



**Summary of NPRA's Testimony before the House Committee on Energy &
Commerce Subcommittee on Energy & Air Quality
June 7, 2007**

- NPRA's long-standing position opposes the mandated use of alternative fuels, and supports the sensible and workable integration of alternative fuels into the marketplace based on market principles and demands. However, NPRA has specific comments on the proposed discussion draft.
- The requirements of the alternative fuels program (AFP) and the low carbon fuels standard (LCFS) are large and ambitious. NPRA appreciates that, compared to legislation in the Senate and the Administration's alternative fuels proposal, the implementation timeline for the AFP reflects a relatively measured, gradual progression.
- The tension between the AFP and the LCFS has the potential to interfere with the implementation of both programs. While the AFP allows for a wide variety of fuels to meet its mandated volumes, the strict limitations of the LCFS may prevent many fuels from being eligible to meet the standard.
- The waiver language contained in the bill has the potential to undermine capital investment. A preferable approach to an "off-ramp" waiver would be to develop an "on-ramp" trigger. Under this system, the EPA Administrator would have to certify that certain conditions necessary for implementation are in place at least two years before the AFP commences.
- The AFP allows for the use of an expanded fuel base, thereby providing incentives for a wider array of fuels, thereby promoting flexibility and allowing for the development of myriad alternatives. State biofuels mandates, however, could frustrate and undermine this purpose by limiting refiners' choices in specific geographic areas. Further, these mandates create boutique markets requiring special fuel formulations and transportation logistics, thereby balkanizing the national fuel market. If Congress wishes to allow for as diverse a supply of alternative fuels as possible, and to promote as much flexibility in the system as possible, state and local biofuels mandates should be preempted.
- Requirements to substantially increase the volume of ethanol and other renewables could essentially supplant a significant portion of the need and desire for additional domestic refining capacity. Refiners must make investments today on what they believe to be the longer-term (10-15 years or more) outlook. The domestic refining industry is likely to look upon rapidly rising mandates for alternative fuels in the coming years as adding significant risk to investments in capacity expansions.



Written Statement of the
National Petrochemical & Refiners Association

delivered by
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before the
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce Committee

concerning
**Legislative Hearing on Discussion Draft Concerning Alternative Fuels,
Infrastructure, and Vehicles**

June 7, 2007
Washington, DC

Chairman Boucher, Congressman Hastert, and members of the subcommittee, I am Charles T. Drevna, Executive Vice President of NPRA, the National Petrochemical & Refiners Association. Thank you for the opportunity today to provide with you with our perspective on the proposed Fuels Title. NPRA is a national trade association with 450 members, including those who own or operate virtually all U.S. refining capacity, as well as most of the nation's petrochemical manufacturers with processes similar to those of refiners.

The House Subcommittee on Energy and Air Quality released a Discussion Draft of alternative fuels legislation on June 1, which includes an increase in the RFS for 2009-2012, the replacement of the RFS with an Alternative Fuels Program that starts at 14 billion gallons in 2013 and increases slowly to 35 billion gallons in 2025, and implements a Low Carbon Fuel Standard beginning in 2013. In addition, it would require EPA to establish uniform standard specifications for biodiesel, establish a DOE grant program for alternative fuels infrastructure, prohibit a franchise agreement from restricting the expansion of alternative fuels infrastructure, require DOE to mandate the installation of E-85 compatible retail pumps when FFV market penetration reaches 15% in a geographic region, require an increase in corporate average fuel economy standards (36 mpg after MY2021 for passenger automobiles, 30 mpg after MY2024 for non-passenger automobiles), prohibit EPA from granting state waivers for state automobile emissions standards to reduce greenhouse gas emissions, and require automakers to increase production of FFVs.

While there is universal agreement that alternative fuels will continue to be a strong and growing component of the nation's transportation fuel mix, NPRA's long-standing position opposes the mandated use of alternative fuels and supports the sensible and workable integration of alternative fuels into the marketplace based on market principles and demands. Having said that, I will address specific provisions of the alternative fuels discussion draft. Then, I will provide you with some general thoughts on a stable fuels policy.

Overall, NPRA is concerned that the proposed Fuels Title establishes requirements that may be inconsistent and do not work together to form a stable fuels program, which is critical to national energy policy. Leadership on this Committee and elsewhere in Congress has stressed the need to maximize refining capacity in the United States, and our members have risen to the challenge, principally by adding hundreds of thousands of barrels of capacity at existing refineries. In fact, on the aggregate over the last 14 years, our companies have essentially built the equivalent of one new world-class refinery each year. But continued success in this area requires the kind of legislative and regulatory certainty that attracts capital investment to refining. We know the Subcommittee recognizes the need for such certainty. We request that the proposed legislation, while attempting to integrate renewable fuels into the transportation fuel mix and, at the same time, lower the total carbon content of fuels, not simply add additional layers of regulation to the refining sector in ways that undermine certainty.

I. Section 101 - Alternative Fuels Program; and Section 102 - Low Carbon Fuel Standard

A. The Requirements of the Alternative Fuels Program and the Low Carbon Fuels Standard Are Large and Ambitious.

The proposed alternative fuels program (AFP) would require the use of 35 billion gallons of alternative fuel by 2025 and begin in 2013. Also in 2013, the low carbon fuels standard (LCFS) would take effect and grow increasingly stringent every year. Under the LCFS, 12 billion gallons per year of the new AFP would have 80% of the carbon intensity (CI) of gasoline in 2004. Our understanding of the proposed language is that half of remainder (*e.g.*, 2013 Alternative Fuel = 14; remainder = 14-12=2; half =1 in 2013) would have 50% of the CI of gasoline in 2004. The other half of the remainder would have 25% of the CI of gasoline in 2004. Therefore, the average CI of the total AFP would decline annually.

By our calculation, the average CI would start at 0.7393¹ in 2013 and decline quickly each year thereafter. Therefore, a 26% reduction would be required in the first year and increasing annually to a 38% reduction in 2020.

This proposed Low Carbon Fuel Standard is much more stringent than California's proposed Low Carbon Fuel Standard, a 10% reduction by 2020.

B. The Requirements of the Alternative Fuels Program and the Low Carbon Fuels Standard Are in Tension with One Another.

The proposed legislation seems to embrace the enthusiasm for a 35 billion gallon program shared by the Administration and the Senate, although the draft does provide a longer, less front-loaded timeframe. However, by placing an overlapping carbon limit on alternative fuels, the aperture through which industry must travel to comply may be much too narrow. As a result, there is a fundamental tension between the yearly expansion of the alternative fuels mandate in the AFP and the restraints placed on qualifying fuels under the LCFS.

It would be very confusing and difficult for industry to comply simultaneously with an increasing AFP and a decreasing LCFS. The impact on obligated parties would be compliance strategies that could change frequently because the LCFS changes every year. An obligated party would have to adjust compliance strategies annually. Therefore, interest in particular alternative fuels may quickly wane, since formulations may qualify under LCFS for only a few years. Thus, the obligated party would seek a different mix of alternative fuels for later years. This lack of stability would hinder the commercialization of some alternative fuels.

To the extent that the Environmental Protection Agency (EPA) exercises its authority to regulate some fuels based on lifecycle greenhouse gas emissions, it alters the economics of these fuels. To reconcile these provisions, EPA should be able to decrease the AFP mandate requirements by the

¹ $((12 * 0.8) + (1 * 0.5) + (1 * 0.25))/14 = 0.7393$

same volume of fuel rendered ineligible for satisfying the LCFS. Without this ability, the LCFS could unwittingly disrupt fuel supply to consumers.

C. The Waiver Provision May Undermine Capital Investment.

In order to comply with the AFP the industry will have to make significant capital investment. The problem with the waiver provision is that it requires significant economic hardship to occur *prior* to reducing or eliminating the AFP. As a result, the waiver provision could have the perverse effect of stranding investment in alternative fuels production no longer required. Further, the Committee has encouraged industry to make capital investment available for refinery capacity expansion. Diverting capital to potentially-stranded investments works at cross purposes to this well-established congressional objective.

A preferable approach to an “off-ramp” waiver would be to develop an “on-ramp” trigger. Under this system, the EPA Administrator would have to certify that certain conditions necessary for implementation are in place at least two years before the AFP commences. Those conditions would include projections for adequate supply of alternative fuels at reasonable prices. Should the Committee conclude that a waiver approach makes greater sense, it must then take into account the potential for undermining capital investment already pledged to alternative fuels. A waiver program therefore would need to be of a shorter period than a year, even if waivers were still subject to periodic renewal.

II. Section 203. Alternative Fuel Dispenser Requirements

While NPRA does not speak comprehensively for fuel marketers, our members nevertheless oppose mandates that require us to install dispensers for products that we do not make or for which we cannot vouch. While the bill recognizes at Section 103 that some alternative fuels are still in need of uniform specifications – in some cases because of performance problems – the bill's requirements for alternative dispensers could be interpreted as a tacit approval of certain formulations.

As companies are required to install these pumps, and potentially distribute E-85, a company should be indemnified from any claims related to product quality arising from a dealer's sale of unbranded E85 or other alternative fuels that are not the company's products. Additionally, the mandate would be implemented once flex-fuel vehicle penetration reaches 15% within a region. However, the bill does not define what geographic area constitutes a "region." NPRA believes that a "region" should cover a large geographic area as well as a significant number of consumers. Without a clear definition, a "region" could constitute an area of such small size, that 15% market penetration could be achieved, yet viable demand for E-85 may not exist.

III. Sec. 204. Pipeline Feasibility Study

The logistical challenges associated with an expanded mandate for ethanol use are many. One primary challenge is its transportation, since ethanol is not distributed through pipelines because of problems with water contamination and corrosion. Due to its water solubility, ethanol drops out of fuel during shipment through pipelines and results in noncompliant or substandard fuel. Ethanol's corrosive properties degrade the strength of pipeline valves and joints. For these reasons, ethanol must be blended with gasoline or the appropriate blendstock at the terminal. This makes the delivery and distribution of ethanol expensive because it requires more expensive transportation modes, like truck, rail car, barge or ship. Therefore, any significant increase in the production of ethanol will result in more stress on the distribution system. Because ethanol is blended with gasoline at terminals, these facilities must either invest in new ethanol storage tank and blending equipment or dedicate existing storage tanks, thereby reducing the quantity and diversity of on-hand inventory.

While NPRA supports the undertaking of a pipeline feasibility study by the Department of Energy, as set forth in Section 204, we do not think the Section addresses a key question: What if the Secretary determines that dedicated ethanol pipelines are *not* feasible? A preferable approach would be to make certification of feasibility a condition precedent to proceeding with the full AFP mandate.

Under this system, the Secretary would have to certify that cost-effective infrastructure is available in order to transport the volume of ethanol necessary to meet the requirements of the AFP.

Failure to certify pipeline feasibility should result in a diminishment of the mandate by the quantity of ethanol Congress determined would be needed to fulfill the mandate.

IV. General Thoughts on Maintaining a Stable Fuels Policy

A. The Issue of Energy Security

In addition to the Fuels Title we are discussing today, the administration and many in Congress have rolled out other policy initiatives that would substantially expand the use of ethanol and other renewable fuels for the U.S. transportation sector. These actions are a direct reply, and viewed by its proponents as an effective policy response, to a domestic transportation fuel market that has experienced much volatility and uncertainty in recent years. Although the Fuels Title differs from the administration's proposal, which increases the annual U.S. consumption of ethanol and related bio-fuels to 35 billion gallons by 2017, it is important to consider the impact of a greatly expanded alternative fuels mandate.

According to the Energy Policy Research Foundation, the administration's proposal, when fully implemented and under a best-case scenario, would reduce petroleum imports by 1.5 million barrels per day. This number reflects the metric that if the 35 billion gallon per year goal were to be attained, it would by volume alone replace 2.25 million barrels of imported oil with domestically manufactured fuel. However, since ethanol contains only two-thirds the energy content of petroleum, the oil import savings would be a little as 1.5 million barrels per day. This would not appreciably alter the nation's dependence on foreign oil, which the Department of Energy forecasts to be nearly 13 million barrels per day in 2017. A similar analysis would apply to the Fuels Title.

For the U.S. gasoline pool, it is estimated that about 6 billion gallons of ethanol is both essential and complimentary to the domestic production of gasoline. Without these volumes of ethanol

available for blending with gasoline, the domestic refining industry would likely have difficulty meeting consumer demands.

B. Refinery Capacity Expansion Projects

It should be clearly understood that requirements to substantially increase the volume of ethanol and other renewables could essentially supplant a significant portion of the need and desire for additional domestic refining capacity. Refiners must make investments today on what they believe to be the longer-term (10-15 years or more) outlook. The domestic refining industry is likely to look upon rapidly rising ethanol and other bio-fuels requirements in the coming years as adding significantly more risk to investments in capacity expansions. As recently as 2006, the Department of Energy forecast that domestic refiners were likely to add 1.5 million barrels per day of capacity between 2006 – 2010. Based upon perceptions of renewable market developments – developments being stoked by administration and congressional actions – current estimates suggest that expansion in the domestic refining is likely to be constrained well below 1 million barrels per day. These decisions are being revisited in boardrooms across the refining sector as the anticipated surge in ethanol requirements and mandates in the coming years will pressure domestic, and undoubtedly some foreign refiners currently supply the U.S. market to postpone or cancel new investments in petroleum refining capability.

To illustrate the point further, the President's proposal which calls for use of 35 billion gallons per year of renewable fuels, primarily ethanol, also requires a 20 percent reduction in the use of gasoline by the same time. The Energy Information Administration projects that gasoline demand in 2017 will be 161 billion gallons. A 20 percent reduction of this figure would result in 129 billion gallons of gasoline. In 2006, U.S. production of gasoline was 136 billion gallons and net imports of finished gasoline equaled 7 billion gallons. Therefore, the target for gasoline use in 2017 is below today's U.S. production levels.

C. NPRA supports a level playing field for all types of biodiesel.

The Energy Policy Act of 2005 and the Energy Policy Act of 1992 define two types of biodiesel: biodiesel (mono alkyl esters) and non-ester renewable diesel fuel. Recent developments in technology make it possible and/or likely that non-ester renewable diesel fuel may enter the U.S. fuel supply. Several processes have been developed that use thermal depolymerization coupled with hydrotreating to convert vegetable oils and/or animal fats to paraffinic hydrocarbons. NPRA supports an even playing field for all types of biodiesel fuels, including non-ester renewable diesel fuels. Congress should not promote biodiesel (mono alkyl esters) and provide disincentives for other types (i.e., non-ester renewable diesel). In short, all technologies, feedstocks and processes should be treated equally.

D. Natural Gas Supply Concerns

One possible unintended consequence of the AFP is the potential increase in the price of natural gas. The production of ethanol requires significant volumes of natural gas throughout its production cycle. Natural gas is used in ethanol plants themselves during the production process. Converting corn and, potentially, cellulosic material into a usable fuel requires energy, and natural gas currently provides much of that necessary energy. Additionally, as farmers convert crops, or fallow land, into land for corn or soybean production to be used as biofuel feedstocks, significant additional quantities of fertilizer will be needed. Natural gas serves as the key feedstock fertilizer production. As natural gas demand rises due to demand from ethanol and fertilizer production, the already tight domestic market will be pressured further.

In addition to the natural gas demand caused by biofuels, natural gas demand could potentially rise as obligated parties comply with the Low Carbon Fuel Standard. In order to meet the significant carbon reductions outlined in the discussion draft, technologies that rely on natural gas would have to

be added to the transportation sector. Electric vehicles using electricity from natural gas, hydrogen vehicles or compressed natural gas powered vehicles would all increase demand significantly.

Domestic petrochemical producers as well as a host of other industries rely on natural gas as an indispensable part of production. Already, manufacturers in the United States suffer under some of the world's highest natural gas prices. The AFP and the LCFS in the discussion draft have the potential to significantly worsen this problem.

E. State Biofuels Mandates

The present enthusiasm for renewable fuels has resulted in several states and even municipalities adopting local mandates. Local mandates will impose additional strain on the ethanol distribution system and increase costs for shipping and storage. The existing federal renewable fuels standard mandate with its credit-trading provisions contains a degree of freedom that allows the distribution system to operate at a low-cost optimum by avoiding infrastructure bottlenecks (such as lack of storage or rail capacity). Mandating biodiesel usage in specific areas forces a distribution pattern that is less flexible, and therefore has less capability to minimize costs. These additional costs will be borne by consumers.

The AFP allows for the use of an expanded fuel base, thereby providing incentives for a wider array of fuels, thereby promoting flexibility and allowing for the development of myriad alternatives. State biofuels mandates, however, could frustrate and undermine this purpose by limiting refiners' choices in specific geographic areas. Further, these mandates create boutique markets requiring special fuel formulations and transportation logistics, thereby balkanizing the national fuel market. If Congress wishes to allow for as diverse a supply of alternative fuels as possible, and to promote as much flexibility in the system as possible, state and local biofuels mandates should be preempted.

F. Studies should inform Congress before new mandates are imposed.

This is the classic "cart before the horse" scenario. This draft legislation requires regulations within two years and begins the not-so-gradual climb to reach 35 billion gallons by 2025. Congress

should consider moving the language on page 25 on studies that would apply for Calendar Year 2026 forward in time to inform Congress on appropriate alternative fuels targets after 2009. Energy security, public health and environment, infrastructure, job creation, and rural economic development are topics relevant today and should not be relegated to a review during 2020 through 2025.

This draft legislation should not promote an extensive expansion of renewables without giving any consideration to the environmental or economic consequences to the U.S. An alternative is to examine a graduated series of steps for increases in the use of alternative fuels that are each predicated on a showing that the expanded standard will not have a net negative impact on the U.S. economy and consumers as specified in Section 101.

V. Conclusion

NPRA members share the goals of the U.S. Congress for a stable and effective fuels policy that utilizes a diversity of fuel sources to maximize security. We also recognize the great difficulty of striking a careful balance that offers helpful direction from the government while preserving effective and necessary market forces. While we certainly commend the Subcommittee for the careful attention it has paid to energy policy, NPRA cannot support more expansion of fuels mandates at a time when the economy is just implementing the RFS program in the Energy Policy Act of 2005. In light of this general misgiving we have with mandates, NPRA looks forward to working together with members of the Subcommittee to improve the legislation. Thank you.