has developed two types of energy-efficient incandescents. A premium version that costs \$4.25 per bulb uses 30 percent less energy to produce the same light as an old-style 100-watt incandescent. And it lasts 3,000 hours before burning out, compared with 750 hours for a standard 100-watt bulb. That bulb has been on the market since late 2007, and Moorhead said, "We made it because the law passed."

But competition in the marketplace forced Philips to develop a lower-cost energy-efficient incandescent. The company is preparing to start selling in April an 100-watt-equivalent incandescent bulb that uses 30

percent less energy and lasts 1,000 hours before burning out. The bulbs will cost \$1.49 for two. General Electric Co. and Sylvania also sell the cheaper version.

Another example for DOE to examine is the impact of efficiency standards on the use of residential electric heat pumps. The rule was announced in 2001 and finalized in 2004, with an effective date of January 2006. Obviously, there has been a significant impact in terms of costs and burdens, as the following excerpted EEI testimony shows:

It would be very helpful for DOE to review its forecast for air conditioner and heat pumps shipments from the last rulemaking. It is very likely that the estimated shipments from the 2001 rulemaking for the years 2006-2010 are much higher than what actually happened as a result of the rule and the economic downturn. As part of this analysis, DOE should provide details and account for the equipment (and/or fuel) switching that occurred as a direct result of the January 2006 increase in efficiency standards for residential heat pumps, as well as the economic impacts on consumers.

According to data from AHRI and *Appliance* magazine, shipments of heat pumps have declined significantly since 2005:

- 2005 2,136,525 heat pumps shipped
- 2006 2,118,469 heat pumps shipped
- 2007 1,900,000 heat pumps shipped
- 2008 1,865,310 heat pumps shipped
- 2009 1,642,064 heat pumps shipped
- 2010 1,747,949 heat pumps shipped (lower than the number shipped in 2004)

In the past, heat pump shipments had increased every year from 1997 through 2004, rising from 1,130,718 units in 1997 up to 1,886,100 units in 2004.

It would be helpful if DOE could provide information about the decline in heat pump shipments in terms of how much was caused by economic reasons and how much was caused by the new efficiency standard.

Question (11): Are there regulations that are working well that can be expanded or used as a model to fill gaps in other DOE regulatory programs?

While time consuming for DOE, the 1996 Process Improvement Rule resulted in the creation a significant number of appliance energy efficiency standards that were acceptable to a variety of stakeholders and were cost-effective for consumers while maintaining market and fuel neutrality. As noted, DOE should continue to use the standard setting process set forth in the Process Improvement Rule and should subject

the unilateral termination of its use to notice and comment. If DOE wants to simplify this process, we urge the Department to provide – for notice and comment – an alternative that retains the openness, transparency and stakeholder input found in the Process Improvement Rule.

Thank you for your review of our comments.

Respectfully submitted,

Steve Rosenstock/St.

Manager, Energy Solutions

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Attachments

cc: Rick Tempchin, EEI

Ed Comer, EEI

# APPENDIX A

EEI's key concerns with the termination of the 1996 Process Improvement Rule are shown after each of the three changes shown below:

November 16, 2010

DOE Announces Changes to the Energy Conservation Standards Process

The Department of Energy today announced it is making changes to expedite its rulemaking process. Historically, the Department has had difficulty meeting deadlines imposed by Congress for adopting energy efficiency standards. The Department has already taken steps to improve its internal management of the rulemaking process, and is now making further changes designed to make the rulemaking process more efficient. Those changes are as follows:

# **Notice of Proposed Rule**

The energy conservation standards rulemaking process typically began with a framework document, followed by a preliminary analysis. Only after these two steps were completed did the Department issue a proposed rule for public comment. While the framework document and preliminary analysis provide useful information, there are more efficient ways of gathering data. Accordingly, in appropriate cases, the Department will gather the needed preliminary data informally and begin the public rulemaking process with the issuance of a proposed rule for public comment.

#### Key Concerns:

- This change is at tension with the Process Improvement Rule of 1996 as codified by Part 430 of Chapter II of Title 10, Code of Federal Regulations.
- This change will mean that "in appropriate cases," as determined by DOE, stakeholders will only have <u>one</u> chance (instead of 3) to provide any input on a proposed national appliance efficiency standard. This could lead to standards that are not in the best interests of consumers.
- This paragraph does not describe how "informally" the data will be gathered, or what data sources DOE will use to gather data. If data is gathered from biased sources, it could result in poorly designed standards which do not optimize energy efficiency and cost effectiveness for consumers.
- This paragraph does not describe the other "efficient ways" of gathering data that DOE is going to use. Again, there is a question of the data sources, and whether the preliminary data will be available for other stakeholders to view or comment on.

### Moving Analytical Information to Technical Support Document

The typical energy conservation standards *Federal Register* document has been several hundred pages long. These documents are so long, in large part, because the Department summarizes a great deal of the underlying analysis available in other documents. These summaries must be thoroughly reviewed to ensure that they accurately reflect the underlying data – even though the decisions are based on the data not the summaries. Going forward, the Department will provide references in the rulemaking documents to the analytical information in the technical support documents or elsewhere in the docket. Doing so will shorten the rulemaking documents, allow the process to proceed more efficiently, and allow the public to focus on the policy choices made by the rulemaking.

#### Key Concerns:

- This change describes the laudable goal of shorter rulemaking documents. However, the summaries are very helpful to stakeholders in terms of understanding DOE decisions of various candidate/trial standard levels and of the proposed and final rules. Technical support documents can be thousands of pages long, and this change could mean that DOE will have a reference to a support document that forces stakeholders to try to find the data or analysis used by DOE for its decision.
- The March 2, 2011 Federal Register notice on the preliminary analysis of efficiency standards for distribution transformers (technical support document) is a case study of this change. The 4-page notice was significantly shorter than the 43-page ANOPR for distribution transformers that was published in 2004. It was also much less informative and much less useful to stakeholders. The March 2011 notice, unlike the 2004 ANOPR, provided absolutely no information on the candidate standard levels, no information on the analytical parameters used, no information on the life cycle cost analysis, and no information on the type of feedback requested from stakeholders.
- This change does not lead to a more "efficient process" if the underlying reasons for DOE's decisions on appliance energy efficiency standards are not easily discernable.
- The standards are not about "policy choices", since the public policy is for DOE to create or review efficiency standards for "covered" products, but about developing minimum efficiency standards for "covered" products sold in the United States. These standards will have impacts on consumers, manufacturers, and energy suppliers, and shortening the document by obfuscation will not assist any of the affected stakeholders.

## Establish a Standing Negotiated Rulemaking Committee

Negotiated rulemaking is a process by which an agency attempts to develop a consensus proposal for regulation in consultation with all interested parties and before issuing a proposed rule. It allows an agency to address comments from interested parties in issuing a proposed rule. We believe this process, when done correctly, yields both better

and faster decisions. Accordingly, the Department will now use negotiated rulemakings as a means to engage the public, gather data and information, and, attempt to reach consensus among interested parties in order to advance the rulemaking process.

#### Key Concerns:

- This change is also at tension with the Process Improvement Rule of 1996 as codified by Part 430 of Chapter II of Title 10, Code of Federal Regulations, if the intent is for DOE to use negotiated rulemakings for most or all upcoming standards rulemakings.
- This change does not describe the process to be used by DOE to choose members of this standing committee, leaving open questions about bias and balance.
- This change does not describe the process of whether this committee will have to follow procedures as shown in the Federal Advisory Committee Act (FACA) or how "open" such meetings will be.
- Under Section 308 of the Energy Independence and Security Act of 2007 (EISA), which covered "expedited rulemakings," DOE is required to consider standards proposed by a joint letter that is "fairly representative of relevant points of view" (including covered product manufacturer representatives, States, and efficiency advocates). DOE may use this authority to create a standing committee that only has manufacturer, state, and efficiency advocate representation, while leaving out other key stakeholders such as the undersigned trade associations and consumers.
- If the membership of the committee is limited by DOE, then the process for standards will be less "open" and less "transparent."
- A "faster" decision does not mean a better decision. If a more "efficient" rulemaking process leads to standards where a vast majority of consumers have higher life cycle costs, where median payback periods that are longer than average product lifetimes, where consumers have less choices in the marketplace, and where efficient technologies are banned from the marketplace, then the decision, although "faster," will create a product marketplace that is much worse for consumers and other stakeholders.

The above described changes are another step in DOE's effort to save energy for American consumers and businesses by clearing the backlog of energy conservation standards rulemakings, and ensuring that future statutory deadlines are met. The changes are designed to make DOE's rulemaking process more efficient while ensuring robust public participation.

<u>Conclusion</u>: These announced changes are likely to inhibit public participation by reducing the chances for public participation, by limiting members of standing committees (and by possibly having closed meetings), and obfuscating decisions in the *Federal Register* notices. In other words, the revised process will be more "closed" and "invisible", rather than "open" and "transparent," which would be in direct conflict with the Administration's publicly stated goals.

In addition, by not providing the public any opportunity to comment on these significant changes, some of which are clear violations of the July 15, 1996 "Procedures for Consideration of New or Revised Energy Conservation Standards for Consumer Products" Final Rule, DOE appears to be unilaterally choosing a goal of "speed" or "efficiency" over "justifiable" appliance energy efficiency standards.