

**Written Statement of**

**HUGH COOLEY**

**Vice President and General Manager  
National Wholesale and Joint Ventures  
Shell Oil Company**

**Before the**

**SUBCOMMITTEE ON DOMESTIC POLICY  
OF THE  
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM  
OF THE  
UNITED STATES HOUSE OF REPRESENTATIVES**

**July 25, 2007  
10:00 a.m.  
2154 Rayburn Office Building**

My name is Hugh Cooley, and I am Vice President and General Manager, National Wholesale and Joint Ventures, with Shell Oil Company in Houston, Texas. I have been with Shell in various capacities for more than 35 years. I am here to testify because for a number of years I have been responsible for managing Shell's sale of Shell-branded gasoline at the wholesale level, including managing the relationships with our wholesalers who supply most of the independent stations that make up ninety-three percent of the Shell-branded stations in the United States. Independent stations are stations to which Shell sells its branded gasoline, but Shell is not involved in the day-to-day operations, including setting prices of the fuel.

Before I offer my substantive comments, I ask that you appreciate the circumstances under which I appear today. Since December of last year, numerous class action lawsuits have been filed naming more than 100 companies, including Shell, alleging that these companies did something improper by selling fuel using the standard 231 cubic inch volumetric gallon specified by each of the states in which the lawsuits were filed. We firmly believe that these claims are merit-less and based on a seriously flawed understanding of the situation. As I am sure you can appreciate, we usually hope to avoid commenting on the subject matter of pending litigation, especially where there are many other companies whose interests are also at stake.

Let me begin by summarizing what I believe to be the primary questions that concern the Subcommittee and Shell's short answer to each.

**Number 1:** Are consumers losing billions of dollars because there is no automatic temperature adjustment of retail gasoline sales? Absolutely not. Consumers are purchasing

gasoline dispensed in a uniform measurement and sold in a consistent pricing system that takes into account the same factors in each market, such as supply, distribution logistics, demand, temperature, and the like. The retail market for gasoline is highly competitive, and Shell firmly believes that market prices take into account the absence of temperature adjustment.

**Number 2:** Would automatic temperature adjustment guarantee that every gallon of motor fuel contained the same amount of energy? Again, the answer is no. Uniform energy content for gasoline is virtually impossible due to the many factors other than temperature that affect its energy content.

**Number 3:** Why is temperature adjustment used for wholesale gasoline transactions but not for retail sales? The applicable State laws and regulations allow or require temperature adjustment for many wholesale transactions but specify volumetric measurement without regard to temperature for retail sales.

**Number 4:** Why is automatic temperature adjustment used for retail sales in Canada? My understanding is that the government of Canada approved temperature adjustment for retail gasoline fifteen years ago at the urging of the manufacturer of a temperature adjustment device. A few years later, some retailers began to temperature adjust, presumably to obtain a competitive advantage over other retailers as a result of their lowered unit cost. Once the trend became apparent, other retailers followed to avoid a competitive disadvantage.

**Number 5:** Should automatic temperature adjustment be allowed or required for retail sales in this country? No. Shell believes that consumers would not realize any pricing benefit and that consumers would ultimately bear the financial brunt of such a shift in required retail equipment.

Before I address each of these issues in greater detail, I would like to offer a couple of important points that provide context to better understand these issues. First, the cost of installing automatic temperature adjustment equipment would have a significant financial impact on independent owners and operators of retail stations not owned or operated by the integrated oil companies. We believe that independent stations are the major players in selling gasoline to consumers, accounting altogether for more than ninety percent of such sales. For example, as I mentioned earlier, ninety-three percent of all retail stations selling Shell-branded gasoline are not operated by Shell but are independent businesses that have entered into agreements with Shell or Shell wholesalers to purchase Shell-branded gasoline and license the Shell trademarks. Shell determines the retail price of its gasoline at only about seven percent of the Shell-branded stations in the United States. As Mr. Columbus testified to this subcommittee several weeks ago on behalf of the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America, the temperature adjustment debate is not about the integrated oil companies; it is about the independent retailers. And we believe that if independent retailers are impacted, consumers will be as well.

Second, individual state governments set the standards for how gasoline is to be measured at the retail level, and with one exception they follow the recommendations of the independent standard-setting body responsible for recommending the system of weights and measures in this country – the National Conference on Weights and Measures (NCWM). The NCWM has uniformly maintained the historical measurement system based on volumetric gallons without regard to temperature. Thus, the laws of *all states* except Hawaii specify that gasoline be sold by volumetric gallons consisting of 231 cubic inches of fuel, without regard to the temperature of that fuel. Hawaii also specifies the sale of gasoline by a uniform volumetric

gallon, no matter what the temperature, but in the 1970's redefined a gallon of gasoline to be 234 cubic inches. Proposals to institute the use of automatic temperature adjustment for the retail sale of gasoline have been debated on numerous occasions at the NCWM since the 1970's, but that organization has never adopted any of those proposals. Most recently, during the week of July 9, 2007, at its annual conference in Salt Lake City, the NCWM once again declined to endorse automatic temperature adjustment on either a mandatory or permissive basis. The NCWM has set up a steering committee comprised of national experts to help the technical committees answer important questions that were raised during the debate in Salt Lake City.

The Current Law Requiring the Sale of Gasoline By Volumetric Gallons Does Not Harm Consumers.

Some have asserted that the absence of temperature adjustment in the retail sale of gasoline costs American consumers billions of dollars per year. This assertion is incorrect and is based on a misunderstanding of the economics that drive the retail gasoline market. The market for retail sales of gasoline is intensely competitive and localized. This intense competition necessarily adjusts prices to take into account the effect of temperature variations on retail gasoline sales.

Shell similarly believes based on economic principles that, if gasoline were temperature-adjusted at the retail level, the intense competition in the market would adjust prices to take that into account as well. Consumers could benefit from temperature-adjusted fuel sales in warm states only if retail stations were willing to sell larger, non-standard, temperature-adjusted gallons at the same price as they had been selling smaller, unadjusted standard gallons, and Shell does not believe that retailers would or even could do so.

Some have also incorrectly suggested that consumers are misled by retail sales of gasoline in standard volumetric gallons without temperature adjustment, which, as explained above, is the method specified by state regulations. First, the science underlying the temperature adjustment debate is not secret or novel in any way. Second, temperature adjustment at the retail level has been debated for decades at the NCWM, an open and public organization and the appropriate forum for that debate. Third, I do not think anyone could reasonably assert that any advertising or signage at retail stations or elsewhere somehow represents that gasoline sales are adjusted for variations in temperature. To the contrary, every indication at the stations themselves is that consumers are purchasing gasoline in standard volumetric gallons, and that is exactly what they have been getting.

#### Automatic Temperature Adjustment Cannot Guarantee Uniform Energy Content.

The primary assumption on which the proponents of automatic temperature adjustment rest their case is that it would guarantee a uniform energy content for every gallon of gasoline. We believe that is factually wrong. Many factors other than temperature affect the energy content of gasoline, including the percentage of ethanol it contains, the grade of crude oil from which it was refined, and the processes used at the refinery. In fact, gasoline from different stations or different tank truck deliveries is not likely to have the same energy content, even at the exact same temperature. Thus, the claim made by the proponents of automatic temperature adjustment that it would guarantee that consumers would get the same amount of energy in every gallon of fuel is simply not correct. For example, some areas use various winter boutique fuel formulations designed in part to promote cold starts and better car performance by making the fuel more volatile, resulting in less energy per gallon. Conversely, some states mandate the use of various summer boutique formulations of gasoline that are designed to avoid evaporation by

making the fuel more dense thus helping reduce ozone pollution. Denser fuel has more energy per gallon. See <http://www.epa.gov/otaq/rfgecon.htm>. Similarly, fuels that contain ethanol contain less energy than gasoline without ethanol. For example, the Department of Energy and Environmental Protection Agency Fuel Economy Guide indicates that the fuel economy penalty for E-85 averages about 26% with a range between 21% and 35%. See <http://www.fueleconomy.gov> (U.S. Department of Energy and U.S. Environmental Protection Agency). These examples demonstrate that the assumption that temperature adjustment would somehow give every gallon of gasoline the same energy content does not hold up under scrutiny.

All Wholesale Transactions Are Not Adjusted for Temperature.

Previous testimony before this subcommittee indicated that all sales at the wholesale level (that is, sales other than to the motoring public) are temperature adjusted. That testimony was inaccurate. As I have previously explained, state laws require that gasoline be sold to consumers at the retail level by volumetric gallons without regard to temperature. In contrast, some, but certainly not all, wholesale transactions are adjusted for temperature. By law, some states require temperature adjustment in wholesale transactions, some states allow it but do not require it, some states prohibit it altogether, and some states give the buyer the right to choose whether sales will or will not be adjusted for temperature. Thus, not all wholesale transactions are adjusted for temperature. For example, about half of Shell's sales at the wholesale level are temperature adjusted and half are not. In addition, the number of terminals where wholesale transactions occur is much smaller than the number of retail stations in the United States, making installing, maintaining, and inspecting temperature adjustment at the wholesale level far more practical and less expensive than at the retail level.

Furthermore, the reasons that temperature adjustment makes sense for inter-company exchange transactions do not apply to retail sales: distance, time, quantity, and temperature. Gasoline marketers like Shell exchange large volumes of gasoline between terminals that are very far apart, often in markedly different climates, and at varying times of the year, all of which requires accounting for the impact of temperature variations. For example, Shell might deliver a specific number of gallons of gasoline to another company in Texas (where we have a refinery) in exchange for that company's near simultaneous delivery of gasoline in northern Minnesota (where we do not have a refinery). Similarly, in some instances a company may receive product in one season and repay the gallons at a later date when the weather is cooler or warmer.

In contrast, retail gasoline sales occur at far smaller quantities under highly competitive conditions in a specific place, at a specific time, under specific conditions, which include the ambient temperature and large signs visible from the street posting prices. Unlike the exchange context, consumers do not buy and sell gasoline over a huge geographic distance and climate difference — in fact, they cannot do so. Likewise, consumers do not receive product in one season and repay it in another — nor is that possible.

#### The Canadian Experience Does Not Support Temperature Adjustment in the United States.

Shell Canada has historically been a separate company from Shell U.S. In addition, Shell Canada converted most stations to automatic temperature adjustment more than ten years ago. As a result, we are still working to get information regarding the reasons why Shell Canada chose to follow the rest of the market and adopt automatic temperature adjustment for retail sales. That said, I will do my best to convey what we have learned so far from various sources.



My current understanding is as follows: The Canadian government made automatic temperature adjustment permissive at the retail level approximately fifteen years ago. Media reports indicate that a manufacturer of automatic temperature adjustment devices first proposed that Canadian regulators allow automatic temperature adjustment and then marketed the device after the law was changed. We also understand that few, if any, retailers installed automatic temperature adjustment devices in Canada for the first few years after it was allowed. Apparently some retailers started to install automatic temperature adjusting devices, which allowed them in a cold climate to sell smaller volumetric gallons than their non-adjusting competitors, giving them a potential competitive advantage over other retailers because they had a lower effective unit price. Once a number of retailers had installed automatic temperature adjustment devices, other retailers appear to have followed suit to avoid being competitively disadvantaged. Shell Canada apparently followed those retailers that started the trend to convert to automatic temperature adjustment. After most stations had converted and the market essentially had transitioned to automatic temperature adjustment, basic economics leads us to believe that prices at the street level would have adjusted to take into account the new temperature adjusted unit of measure.

Permissive Automatic Temperature Adjustment Would Not Ultimately Benefit Consumers.

Shell believes that making automatic temperature adjustment permissive throughout the United States would not be a good idea. First, if in any given area some stations adopted the technology and others did not, consumers would be confused over how to compare prices. Even if there were a way to easily distinguish a temperature-adjusting station from one that did not adjust, a consumer driving down the street and comparing the prices on the signs would have no practical way to know the current temperature of the gasoline in order to

determine which station had the better price. Second, a permissive system like Canada's would encourage independent retailers to install such devices in the colder states, but would have no ultimate benefit to consumers in those states and no impact whatsoever in the warmer states.

Because Shell believes that there is no real benefit to be gained from the use of automatic temperature adjustment, and certainly not a benefit equal to the cost of the equipment, Shell has no plans to install such equipment at the small percent of sites we own (if allowed to do so in the future) unless market forces required automated temperature adjustment in order to remain competitive. Since independent businesses operate the vast majority of Shell-branded locations, it would be the decision and cost burden of those independent operators to choose whether to install such equipment.

#### Mandatory Automatic Temperature Adjustment Would Not Ultimately Benefit Consumers.

Shell also does not believe that making automatic temperature adjustment mandatory is warranted because the equipment cost would likely raise prices for consumers and might drive some independent operators out of business. Shell perceives no real benefit to consumers due to the fact that per-gallon market prices would likely rise where temperature adjustment resulted in dispensing larger "gallons" and fall where temperature adjustment resulted in dispensing smaller "gallons." At the same time, installation of such equipment, the cost of which Shell estimates (based on our own network) to be approximately \$20,000 to \$30,000 per site, would undoubtedly be a very material capital investment for the many independent businesses that sell Shell-branded gasoline. The need of these retailers to recoup this capital investment would likely lead to an increase in the real price of gasoline. Moreover, this capital investment might well be such a burden on some of the smallest, family-operated retail stations that they might not survive. Thus, the non-existent benefit to consumers would

likely be outweighed by the unintended consequences of mandatory retail temperature adjustment: higher retail prices and fewer independent retailers.

Others Have Rejected Automatic Temperature Adjustment.

Shell believes that for all of these reasons the Subcommittee should conclude that automatic temperature adjustment is not a concept that should be pursued. Others have studied this issue and come to the same conclusion. For example, as described earlier in my testimony, the NCWM has been considering and studying this issue for decades and has never concluded that automatic temperature adjustment would benefit consumers. A report prepared by the Australian Institute of Petroleum in 1996 based on a comprehensive study of gasoline temperatures throughout Australia concluded that there would be no net benefit to consumers from temperature adjustment. Additionally, when legislation was recently proposed in the state of Missouri to redefine a gallon for different geographic zones to account for temperature variations, a legislative study concluded that the proposed legislation would have a negative impact on consumers due to costs to retailers and the added cost of inspection and enforcement.

More Information Will Be Available.

Shell hopes that the Subcommittee will endorse the request of Congressman Gordon, Chairman of the Committee on Science and Technology, to the National Academy of Sciences study this issue requesting that they assess important factors concerning automatic temperature adjustment. Taking this route would also be consistent with recent actions of the NCWM, the state legislature in California, and the Department of Agriculture in Maryland, all of which have decided to make detailed studies of various issues relating to temperature adjustment. Ultimately, Shell believes that this issue is best dealt with by the NCWM and the state

governments, the entities that have regulated wholesale and retail sales of gasoline for many decades.

In conclusion, Shell believes that any perceived benefit from mandatory or permissive temperature adjustment would be greatly outweighed by the costs. We thank you for your time and attention.