

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Missouri Gas Energy's )  
Proposed Tariff Sheets to Administer )  
Natural Gas Conservation Initiatives. )

Case No. GT-2007-0477  
Tariff File No. YG-2007-0880

**REPLY OF THE OFFICE OF THE PUBLIC COUNSEL**

COMES NOW the Office of the Public Counsel and respectfully states:

1. On June 1, 2007, Southern Union Company, d/b/a Missouri Gas Energy (MGE) filed proposed tariff sheets that included an energy efficient water heater rebate program. On June 11, 2007, Public Counsel filed a motion to suspend the tariff due to MGE's failure to provide supporting information as required for promotional practice tariffs by 4 CSR 240-3.255(2)(B). Public Counsel's motion requests that the Commission suspend the tariff filing until MGE has provided the criteria used and analysis performed to determine that the demand-side resource is cost-effective.

2. On June 13, 2006, MGE filed a response opposing Public Counsel's motion. MGE argues that the Commission previously determined that the tariff is not a promotional practice and that the Commission "fully considered and approved the outlines for the Company's natural gas conservation program in Case No. GR-2006-0422." MGE further argues that the definition of promotional practices "expressly excludes energy audits and other informational programs." Lastly, MGE argues that "there can be no serious debate that high efficiency conventional and tankless natural gas water heaters are cost effective."

3. On June 20, 2007 the Commission's Staff filed a recommendation also opposing Public Counsel's grounds for suspension. Staff argues that 4 CSR 240-3.255(2)(B) does not

apply “because MGE is filing a tariff to comply with a Commission Report and Order.” The Staff also echoed MGE’s argument that the program is specifically excluded from being a promotional practice by 4 CSR 240-14.010(6)(L)(8). Public Counsel offers the following response to the arguments of MGE and the Staff.

4. MGE and Staff argue that the Commission has already approved the program in Case No. GR-2006-0422, and therefore, no cost-effective analysis is required. The Commission’s *Report and Order* in Case No. GR-2006-0422 (“Order”) authorized a water rebate program, however, nowhere does the Order state or imply that the Commission’s tariff filing requirements do not apply or that all of the specifics of the water rebate program were pre-approved. The tariff filing process is in place to ensure the details off all tariff filings are addressed if necessary. Now is the time to ensure those details are considered, including the very important step of ensuring the program is cost-effective. The issue before the Commission in GR-2006-0422 was not whether the Commission should adopt a specific conservation program, the issue was whether “funding for natural gas conservation programs [should] be included in MGE’s cost of service.” One must assume that the Commission concluded that funding should be in the cost of service because the Order ultimately approved a program. The Order makes no indication, however, that any of the specifics of the water heater rebate program were considered, and the Order makes absolutely no findings regarding the proposed program. The missing findings on cost-effectiveness is understandable since MGE performed no analysis and the Commission has no basis for approving the program as being a cost-effective benefit to consumers as required. The Order simply states that “the Commission shall approve the conservation program proposed by Staff and MGE.” Ensuring that the tariff filing proposes a program that is cost-effective is a necessary step not addressed in GR-2006-0422.

5. Public Counsel is only requesting that the Commission take the fundamental step of ensuring that the program proposed in the tariff filing is cost-effective, as required by the Commission's rule 4 CSR 240-3.255(2)(B)3. This rule provides valuable protections to consumers from practices that waste resources and provide no material benefit to consumers. This tariff filing should be treated no differently than any other tariff filing and should comply with the Commission's filing requirements unless the Commission has specifically granted MGE a waiver from those rules. No such waiver has been granted.

6. The Commission's *Order Denying Applications for Rehearing* in Case No. GR-2006-0422 states that MGE's Natural Gas Conservation program "is not included in the Commission's definitions of what constitutes promotional practices," and therefore the promotional practices rule "is not applicable." This conclusion is incorrect. As demonstrated below, the water heater rebate program clearly meets the Commission's definition of a promotional practice. Unfortunately, the Commission's *Order Denying Applications for Rehearing* does not provide any analysis to explain why the Commission concluded that the water heater rebate program fails to meet the definition of a promotional practice. Promotional practices are defined in 4 CSR 240-14.010(6)(L) as follows:

(L) Promotional practices shall mean any consideration offered or granted by a public utility or its affiliate to any person for the purpose, express or implied, of inducing the person to select and use the service or use additional service of the utility or to select or install any appliance or equipment designed to use the utility service, or for the purpose of influencing the person's choice or specification of the efficiency characteristics of appliances, equipment, buildings, utilization patterns or operating procedures.

This definition clearly applies to the program proposed in the tariff filing, which is as "an incentive program designed to assist customers with natural gas conservation efforts through the installation of high efficiency gas water heaters." The incentive program would offer customers

a bill credit for purchasing and installing a natural gas hot water tank with an Energy Factor at or above 0.62, or a natural gas tankless hot water system with an Energy Factor at or above 0.80. In other words, the program would offer consideration for the purpose of inducing a person to install a gas appliance and to influence that person's choice or specification of the efficiency characteristics of the appliance. This program meets the definition of "promotional practices" without ambiguity.

7. MGE argues that the definition of promotional practices expressly excludes "energy audits and other informational programs." The Staff states that the program "is specifically excluded from being a promotional practice. Both MGE and the Staff cite to 4 CSR 14-14.010(6)(L)(8), which excludes from the definition of promotional practices the following:

Providing free or below-cost energy audits or other information or analysis regarding the feasibility and cost-effectiveness of improvements in the efficiency characteristics of appliances, equipment, buildings, utilization patterns or operating procedures.

MGE correctly states that energy audits or other informational programs are excluded from the definition of promotional practice. However, Staff's and MGE's responses fail to explain how a program that offers consideration for replacing appliances to improve energy efficiency is excluded from the definition. The program would apply \$705,000 in ratepayer funds to a program to offer credits for replacing water heaters. An exclusion applying to energy audits is inapplicable.

8. The last argument offered by MGE is that "there can be no serious debate that high efficiency conventional and tankless natural gas water heaters are cost effective." Contrary to MGE's claim, there *can* be serious debate as the attached affidavit by Public Counsel's Chief Energy Economist Mr. Ryan Kind indicates. Mr. Kind shows that not only can there be serious debate on the cost-effectiveness of the water heater rebate program, but the facts show that

MGE's proposal is clearly *not* cost-effective. Considering Mr. Kind's persuasive analysis, Public Counsel recommends that the program be adjusted to make it cost-effective by either adjusting the water heater rebate portion or replacing it with a different program.

9. MGE referenced several documents in an attempt to show the water heater rebate program is cost-effective. The first document, a "Draft Criteria Analysis" recognizes the "limited energy efficiency potential in the common conventional water heating technologies." This limited potential should raise serious doubt regarding the cost-effectiveness of a water heater rebate program, and should further necessitate a cost-effective analysis before approving such programs. The Draft Criteria Analysis recognizes the "limited" energy efficiency improvements for gas storage water heaters and concludes on Page 3 that "[g]iven current and potential energy savings, conventional gas storage water heating technology is nearly maximized and is not under consideration for ENERGY STAR." The Draft Criteria Analysis also raises concerns about the whole-home gas tankless water heaters when it states on Page 4 that "[e]nergy savings potential is questionable." MGE's responsive pleading raises more questions about cost-effectiveness than it does to resolve such questions.

10. A telling indication that the water heater rebate program is a promotional practice is MGE's own characterization of the program. MGE witness David Hendershot, Manager, Business Support Services described the program as a promotion in his rate case rebuttal testimony in Case No. GR-2006-0422 where the water heater rebate program was first proposed. And the tariff filing at issue in this case also characterizes the program as a promotional practice by including the heading "PROMOTIONAL PRACTICES" on all three tariff pages outlining the program.

11. Granting Public Counsel's motion to suspend the tariff would be consistent with recent Commission practices when considering a demand-side resource program filed as a rate case tariff. In the recent AmerenUE decision issued last month in Case No. ER-2007-0002, the Commission did not approve a tariff filed to implement a promotional practice because AmerenUE did not submit an evaluation plan as required by the promotional practices rule. The Commission concluded:

The Commission will not approve the submitted tariff that would implement an IDR Pilot Program at this time because the submitted tariff does not comply with the filing requirements of the Commission's Electric Utility Promotional Practices rule. The Commission orders AmerenUE to submit a revised tariff including an evaluation plan within 30 days from the effective date of this order. In a separate order, the Commission will open a new case to consider that revised tariff. The revised tariff does not need to be submitted as part of the compliance tariffs resulting from this report and order. As it reevaluates its proposed tariff, the Commission directs AmerenUE to consult with the other parties and to give due consideration to the revisions urged by the MEG. If AmerenUE does not file a tariff that is acceptable to all other parties, the Commission may impose the revisions urged by MEG.<sup>1</sup>

The AmerenUE tariff filing is analogous to the MGE tariff filing in that both are attempts to offer a promotional practice without following the consumer protections provided for in the Commission's rules. Consistent with the above quoted Commission Order, Public Counsel urges the Commission to direct MGE to submit a revised tariff that includes "documentation of the criteria used and the analysis performed to determine that the demand-side resources are cost-effective." Public Counsel should note that in the AmerenUE case the Commission's Staff recommended that no demand-side management plan should be implemented without a cost-effectiveness analysis. Staff's Post-Hearing Brief states:

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<sup>1</sup> In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area, Case No. ER-2007-0002, Report and Order, May 22, 2007.

Staff does not recommend implementation of a DSM program that has not undergone this extensive analysis simply to fulfill a dollar amount spending requirement.<sup>2</sup>

Here the Commission's Staff recognized the need to distinguish between simply spending an allotted amount versus analyzing the specifics of the program to ensure cost-effectiveness.

12. In approving a straight-fixed variable (SFV) rate design for MGE in Case No. GR-2006-0422, the Commission admittedly removed an incentive for consumers to reduce usage. The conservation and energy efficiency programs were approved as an offset to fill the void created by the removal of a conservation incentive. The impact of adopting a SFV rate design coupled with a program that is not cost-effective would be a significant reduction in conservation incentives with no offsetting benefits. It would be contrary to the goals of a conservation program if the Commission were to authorize a program that wastes ratepayer dollars and offers no more than an appearance of providing a counterbalance to reduced conservation incentives. By requiring MGE to provide an analysis of the program proposed in the tariff filing, and by requiring that the program be cost-effective, the Commission can help ensure the program is designed to truly benefit ratepayers. Until the Commission can conclude that MGE has shown the proposed program to be cost-effective, approving the tariff as proposed would be a disservice to consumers and would ignore the necessary protections provided for in the rules. As it stands now, the Commission has no basis for a conclusion that the program is cost-effective. Public Counsel is not requesting suspension of the tariff for any reason other than to ensure consumers are not forced to pay \$750,000 for an ineffective program. If MGE is unable to show that the proposed program is cost-effective, Public Counsel would encourage the Commission to modify the program in a way that ensures cost-effectiveness. For example, a

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<sup>2</sup> The Staff's Post-Hearing Brief, Case No. ER-2007-0002, p. 35.

cost-effective program that offers rebates on gas furnaces could be considered as a replacement. Just as MGE considers Public Counsel's motion to suspend the tariff "a mystery," Public Counsel considers it a mystery why MGE or the Staff would want the Commission to authorize a program that is not cost-effective and which would waste ratepayer funds.

WHEREFORE, the Office of the Public Counsel respectfully offers the above response and requests that the Commission suspend Tariff Filing Number YG-2007-0880.

Respectfully submitted,

OFFICE OF THE PUBLIC COUNSEL

By: /s/ Marc D. Poston

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**CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing have been mailed, emailed or hand-delivered to the following this 25th day of June, 2007:

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/s/ Marc Poston



**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Missouri Gas Energy's  
Proposed Tariff Sheets to Administer Natural  
Gas Conservation Initiatives

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**Case No. GT-2007-0477**  
Tariff No. YG-2007-08880

**AFFIDAVIT OF RYAN KIND**

**STATE OF MISSOURI** )  
                                  ) ss  
**COUNTY OF COLE**     )

Ryan Kind, being first duly sworn, deposes and states:

1. My name is Ryan Kind. I am a Chief Utility Economist for the Office of the Public Counsel (Public Counsel or OPC). I have worked extensively in the areas of resource planning and utility-sponsored energy efficiency programs for the last 15 years. I have reviewed program designs, cost effectiveness evaluations, and post-implementation evaluation plans for most of the energy efficiency programs that have been proposed by Missouri gas and electric utilities over the past 15 years.
2. Missouri Gas Energy (MGE or Company) filed its SUGGESTIONS OF MISSOURI GAS ENERGY IN OPPOSITION TO THE OFFICE OF THE PUBLIC COUNSEL'S MOTION TO SUSPEND TARIFF (MGE's Reply) in this case on June 13, 2007. The MGE Reply states in paragraph 5 that "there can be no serious debate that high efficiency conventional and tankless natural gas water heaters are cost effective." Not only can there be a "serious debate" about this topic -- the quantitative analysis that I performed and describe in this affidavit clearly shows that offering \$75 rebates to MGE's customers for the purchase of water heaters with an energy factor (EF) of .62 is not cost-effective. Public Counsel does not dispute that tankless water heaters can be cost effective in the niche market that exists for this type of water heater. However, Schedule DH2 of David Hendershot's Rebuttal testimony in Case No. GR-2006-0422 shows that MGE believes that only 200 (approximately 3%) of the 6,784 rebates in each program year will be for tankless water heaters while the rest will be for conventional gas water heaters.
3. Paragraph 5 of MGE's Reply states "with reference to Table 2 of the attached Appendix A [for the reader's convenience, Table 2 is attached to this affidavit as Attachment A], the energy savings realized as between a standard water heater and a high-efficiency model will be greater than the cost of the rebate over the life of a



conventional water heater” and that “even at MGE’s relatively low current PGA rate of approximately \$0.80/Ccf, savings over the nine year expected life of a 50 gallon capacity unit are \$137 which exceeds the incentive by \$62.” This statement implies that MGE believes that its water heater program will create \$137 in savings per participant and that this level of savings can be compared to MGE’s expense of \$75/rebate to assess the cost-effectiveness of the conventional water heater rebate program. MGE’s attempt to show that its rebate program for conventional water heaters is cost effective will be shown to be incorrect by the analysis that follows.

4. MGE’s “cost effectiveness” analysis of the conventional water heater rebate program is flawed because it: (1) ignores the fact that the new federal appliance standards for water heaters (the baseline for cost-effectiveness analysis) vary depending on the storage capacity of the water heater, (2) fails to include other significant costs of the rebate program including administrative costs and promotional costs, and (3) compares a \$75 rebate expense today with the undiscounted \$15.20 savings per year over a nine year period ( $\$15.20 \times 9 \text{ years} = \$137$ ).
5. In MGE’s Reply, it references the cost: benefit analysis in Table 2 of the Energy Star Residential Water Heaters: Draft Criteria Analysis dated May 2, 2007. First, it should be noted that this analysis was based on a cost per Ccf of \$1.37 (\$26/year savings divided by the savings per year of 19 Ccf) which greatly exceeds the current MGE PGA rate of approximately \$0.80/Ccf. MGE acknowledges this difference when it claims the conventional water heater rebate program will result in \$137 in lifetime savings instead of the much higher \$234 figure that appears in the table. However, the savings that are shown by the analysis in the table, when adjusted to reflect MGE’s PGA rate of \$0.80/Ccf are still overstated because they do not reflect: (1) higher federal efficiency standards (efficiency factors) for 30 and 40 gallon water heaters, (2) additional administrative and promotional program costs, and the (3) the lower discounted present value of the savings that occur over the nine year period.
6. The new federal efficiency standards that became effective on January 20, 2004 (See Attachment B) are based on the following formula:

$$\text{Energy Factor} = .67 - (0.0019 \times \text{Rated Storage Volume in gallons})$$

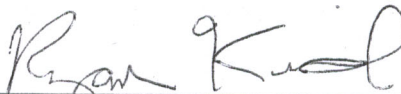
As Table 2 in Attachment A indicates, the Energy Factor (EF) associated with a 50 gallon water heater that meets the new federal appliance guidelines is .575. However, as can be seen by the above formula, the energy factors mandated by federal law vary depending on the number of gallons of storage capacity. Since 30 and 40 gallon water heaters have higher federal minimum standards (EF) the savings associated with installing a water heater that meets the MGE rebate criteria of an EF of .62 will be less per year and less over the life of the water heater. Attachment 3 shows the EF values of .594 and .613 that are associated with 30 and 40 gallon water heaters respectively. The lower levels of annual savings associated with replacing the least efficient 30 and 40 gallon water heater with a water heater that meets the MGE criteria of a .62 EF are



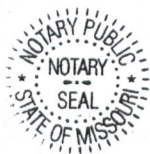
shown in Attachment 4. This attachment shows that the annual savings resulting from installing a 30 or 40 gallon water heater with an EF of .62 instead of the least efficient model that is now available is only a few dollars per year.

7. One of the other major flaws in the MGE analysis is that the Company ignored the administrative and promotional costs that are necessary to implement the program when it looked at the costs and benefits associated with the conventional water heater rebate program. Schedule DH2 of David Hendershot's Rebuttal testimony in Case No. GR-2006-0422 shows that the Company expects to spend \$66,687 in administrative costs/year and \$100,000 in promotional costs/year while providing rebates to 6,784 customers. This means that in addition to the \$75/customer that MGE will incur for participants in the conventional water heater rebate program, the Company will also incur \$24.57 in administrative and promotional costs ( $(\$66,687 + \$100,000)/6,784 = \$24.57$ ). Therefore, the Company will actually incur \$99.57 ( $\$75.00 + \$24.57$ ) for each participant in the conventional water heater rebate program.
8. The other major flaw in the "cost effectiveness" analysis performed by MGE was the Company's failure to properly compare the costs that will be incurred at the time the rebate is paid with the future benefits of a more efficient water heater that will accrue over the nine-year period that the savings are expected to accrue. Such a comparison cannot be made without performing a present value analysis that discounts the value of the benefits that will be received in future years before comparing them to the level of costs associated with the program. Attachment 5 contains an analysis that shows the present value of the benefits resulting from installing 30, 40 or 50 gallon water heaters that meet the MGE criteria of a .62 EF instead of installing the least efficient water heater that is available in the market today. The present value analysis for 30, 40, and 50 gallon water heaters shows that the present value of future benefits are \$14.74, \$54.72, and \$94.64 respectively. When the present value of future benefits are added to the present value of upfront program costs, the analysis of 30, 40, and 50 gallon water heaters shows that the net benefits (savings) are -\$84.83, -\$44.85, and -\$4.93 respectively.
9. The cost effectiveness analysis that I have performed shows that the MGE conventional water heater rebate program is clearly not properly designed to be cost effective. This is not surprising given that rebate levels proposed by MGE for this program are close to the highest levels of any offered anywhere in the U.S. and because there is very little difference between the efficiency level that MGE is incenting its customers to achieve in comparison to the lowest level of conventional water heater efficiency available in the market due to new federal appliance standards that recently went into effect.


FURTHER AFFIANT SAYETH NOT.

  
Ryan Kind

Subscribed and sworn to me this 25<sup>th</sup> day of June 2007.



JERENE A. BUCKMAN  
My Commission Expires  
August 10, 2009  
Cole County  
Commission #05754036

  
Jerene A. Buckman  
Notary Public

My commission expires August 10, 2009.

**Table 2: Energy and Cost Comparison: Gas Water Heating – 50-gallon capacity**

Gas Water Heater	Standard	High-Performing	Advanced Non-Condensing	Tankless	Gas-Condensing	Solar
Energy Factor	0.575	0.62	0.7	0.8	0.8	1.0 <sup>16</sup>
Annual Consumption (therm/yr) <sup>17</sup>	261	242	214	187	187	150
Annual Savings (therm/yr)	None	19	47	74	74	111
Annual Cost of Operation (\$/yr)	\$360	\$334	\$306 <sup>18</sup>	\$258	\$268 <sup>19</sup>	\$207
Annual Savings (\$/yr)	None	\$26	\$60	\$102	\$92	\$153
Life Expectancy	9 years <sup>20</sup>	9 years	13 years <sup>21</sup>	20 years <sup>22</sup>	15 years	20 years
Lifetime Savings (therms)	None	171	611	1480	1,110	2,220
Lifetime Savings (\$)	None	\$234	\$776	\$2,042	\$1,376	\$3,064
Installed Cost	~\$865 <sup>23</sup>	~\$930	~\$1,100	~\$1,470-\$2,500 <sup>24</sup>	~\$1,300-\$1,800 <sup>25</sup>	~\$3,200
Price Premium	None	~\$65	~\$235	~\$605-\$1,635	~\$435-\$935	~\$2,335
Payback on Price Premium	None	~2.5 years	~4 years	~6-16 years	~5-10 years	~15 years
Tax Credit (See detail below)	None	None	None	\$150-\$250	\$130-\$180	\$960
Payback w/ Tax Credit	NA	NA	NA	~4.5-13.5 years	~3.5-8 years	~9 years
Residential Annual Sales	~4.7 million <sup>26</sup>	NA	NA	~254,600 <sup>27</sup>	NA	2,430

<sup>16</sup> Natural Resources Defense Council "Solar Water Heater Fact Sheet" October 2004. SEF refers to Solar Energy Factor.

<sup>17</sup> Energy consumption estimated using the DOE test procedure. Based on the following formula: (41,045 BTU/EF x 365)/100,000

<sup>18</sup> Takes into account an additional 50 kWh consumed for running powered burner, igniter and draft inducer

<sup>19</sup> Takes into account an additional 100 kWh consumed for running the blower and igniter

<sup>20</sup> *Appliance Magazine* "29<sup>th</sup> Annual Portrait of the U.S. Appliance Industry" September 2006

<sup>21</sup> Super Efficient Water Heating Appliance Initiative, PIER Draft Final Project Report, March 2007, California Energy Commission (CEC-500-05-010)

<sup>22</sup> Energy Trust of Oregon "Tankless Gas Water Heaters: Oregon Market Status" December 2005

<sup>23</sup> Based on survey data collected for the Super Efficient Water Heating Appliance Initiative "PIER Draft Final Project Report" March 2007, California Energy Commission (CEC-500-05-010)

<sup>24</sup> Based on information in Energy Trust of Oregon "Tankless Gas Water Heaters: Oregon Market Status" December 2005 and survey data collected for the Super Efficient Water Heating Appliance Initiative "PIER Draft Final Project Report" March 2007, California Energy Commission (CEC-500-05-010)

<sup>25</sup> Based on information in Super Efficient Water Heating Appliance Initiative "PIER Draft Final Project Report" March 2007, California Energy Commission (CEC-500-05-010) and American Council for an Energy Efficient Economy "Emerging Technology and Practices" 2004

<sup>26</sup> Gas Appliance Manufacturers Association 2006 Shipments

<sup>27</sup> Ibid.

Issued in Washington, DC, on December 26, 2000.

**Dan Reicher,**

*Assistant Secretary, Energy Efficiency and Renewable Energy.*

For the reasons set forth in the preamble, Part 430 of Title 10, Code of Federal Regulations, is amended as set forth below.

# **PART 430—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS**

1. The authority citation for Part 430 continues to read as follows:

**Authority:** 42 U.S.C. 6291–6309, 28 U.S.C. 2461 note.

2. Section 430, Appendix E to Subpart B of Part 430 is amended in Section 1 by adding paragraph 1.16 to read as follows:

## **Appendix E to subpart B of Part 430—Uniform Test Method for Measuring the Energy Consumption of Water Heaters**

### **1. Definitions**

\* \* \* \* \*

1.16 *Tabletop water heater* means a water heater in a rectangular box enclosure designed to slide into a kitchen countertop space with typical

dimensions of 36 inches high, 25 inches deep and 24 inches wide.

\* \* \* \* \*

3. Section 430.32(d) of subpart C is amended by revising paragraph (d) to read as follows:

§ 430.32 Energy and water conservation standards and effective dates.

\* \* \* \* \*

(d) *Water heaters.*

The energy factor of water heaters shall not be less than the following for products manufactured on or after the indicated dates.

Product class	Energy factor as of January 1, 1990	Energy factor as of April 15, 1991	Energy factor as of January 20, 2004
1. Gas-fired Water Heater .....	0.62 – (.0019 × Rated Storage Volume in gallons).	0.62 – (.0019 × Rated Storage Volume in gallons).	0.67 – (.0019 × Rated Storage Volume in gallons).
2. Oil-fired Water Heater .....	0.59 – (.0019 × Rated Storage Volume in gallons).	0.59 – (.0019 × Rated Storage Volume in gallons).	0.59 – (.0019 × Rated Storage Volume in gallons).
3. Electric Water Heater .....	0.95 – (0.00132 × Rated Storage Volume in gallons).	0.93 – (0.00132 × Rated Storage Volume in gallons).	0.97 – (0.00132 × Rated Storage Volume in gallons).
4. Tabletop Water Heater .....	0.95 – (0.00132 × Rated Storage Volume in gallons).	0.93 – (0.00132 × Rated Storage Volume in gallons).	0.93 – (0.00132 × Rated Storage Volume in gallons).
5. Instantaneous Gas-fire Water Heater.	0.62 – (0.0019 × Rated Storage Volume in gallons).	0.62 – (0.0019 × Rated Storage Volume in gallons).	0.62 – (0.0019 × Rated Storage Volume in gallons).
6. Instantaneous Electric Water Heater.	0.95 – (0.00132 × Rated Storage Volume in gallons).	0.93 – (0.00132 × Rated Storage Volume in gallons).	0.93 – (0.00132 × Rated Storage Volume in gallons).

**Note:** The Rated Storage Volume equals the water storage capacity of a water heater, in gallons, as specified by the manufacturer.

\* \* \* \* \*

## **Appendix**

[The following letter from the Department of Justice will not appear in the Code of Federal Regulations.]

Department of Justice,  
*Antitrust Division, Joel I. Klein Assistant Attorney General*

Main Justice Building, 950 Pennsylvania Avenue, NW, Washington, DC 20530–0001, (202) 514–2401/(202) 616–2645 (f), [Antitrust@justice.usdoj.gov](mailto:Antitrust@justice.usdoj.gov)

July 10, 2000.

Mary Anne Sullivan,  
*General Counsel, Department of Energy, Washington, DC 20585*

Dear General Counsel Sullivan: I am responding to your May 10, 2000 letter seeking the views of the Attorney General about the potential impact on competition of the proposed energy efficiency standards for water heaters, Docket No. EE–RM–97–900. Your request was submitted pursuant to Section 325(o)(2)(B)(i) of the Energy Policy and Conservation Act, 42 U.S.C. 6291, 6295, which requires the Attorney General to make a determination of the impact of any lessening of competition that is likely to result from the imposition of proposed energy efficiency standards. The Attorney General's responsibility for responding to requests from other departments about the effect of a program on competition has been

delegated to the Assistant Attorney General for the Antitrust Division in 28 CFR 0.40 (g).

We have reviewed the proposed standards, the supplementary information published in the **Federal Register** notice, the Technical Support Document, and information from water heater manufacturers, their suppliers, and other interested parties. The Antitrust Division has concluded that the proposed standards could have an adverse effect on competition because water heater manufacturers may have to use an input that will be produced by only one source. We do not anticipate that the proposed standard will affect competition among water heater manufacturers. Rather, competition to provide heater manufacturers with blowing agents could be adversely affected, with resulting cost increases to consumers.

In the analysis of the proposed standard that the Department of Energy published in the **Federal Register**, the only design options for affected electric water heaters that meet the DOE's proposed standard require use of HFC–245fa as a blowing agent for insulation. Insulation is an essential part of a water heater, and HFC–245fa is a patented product that has only one supplier. DOE's published analysis further concludes that gas-fired water heaters have design options that would eliminate the need for HFC–245fa, but at significant added costs.

Water heater manufacturers have objected to the proposed standard on the grounds that their need to rely on a sole source will make

them vulnerable to supply disruptions and monopoly pricing. Based on the analysis that DOE published, the concerns of water heater manufacturers regarding HFC–245fa, and our interviews with industry participants, the Antitrust Division has concluded that competition could be adversely affected by the adoption of the proposed standard.<sup>1</sup> The Department urges the Department of Energy to take into account this impact on competition in determining its final energy efficiency standard for water heaters and to consider altering the standard so that manufacturers may meet the standard for all affected models using blowing agents for insulation other than HFC–245fa without adding significantly to the costs of manufacturing water heaters.

Sincerely,

Joel I. Klein

[FR Doc. 01–1081 Filed 1–16–01; 8:45 am]

**BILLING CODE 6450–01–P**

<sup>1</sup> We note that some manufacturers have suggested that DOE underestimated the performance capabilities of alternative blowing agents. If these suggestions prove correct, water heater manufacturers may in fact be able to comply with the proposed standard for more models, while using water-based blowing agents. We also note that it's possible that manufacturers may in fact be able to engineer design options using water-based blowing agents with a greater performance capability or lower cost than they now anticipate.



## Federal Energy Factor Minimums By Gallons of Capacity

	Gallons of Storage			Minimum Energy Factor
(a)	(b)	(c) =(a)*(b)	(d)	(e) = (d) - (c)
0.0019	<b>30</b>	0.057	0.67	0.613
0.0019	<b>40</b>	0.076	0.67	0.594
0.0019	<b>50</b>	0.095	0.67	0.575

Energy Factor = .67 – (0.0019 x Rated Storage Volume in gallons)

# Annual Savings for 30, 40, and 50 Gallon Water Heaters

Water Heater Storage Capacity	Appliance Standard EF	% of usage at .62 EF	Avg. Usage Appliance Standard	MGE Program Rebate Criteria	Annual Usage at .62 EF (Ccf)	Difference in annual usage	MGE rate cents/Ccf	Annual Savings (\$s)
(a)	(b)	(c) =(b)/(e)	(d)=(f)*(c)	(e)	(f)	(g)=(f) - (d)	(h)	(i)=(g)*(h)
<b>30 gallon</b>	0.613	0.99	258.05	0.62	261.00	2.95	0.80	2.36
<b>40 gallon</b>	0.594	0.96	250.05	0.62	261.00	10.95	0.80	8.76
<b>50 gallon</b>	0.575	0.93	242.06	0.62	261.00	18.94	0.80	15.15

Note 1 - EF values in column (b) are calculated in Attachment C

Note 2 - usage values in column (f) are from Table 2 in Attachment A



## Water Heater Present Value and Net Benefits Analysis

Year	----- Annual Savings -----		
	30 Gallon	40 Gallon	50 Gallon
1	2.36	8.76	15.15
2	2.36	8.76	15.15
3	2.36	8.76	15.15
4	2.36	8.76	15.15
5	2.36	8.76	15.15
6	2.36	8.76	15.15
7	2.36	8.76	15.15
8	2.36	8.76	15.15
9	2.36	8.76	15.15
Years 1-9 PV savings	\$14.74	\$54.72	\$94.64
Year 1 Rebate cost	\$75.00	\$75.00	\$75.00
Year 1 Admin. And Promotion costs	\$24.57	\$24.57	\$24.57
PV of upfront costs	\$99.57	\$99.57	\$99.57
<b>NET BENEFITS (SAVINGS)</b>	<b>-\$84.83</b>	<b>-\$44.85</b>	<b>-\$4.93</b>

Note - Annual Savings (\$2.36, \$8.76, \$15.15) are calculated in Attachment D