



Bexar County, Texas refueling station.

Opportunity Is Knocking

CleanFUEL USA is poised to enter exciting new era for alternative transportation fuel.

The opportunities for propane motor fuel are looking better and better, perhaps brighter than ever as political, environmental, and market forces converge. Curtis Donaldson, CEO, president, and director of CleanFUEL USA (Georgetown, Texas), observes that the three “Es” are now in place—economic, environment, and the energy bill. Spiraling fuel costs show propane widely trailing gasoline and diesel prices; environmental concerns are highlighting propane’s clean-burning advantages; and the 2005 national energy and highway bills provide tax incentives for propane vehicle purchases, installation of fueling infrastructure, and use of the fuel itself.

“The table has been set and the opportunities are there,” says the eternally optimistic CleanFUEL USA founder, whose company has station-side, vehicle-side, and fuel distribution operations for both propane and biofuels. “The landscape is prepared for growth and the future looks bright for all fuels.”

As a start-up in 1993, CleanFUEL USA, then known as Clean Fueling Technologies Inc. (CFT), was founded as a dispenser manufacturing company whose purpose was to put a new face on alternative fuel infrastructure. “The goal was to replace meter-on-a-stick installations and introduce technology

to provide a seamless feel, touch,” says Donaldson, Propane Education & Council member who has served two terms, the latter look, and a former Research elected to ending in June. “The company was founded to introduce a domestic solution so [fuelers] didn’t have to go to Canada to buy a dispenser.”

Beyond Dispensers

Although CFT’s core business was to sell and install alternative fuel dispensers and infrastructure, without alternative fuel engine systems to support the business, not many dispensers were going to be sold. Engine systems needed to be brought onboard. Looking for an answer to the classic chicken or the egg scenario, CleanFUEL partnered with ICOM S.p.A. (Cisternia di Latina, Italy) to bring its LPI (liquid propane injection) system to the U.S. in 2004. Tested at England’s Millbrook Proving Ground for U.S. certification, the LPI system is now available as an OEM upfit with some General Motors medium-duty trucks and as an aftermarket conversion through CleanFUEL.

Donaldson notes that CleanFUEL USA’s choice to partner with ICOM was driven by research that found liquid injection had numerous benefits over vapor systems, as well as that the ICOM system had proven OEM performance in Europe, with about 40,000

vehicles operating throughout the EU. The LPI system more closely matched OEM equipment and could successfully be mated with the vehicle’s onboard computer. Higher combustion temperatures with vapor systems in the past had, in some instances, led to valve failure. Alternately, liquid systems run cooler, which also aids in more closely duplicating the torque and horsepower of the original gasoline fuel system equipment. (For more information on the LPI system, see p. 25.)

In addition, modern fleets and retailers need the ability to track transactions and capture data, commented industry veteran Wayne Moore, vice president and general manager, who in the late 1990s led CleanFUEL USA’s successful business efforts in Mexico. “On the station side, the purpose is to put a new face on fueling infrastructure and introduce technology to the operation that allows tracking of all transactions and programming at the dispenser,” he says. “On the engine side, it’s important we get more engine families certified so they can be brought to market.”

CleanFUEL USA maintains CFT as a separate division to not only manufacture dispensers but also upfit dispensers by other manufacturers such as Gilbarco and Dresser Wayne. In a highly celebrated move in 1995, the company replaced Conoco propane dispensers in



In Atlanta this year, CleanFUEL USA's representatives (from left) Wayne Moore, Al McFadden, Robin Parsons, Mike Perticone, plus guests Angel Robinson and Bill Platz, Trena Smith, Curtis Donaldson, guest Jose Morales, and Jim Jensen were busy answering questions about their products.

Denver with Gilbarco dispensers, which marked the beginning of a decade-long relationship with Gilbarco to initiate an up-fit business. In 2001, the company converted six Conoco stations in Denver to CleanFUEL USA stations, while in 2002 seven CleanFUEL stations were built in Phoenix. In 2003, additional stations were established in Southern and Central California with Bill Platz of Delta Liquid Energy (Paso Robles, Calif.). Ferrellgas (Overland Park, Kan.) and Delta Liquid Energy operate the stations in Arizona and California, respectively, under partnership agreements with CleanFUEL.

Overall, CleanFUEL USA operates nearly 40 public fueling stations throughout the Western U.S., all of which are open for operation 24 hours. CFT offers complete, easy-to-install "skid packages" that are portable and include a dispenser and either a vertical or horizontal tank with capacities up to 2000 gallons. Access codes assigned to CFT's card reader technology signify that fuelers have been trained to safely operate the equipment, and the company's user cards can be linked to traditional credit or debit card accounts. Since its inception in 1993, CFT has installed more than 2500 dispensers around the world in over 30 countries. The division has also diversified into manufacturing purpose-built E85 dispensers, installing its first in Nebraska in 2005.

In addition to its station-side and vehicle-side operations, CleanFUEL Distribution provides retailer and fleet fuel procurement and supply expertise to more than 200 facilities that are un-

der contract. It provides customers with propane, natural gas, diesel, gasoline, ethanol blends, fueloil, and biofuels at market-competitive prices.

The company's distribution arm offers fleet regulatory compliance assistance, biofuel supply services, turn-key refueling infrastructure, fleet fuel management software, risk management, and station financing and grant writing assistance, among others.

Not a "Boutique Fuel"

Rick Richard, CleanFUEL USA's board chairman, served as president and CEO of Columbia Energy Group until its acquisition. He too is enthusiastic about propane's future in the motor fuel energy mix. The former Federal Energy Regulatory Commission commissioner, appointed by President Ronald Reagan, observes that propane is no longer a "boutique fuel," and that continued upward pressure on imported oil prices foretells \$70/bbl-plus crude prices aren't going to go away.

"At that price we are at a tipping point where it is increasingly attractive to adopt an alternative fuel mix to power our nation's highway fleet," he says. "Now is the time to push for a significant place for propane among the hybrids and biofuels."

CleanFUEL CEO Donaldson, chairman emeritus of the National Ethanol Vehicle Coalition, is the recipient of the Department of Energy's AFV Hero Award for his leadership in creating alternative fuel infrastructure. He also is a past president of the former Propane Promotion Consortium (ProCon),

which prior to PERC's incorporation of engine fuel programs worked to bolster sales of propane vehicles nationwide, as well as a former member of the Propane Vehicle Council. Among his numerous accomplishments in recent years was the installation of a fueling station and delivery of a Ford F-250 propane-fueled pickup truck at President George W. Bush's Crawford, Texas ranch in 2001.

On hand at the dedication in Crawford was Milford Therrell, formerly of Squibb-Taylor (Dallas) and the first PERC chairman. Donaldson credits Therrell with helping to convince him to return to the industry after spending a year as a marketing manager for a small firm while he oversaw the medical care of his parents. He previously had spent 10 years with Conoco in various capacities, ending his career in 1992 as coordinator of alternative fuel marketing.

"Milford would call me every third day or so to tell me the industry needed me back to do something about engine fuel," Donaldson reminisces. "I'd tell him I was working on a plan to come back, and he kept right on calling me for a year until I told him I had a plan and I was coming back." Then it was time for Donaldson to shop his business plan around to various banks in search of financing.

"Remember the time frame and think about the outlook for alternative fuel in 1993," he says. "Every time I'd go into the bank and present my business plan I got turned down. Finally I walked into one bank and the loan committee approved my loan. I later learned that J.B. Wood, the founder of Northwest Propane (Dallas), chaired that loan committee and supported me. This industry put me back into the industry. Now we will see what the final chapter will be."

Donaldson emphasizes that there is no silver bullet for supplying the nation's transportation fuel needs, and in the interim every fuel will be needed. "With sensible planning the future looks bright for all fuels. We have to focus on the right things, such as R&D and certifying more engines so we have more in our briefcase to offer. After swinging the bat for 14 years now, the future looks good for growth."

—John Needham