March 13, 2001

The Honorable Spencer Abraham
Secretary of Energy
Forrestal Building
1000 Independence Avenue
Washington, DC 20585-1000


Docket No. EE-RM-94-403

Dear Secretary Abraham:

The undersigned organizations represent a broad cross-section of consumer advocacy and other public interest organizations, and respectfully petition the Department of Energy (DOE) to reconsider its new energy conservation standards for clothes washers.1

As will be discussed below, DOE’s new standards conflict with several statutory criteria, including those designed to protect the interests of consumers. These concerns were raised during rulemaking proceedings, but have not been addressed by DOE. Furthermore, even if DOE does not believe that the law has been clearly violated, the new administration has the discretion to make changes to the standards. Therefore, we believe the Final Rule should be reopened for additional public comment and further agency consideration prior to its effective date.

1 This petition for reconsideration is to be distinguished from a petition for rulemaking. We are requesting that DOE consider modifying the Final Rule prior to its effective date, and not requesting that DOE promulgate a new standard to supersede the Final Rule. Indeed, DOE is not permitted to set an amended energy conservation standard less stringent than a previous one that has taken effect. 42 U.S.C. §6295(o)(1).
I. BACKGROUND

The Energy Policy and Conservation Act, as amended (the Act), set initial energy conservation requirements and created a process by which DOE may promulgate amended standards, for clothes washers and 13 other energy-using home appliances. The original requirements for clothes washers took effect in 1988, and amended standards took effect in 1994.

Soon thereafter, the agency began the process of promulgating a second round of amended standards. The agency published an Advance Notice of Proposed Rulemaking (ANOPR) in 1994, and, after numerous delays, a Supplemental ANOPR in 1998. On July 27, 2000, all manufacturers of clothes washers sold in the United States joined several energy conservation advocacy organizations and utilities in submitting to DOE a Joint Stakeholders Comment (Joint Comment), endorsing new standards for clothes washers. These standards would require a 22 percent increase in efficiency by 2004 and a 35 percent increase by 2007 above the standards currently in effect. The Joint Comment also endorsed substantial tax credits for manufacturers of energy efficient clothes washers and refrigerators.

No consumer organizations were a party to the Joint Comment, nor were any provisions made for public participation in its creation. The Joint Comment does state that DOE endorsed this process, though the extent of any direct agency participation or support has not been disclosed.

The Joint Comment was essentially adopted by DOE as its Notice of Proposed Rulemaking (NOPR), which was published on October 5, 2000. Concurrent with the publication of the NOPR, DOE released its Technical Support Document (TSD), which contained more than 500 pages and cited numerous other materials, only some of which were included in the record.

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2 42 U.S.C. §§ 6291 to 6317.
5 DOE’s Interpretive Rule states that “joint recommendations will be of most value to the Department if the participants are reasonably representative of those interested in the outcome of the standards development process, including manufacturers, consumers, utilities, states and representatives of environmental or energy efficiency interest groups.” 10 CFR, Part 430, Subpart C, Appendix A, §8(b) (emphasis added).
6 Joint Comment, p. 3. It should be noted that DOE did not comply with the Federal Advisory Committee Act (FACA), though the agency’s Interpretive Rule states that if the agency does participate in joint stakeholder recommendations, “the procedural requirements of the Federal Advisory Committee Act may apply to such participation.” 10 CFR, Part 430, Subpart C, Appendix A, §8(c). Specifically, FACA requires that applicable meetings be announced in the Federal Register, open to the public, and that all proceedings be documented for subsequent public inspection. DOE complied with none of FACA’s requirements here.
The NOPR allowed only the statutory minimum 60 days for public comment, until December 4th. Despite the limited time span, DOE received several critical comments, including those from some of the undersigned organizations. DOE submitted its draft final rule to the Office of Management and Budget on December 8th, only four days after the close of the comment period. The Final Rule, which DOE concedes is “based on the joint proposal submitted to the Department by clothes washer manufacturers and energy conservation advocates,” was published in the Federal Register on January 12, 2001, little more than a week before the change in Administration. The brevity of the period that DOE considered comments is reflected in the Final Rule, which makes no substantive changes from the Joint Comment in response to comments from other parties. Furthermore, DOE’s discussion of critical comments in the Final Rule was cursory and incomplete.

II. THE FINAL RULE CONTRADICTS SEVERAL STATUTORY CRITERIA

The standards promulgated in the Final Rule are not economically justified, will not result in significant energy savings, and threaten to compromise product choice and features. For these reasons, we believe the standards may violate the Act and warrant further consideration by the agency before taking effect. Though the following discussion is largely based on the 2007 standard, we are requesting agency reconsideration of both the 2004 and 2007 standards in the Final Rule.

A. The Final Rule Is Not Economically Justified

Under the Act, amended standards must be economically justified, based on the following criteria:

- the economic impact on manufacturers and on consumers,
- the likely savings in operating costs compared to any increase in purchase price, initial charges or maintenance costs;
- the total projected amount of energy savings;
- any lessening of utility or performance;
- the impact of any lessening of competition, as determined by the Attorney General;
- the need for national energy conservation; and
- other factors the Secretary considers relevant.\textsuperscript{11}

\textsuperscript{8} The comments of the undersigned Competitive Enterprise Institute, Mercatus Center, Consumer Alert, and Energy Market & Policy Analysis, Inc. are included in the rulemaking record, and are incorporated by reference in this petition.
The 2007 standard fails several of these criteria.

DOE’s analysis greatly overstates the net savings to consumers from purchasing a clothes washer that complies with the 2007 standard. Even so, the agency’s own analysis of lifecycle costs concedes that 19 percent of consumers overall, and 28 percent of senior households, will actually suffer net costs. However, the agency’s analysis greatly understates the extent to which the standard is not economically justified and will place an undue burden on consumers.

1. DOE Has Understated The Costs of Owning and Maintaining A 2007 Compliant Clothes Washer.

DOE estimates that the 2007 standard will add approximately $249 to the average purchase price of a new clothes washer, from $421 today to $670. This 59 percent increase is unprecedented in the history of DOE’s conservation standards program, and alone casts serious doubt on the economic justification of the standard. In addition, the actual ownership costs may be higher, as DOE has failed to meet its requirement in considering the likelihood of higher maintenance or warranty costs. The agency claims it has no data to that effect. However, these costs may be substantial, as the 2007 standard will likely result in the demise of models that have been on the market for many years and that have established a strong track record for reliability. These models will be replaced by substantially new ones, many of which have yet to be introduced, and thus have no repair history to judge.

Any market shift from “tried and true” models to unproven ones is very likely to result in increased maintenance costs. For this reason, leading consumer publications recommend clothes washers of proven reliability. To the limited extent repair histories of high efficiency front-loading washers are available, for at least one brand these new models are proving less reliable than their non-compliant top-loading counterparts. Further, it was announced after the publication of the Final Rule that another brand’s recently introduced high efficiency model was subject to a recall. The importance of

14  65 Fed. Reg. 59,562. It appears that the agency made no attempt to study the possibility of higher maintenance and repair costs, and simply relied on submissions (or the lack thereof) from manufacturers. Not surprisingly, manufacturers declined to criticize their own future product lines as being less reliable and/or costlier to repair.
16  Consumer Reports, “Product Updates,” January 2001, p. 46 (“Maytag front-loaders were among the less reliable brands and less reliable than Maytag top-loaders.”)
DOE taking into account the likelihood of increased repair or warranty costs is further underscored by the tendency for such costs to increase in high efficiency appliances.  

2. DOE Has Overstated the Likely Energy Savings From Its Standards.  

There are several reasons to question DOE’s poorly supported estimate of energy savings, but two agency assumptions deserve particular scrutiny – that the average clothes washer owner does 392 loads laundry per year and will own the same machine for over 14 years.

In its calculation of payback period and lifecycle costs, DOE has chosen to assume an average of 392 cycles per year. As with many of DOE’s assumptions, the agency does not provide enough information to independently determine the reliability of this estimate. Since, energy savings correlate directly with usage, any household that does considerably less than 392 loads per year will save considerably less energy.

Fortunately, the absence in the record of verifiable data on clothes washer usage was remedied by a survey submitted by the Mercatus Center. In contrast to DOE’s assumption of 392 loads per year (more than 7 loads per week), the survey of nearly 2,000 households found that over 54.6 percent do 5 or fewer loads per week, while only 28.9 percent operate their clothes washer 6 or more times per week. In addition to casting serious doubt on DOE’s assumed average, these results indicate that a majority of households will not operate their 2007 compliant clothes washer frequently enough to earn back the higher purchase price. DOE declined to discuss this survey in its response to comments.

Even if no other adjustment is made to DOE’s analysis, simply replacing DOE’s assumption of 392 loads per year with more accurate estimates (which could take the form of a range rather than a single average) would greatly weaken the agency’s assertion that the rules are economically justified.

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18 See, Consumer Reports, “Way Cool: A Guide To Buying Air Conditioning,” June 1998, p. 37 (“Mid-efficiency models … may be the least expensive to own overall because they’re cheaper to buy and less likely to need repair.”)
19 DOE also takes water savings into account, though the statute clearly limits the consideration for clothes washers to energy savings. 42 U.S.C. §6295(o)(2)(A).
21 DOE states that the number comes from a Proctor and Gamble survey, as adjusted by the agency using Residential Energy Consumption Survey data on household sizes. The Proctor and Gamble survey is not provided, and no other estimates are discussed. DOE further concedes that “in actuality, the number of loads of laundry washed per household per year depends on the number of persons in the household, and probably on other factors.” TSD, p. 10-6.
22 Mercatus Center Regulatory Studies Program, Addendum to Public Interest Comment on the Department of Energy’s Proposed Clothes Washer Efficiency Standards, No. 224, pp. 4-5.
23 Id., pp. 4-5.
24 Elsewhere in its analysis, the Mercatus Center calculates that a clothes washer meeting the 2007 standard must be used 300 times a year, or 5.8 times per week, to recover the higher purchase price over its useful life. Based on this estimate and the survey results of actual usage rates, the Mercatus Center concludes that more than two-thirds of households would not recoup the higher purchase price of the mandated washing machines. Id., p. 5.
Nearly as dubious as the assumption of 392 loads per year is the assumption that the initial purchaser of a clothes washer will own it throughout its useful life of 14 years. In reality, most people will change residences (and leave their clothes washer behind) before that time, and indeed a substantial number will change residences before the payback period (the time it takes to earn back the higher purchase price in the form of energy savings) has elapsed. According to the U.S. Bureau of the Census, the average median duration in one’s current residence is 5.2 years overall, 8.2 years for owner-occupied housing units.25

In its NOPR, DOE argued that it is obligated by statute to calculate the energy savings over the entire expected lifetime of a clothes washer.26 However, the agency cannot logically attribute all of these energy savings to the original owner, irrespective of the actual period of ownership and use. Indeed, the Act directs the agency to consider “the economic impact of the standard … on the consumers of the products subject to such standards.”27 Thus, DOE cannot ignore the likelihood that most consumers will not operate the same clothes washer for 14 years, and indeed that many won’t own a 2007 compliant washer long enough to earn back the higher purchase price. Data on the actual period of clothes washer ownership should be a part of the analysis.

Compounding the overstatement of the amount of energy saved are exaggerations of the cost of that energy. As several commenters noted, DOE uses highly problematic forecasts of energy prices extending decades into the future, though such forecasts have a track record for unreliability. In particular, the US Energy Information Administration electricity forecasts over the past twenty years have often overstated what proved to be the actual electricity costs. In addition, DOE has used an inexplicably low discount rate, rather than more plausible but higher alternatives such as average credit card or consumer loan rates.28 Given the long period of clothes washer ownership assumed by DOE, the agency’s use of a low discount rate significantly overstates the present value of the hypothetical stream of future energy savings.

3. DOE’s Consumer Subgroup Analysis Greatly Understates the Disproportionately Adverse Impacts on Low Income and Senior Households.

In its NOPR, DOE analyzed the effect of the rule on low income and senior households, but made no attempt to directly study these subgroups. Instead, DOE used simple mathematical adjustments to its estimate of 392 loads per year for the average household, based entirely on average sizes of low income and senior households. By DOE’s reckoning, since low income households have slightly higher numbers of persons per household, DOE calculated that they average 410 loads per year (nearly 8 loads per week), and thus benefit slightly more than the average household by owning an energy...

28 TSD, 7-22.
efficient clothes washer.\textsuperscript{29} Similarly, DOE estimates that senior households, with fewer persons, average 299 loads per year (nearly 6 loads per week), less than the overall average of 392 but enough so that only 28 percent of such households suffer net lifecycle costs.\textsuperscript{30}

In contrast to DOE’s speculative and inferential approach, the Mercatus Center actually asked persons with low incomes and senior citizens how much laundry they do. The survey results indicate that both subgroups do substantially less laundry than the average household, and far less than DOE’s calculations indicate.\textsuperscript{31} Of households with incomes under $20,000 per year, 66.6 percent do 5 or fewer loads per week, and only 9.8 percent do as much or more as DOE estimates.\textsuperscript{32} For persons 65 years of age or older, 65.7 percent do 5 or fewer loads per week, and only 11.3 percent do as much or more as DOE estimates.\textsuperscript{33} Based on these usage rates, a substantial and disproportionately high majority of low income and senior households would not recoup the higher purchase price of a 2007-compliant clothes washer.

Beyond net costs, there are other reasons low income and senior households would suffer disproportionately from these standards. For example, low income households would need to make greater sacrifices in order to come up with the additional $249 for a 2007-compliant clothes washer, and would face less favorable financing options and interest rates as compared to the average household.\textsuperscript{34} Senior households disproportionately object to the inconvenience of front loading washers, which (as will be discussed in a subsequent section) may become the predominant type once the 2007 standard takes effect.\textsuperscript{35}

4. The Attorney General’s Letter Failed To Consider the Anti-Competitive Effects.

The Attorney General is required to make a determination in writing of the impact energy conservation standards would have on competition.\textsuperscript{36} The letter from the Acting Assistant Attorney General, included with the Final Rule, states that the clothes washer standards would not adversely affect competition.\textsuperscript{37} In concluding so, the Acting Assistant Attorney General cites as primary support the Joint Comment, and in particular the fact that “virtually all manufacturers of clothes washers who sell in the United States participated in arriving at the recommendation….”\textsuperscript{38} Apparently, the Acting Assistant

\textsuperscript{29} 65 Fed. Reg. 59,573.
\textsuperscript{30} Id.
\textsuperscript{31} No. 224, Addendum, pp. 8, 10.
\textsuperscript{32} Id. at 10.
\textsuperscript{33} Id. at 8.
\textsuperscript{34} Indeed, DOE’s analysis assumes that the majority of low income households would have to forego purchasing a new high efficiency washer. TSD, Appendix J-27.
\textsuperscript{35} No. 224, Addendum, p. 5.
\textsuperscript{38} Id.
Attorney General believes there can be no concerns about competition as long as all the manufacturers of a product are working in unison. In contrast, we believe that this apparent cooperation only heightens such concerns.

It should be noted that, through the Joint Comment, representatives of the entire United States clothes washer market agreed to a future limitation of production to models estimated to cost 59 percent more than the current average. If such an agreement were made and implemented outside of any federal regulatory context, the Department of Justice would almost certainly initiate antitrust proceedings under Sherman Act. The fact that the manufacturers here used DOE’s rulemaking process to achieve the same result hardly eliminates the competitiveness concerns.

Competition must be preserved, not just between independent manufacturers, but also among product types and price ranges – indeed it is the latter form of competition that most directly affects consumers. For this reason, we respectfully request further input from the Attorney General’s office regarding the impact on competition of the new standards.

5. DOE Has Not Established The Need For National Energy Conservation.

DOE’s primary stated need for the energy savings is the “cumulative greenhouse gas emission reductions of 95.1 million metric tons (Mt) of carbon dioxide equivalent,” the agency attributes to reduced electricity generation from 2004 to 2030. This estimate, even if it proves accurate, is too trivial to be of consequence. Based on the US Energy Information Administration’s most recent forecast, carbon emissions associated with energy consumption will total approximately 53,000 million metric tons during this period. Thus, the estimated reductions of carbon dioxide equivalent represent only 0.18 percent of this total.

Furthermore, it is not clear if DOE is allowed to consider greenhouse gas emissions reductions. DOE is specifically forbidden from promulgating rules that implement or give effect to the Kyoto Protocol, the as yet unratified treaty obligating the

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39 See, Federal Trade Commission and U.S. Department of Justice, “Antitrust Guidelines for Collaborations Among Competitors,” April 2000, p. 6 (“Competitor collaborations may harm competition and consumers by increasing the ability or incentive profitably to raise price above or reduce, output, quality, service, or innovation below what likely would prevail in the absence of the relevant agreement.”).
40 In a January 22, 2001 energy conservation standard for air conditioners and heat pumps, the Acting Assistant Attorney General did raise competition concerns, in part because the standard could disadvantage some product types relative to others. 66 Fed. Reg. 7,170, 7,200 (January 22, 2000).
43 DOE’s estimated reductions in nitrogen oxides and sulfur dioxide are similarly trivial, and are largely unnecessary because ambient concentrations of these pollutants are already declining substantially under the Clean Air Act. See, Environmental Protection Agency, “Latest Findings on National Air Quality: 1999 Status and Trends,” August 2000.
US and other nations to reductions in carbon dioxide and other greenhouse gas emissions.\textsuperscript{44} DOE declined to comment on this possible statutory violation.

The above discussion highlights several reasons why the Final Rule is not economically justified. Given the inadequate support in the rulemaking record, DOE should reconsider its initial determination as to economic justification.

B. The Energy Savings Are Insignificant

DOE may not prescribe a standard that “will not result in significant conservation of energy….\textsuperscript{45} This is a separate requirement from the determination of economic justification described above. Indeed, “even an efficiency standard with no technical or economic drawbacks whatever – one that offers a completely painless way to energy conservation – will be discarded if it fails to achieve ‘significant’ conservation.”\textsuperscript{46} DOE states that the energy savings here are significant, equating the term with “non-trivial.”\textsuperscript{47} The agency did not articulate a threshold below which energy savings would be not be considered significant.

Here, however, the energy savings are so small (especially in relation to the costs to achieve them) that allowing the standards to go into effect would render this requirement meaningless. DOE estimates that the standards would result in savings of 5.52 quadrillion Btu (quads) of energy over the period 2004 to 2030.\textsuperscript{48} As discussed previously, this estimate is likely exaggerated, but even if accurate would likely fail any reasonable test of significance. Based on the US Energy Information Administration’s forecast of energy consumption, the nation will use approximately 3,400 quads of energy during this period.\textsuperscript{49} Thus, the estimated energy savings 5.52 quads from the new standards are 0.16 percent of total energy use.

We request DOE to reconsider its determination that the expected energy savings are significant. If DOE does determine that 0.16 percent energy savings are significant, the agency should at least explain where it believes the threshold for insignificance lies.

\textsuperscript{44} Department of the Interior and Related Agencies Appropriations Act, 2001, Public Law No. 106-291, §329.
\textsuperscript{46} \textit{Natural Resources Defense Council v. Herrington}, 768 F.2d 1355, 1373 (D.C. Cir. 1985) (\textit{Herrington}).
\textsuperscript{47} DOE relies on \textit{Herrington} for the proposition that “significant” is synonymous with “non-trivial”. 66 Fed. Reg. at 3,318. This conclusion both misinterprets \textit{Herrington} and overstates its relevance to the standards at issue here. In \textit{Herrington}, the court did not equate significance with non-triviality, and indeed declined to impose any specific definition of significance on the agency. Id. at 1382. The court merely rejected DOE’s working definition of significance, which was so high at the time that the agency literally refused to set any energy conservation standards whatsoever. Here, in contrast, clothes washer standards are already in place, and DOE seeks to amend them for the second time, despite the questionable significance of the marginal energy savings in doing so.
C. The New Standards Are Likely To Impermissibly Restrict Choice and Features

In perhaps the strongest consumer protection provision in the Act, DOE is restricted from prescribing a standard if interested persons establish by a preponderance of evidence that the standard is likely to result in the unavailability “in any covered product type (or class) of performance characteristics (including reliability) features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States at the time of the Secretary’s finding.” This requirement ensures that product performance and features will not be sacrificed for the sake of energy conservation.

The 2007 standard threatens to restrict product quality and choice to an extent unprecedented for energy conservation standards. Here, the preponderance of evidence standard can be easily met, since DOE’s own TSD concludes that the 2007 standard will likely violate this provision. The agency readily concedes that that full feature, vertical axis top loading clothes washers (which currently dominate in the market) would no longer be available once the 2007 standard takes effect. DOE’s record also establishes that door placement is an important feature for consumers and that top loading models are the preferred choice.

In the Final Rule, DOE conceded that “the original manufacturer data assumed that all clothes washers at and above a 35 percent improvement [the 2007 standard] would be horizontal-axis machines,” but added that progress has been made in the past few years and that “manufacturers have already begun offering top-loading, vertical-axis clothes washers that would meet the 2007 standard.” However, DOE provides no documentary support for this change in position, such as evidence that these new ultra-efficient top-loading models provide all the performance characteristics consumers demand.

Further, new evidence has emerged that these 2007 compliant top-loading clothes washers are not problem-free. The recently recalled washer is one such model; nonetheless, it is highlighted in some of DOE’s materials as proof that high efficiency top loading washers are currently available. Another 2007 compliant top-loader was previously criticized in Consumer Reports for saving energy by not heating the water sufficiently.

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51 For example, on page J-3 of the Technical Support Documents, DOE discusses compliant washers as being “either front loading machines with hot water wash capability or top loading machines with no hot water capability.” Further, in Tables 11.12 and 11.13, DOE assumes that top loaders will no longer be sold once the 2007 standard takes effect.
52 TSD, J-18 and 19, I-19.
54 Consumer Reports, “Sears Recalls Some Calypso Washers,” March 2001, p. 55. The model in question, the Kenmore Elite Calypso, was specifically cited by DOE to refute the charge that its new standards will eliminate top-loading washing machines.
Thus, DOE’s original concerns about the effect of the 2007 standard on top-loading models have been confirmed by difficulties with the first of these models to reach the market. Clearly, there is substantial evidence that this standard will compromise product choice and features.

III. **EVEN IF DOE VIEWS ITS FINAL RULE AS COMPLYING WITH THE STATUTORY CRITERIA, IT SHOULD NONETHELESS EXERCISE ITS DISCRETION AND RECONSIDER THE RULE**

Even if DOE rejects the position that its Final Rule fails to meet the statutory criteria for clothes washer standards, it should still exercise its discretion to reopen this proceeding. “An agency’s view of what is in the public interest may change, either with or without a change in circumstances.” *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1971). This is especially true with a change in administration, because:

> the responsible members of one administration may consider public resistance and uncertainties to be more important than do their counterparts in a previous administration. A change in administration brought about by the people casting their votes is a perfectly reasonable basis for an executive agency’s reappraisal of the costs and benefits of its programs and regulations. As long as the agency remains within the bounds established by Congress, it is entitled to assess administrative records and evaluate priorities in light of the philosophy of the administration.

*Motor Vehicle Mfrs. Ass’n v. State Farm Mutual Life Ins. Co.*, 463 U.S. 29, 59 (1983) (Rehnquist, Berger, Powell, and O’Connor concurring in part and dissenting in part.) Further, “an agency to which Congress has delegated policymaking responsibilities may, within the limits of that delegation, properly rely upon the incumbent administration’s views of wise policy to inform its judgments.” *Chevron v. Natural Resources Defense Council*, 467 U.S. 837, 865 (1984). Given the questions described above concerning the previous administration’s handling of such issues as economic impacts and the uncertain reliability of new technology, DOE clearly has the power to reopen this matter. All that is required under the law is that, if DOE does proceed to change this rule, it “supply a reasoned analysis” for why it has done so. *Greater Boston*, at 852. The reasons set forth in this petition, we submit, are the basis for such a change.

IV. **CONCLUSION**

For the reasons discussed above, we respectfully request DOE to reconsider its Final Rule on clothes washers. In light of the inadequate discussion of critical comments in the rulemaking record, we also request that the reconsideration process be fully open to input from all interested parties.