FUEL FOR THE FUTURE – Infrastructure on Track to Support On-Time Transition to HOLC Ethanol-Based Fuel by 2023

Editor's Note: Reg Modlin is a Senior NRS Advisor and a veteran of 40-plus years in the automotive industry. Over the next several posts, he will examine the steps that have been taken – and need to be taken – to attain the transportation fuel that best serves our nation for years ahead. All blogs in this series will be made available here.

The capability of the fuel distribution infrastructure to support the deployment of a 98 RON, E25 product is good. Some that hold a different view are presenting their opinion as seen through a doomsday lens. Remember, ethanol has been in the market for decades. Performance requirements for its distribution have been written and are reasonably understood and followed. Because demonstration of compliance to these requirements is relegated to local authorities (fire marshals) who are largely supported by a local electorate, such demonstration is known to be inconsistent. However, this does not mean that huge or overwhelming investment is needed to move to a better gasoline product.

Distribution and storage tanks are required to be certified for the liquid that they are intended to manage. In the current market, E100 is expected to be distributed via rail and truck and stored in underground tanks at retail stations. The Department of Energy (DOE) has reviewed and reported on this issue over recent years. Their observation is that there is no systemic failure of the market to accommodate high levels of ethanol in bulk storage. Manufacturers claim to have met these requirements for a very long time. If there are exceptions, they are few.

Transition of above ground equipment (dispenser pump systems) to compatibility with E25-40 product is well underway. UL has been in process of testing all new dispenser systems to compatibility with E25 product, and more recently, to E40 product. Per industry advertising material, Wayne Fueling Systems began offering all new products sold since January 2017 certified to dispense E25 fuels. More recently, those same products have been certified up to E40. Other major pump manufacturers are engaged in certification programs for their products to the same levels.

By putting together the requirement for retail dispensers to install new pumps with chip readers by October 2022, and the fact that Wayne Fueling Systems has about 40 percent of the market, it is easy to show the calculation that there will be enough E25-40 compatible pumps in place nationwide by October 2022 to distribute 98 RON, E25 gasoline to any owner of a new vehicle capable of using such a product. Testimonials from station owner/operators who have already begun selling E15+ fuels show that their infrastructure transition is being driven by the expectation of the expansion of higher-octane fuels, proving that the future may well be driven by the need for a HOLC product. Therefore, the nominal cost to upgrade to increased capability dispensers, which would be replaced either way, is not a bar to present plans for equipment upgrades.

As a result, as stated by DOE, there are no foreseeable major, sweeping capital programs needed or expected for deployment of HOLC mid-level ethanol blends of gasoline. This observation embraces the challenge of overcoming years of lax compliance demonstration/records keeping that must be addressed.

Through the cooperation of equipment manufacturers, fuel retailers and government agencies, the vision of a distribution infrastructure for high-octane, low carbon, low cost, sustainable, renewable, and energy job creating liquid fuel is rapidly being put into place.

Coming next – With corn available and ethanol capable of supporting growing demand to an E25 national level, who is in a position to champion change to a higher efficiency, lower environmental impact, available, compatible, lower retail cost gasoline?