Propane's Winter Of Discontent

By John Harpole

U.S. farmers used five times more propane this past winter than in an average season.

That would certainly make Bill Wepfer smile. He was marketing director for Arkansas Louisiana Gas Co. in the mid-1960s when ARKLA challenged him and his colleague, Melton Lancaster, to find a new market for propane. In response, they invented the propane-fired barbeque grill in Wepfer's garage.

It was certainly a sign of the times for the U.S. natural gas industry to pursue demand growth five gallons (gal) at a time. If only they could have peered into the future and taken a page from the 2004 corn-growers' ethanol playbook on growing demand.

The three factors

This past winter saw a lot of hand-wringing over a shortage of propane, thanks to three factors that coalesced into the perfect storm for U.S. propane.

First, last September and October, 13.9 billion bushels of corn were harvested in the Midwest—a record amount thanks to high prices resulting from corn ethanol fuel mandates.

Think of it: that's 2,500 pounds of corn for every U.S. citizen.

A wet spring, a hot dry summer and a cooler and wetter-than-normal fall created a batch of wet corn that required more than 300 million gal of propane to dry it out—nearly five times the 2012 propane consumption.

Following this record harvest, the U.S. converted 5 billion bushels of corn, just over 36% of the 2013 harvest total, into ethanol. Stated another way, the U.S. converts about 13% of the world's corn supply into 0.7% of the world's motor fuel.

Record amounts of Midwest propane inventory were consumed in September and October. By November, inventories were at their lowest seasonal level in 14 years. That early winter reality was followed by the second of our three factors: It was one of the coldest winters the Midwest had seen in decades.

By January, propane inventories were at winter-end numbers, with two months of cold weather remaining. But it was factor No. 3 in propane's winter of discontent that received a disproportionate amount of blame.

Politicians pointed the finger at expanded U.S. propane exports as a huge reason—or even the sole reason—for shortages. Governors of Midwestern states declared a state of emergency.

In a "don't let a crisis go to waste" attitude, environmentalists seized the opportunity to claim that propane exports and the resulting shortage are a warning of what could happen to U.S. gasoline prices if the federal government allows the export of U.S. crude oil.

They made a fundamental mistake in blaming total U.S. propane supply for what was actually a regional supply-and-transportation problem, compounded by a wet harvest, followed by severe cold weather.

Granted, in 2013 propane exports rose more than 75% to 4.6 billion gal as compared to 2012 because of two separate Houston Ship Channel expansions by Enterprise Products Partners LP and Targa Resources Partners LP. However, the U.S. propane export number was only 20% of total U.S. production.

But don't forget, total U.S. propane production increased by 1.5 billion gal in 2013. New propane supply was available due to the tremendous growth in shale gas production. After all, propane is a byproduct of shale gas.

Targa's expected cost of its export project is $480 million. Enterprise announced in January plans to expand its propane/butane export capacity from 378 million gal per month to more than 672 million gal per month by the end of 2015, all supported by long-term export agreements.

But it is not only a Gulf Coast game. By the end of 2014, Sunoco Logistics Partners LP will have the capacity to load a million gal per day of Marcellus Shale propane into ships at its Marcus Hook terminal in Philadelphia.

Calls for eliminating propane exports are reminiscent of the Carter administration's fundamental misunderstanding of U.S. gas supply. Like some export critics today, Carter mistook market and regional transport issues for gas supply issues. That misunderstanding brought us the 1978 Natural Gas Policy Act and the Fuel Use Act. By some estimates, it took the domestic gas industry at least 20 years to recover from that direct market intervention by our government.

Free market response

If the government really feels the need to get involved, it could accumulate strategic reserves at the state or local level when propane supply is plentiful. But it had better hurry because the free market may come up with that solution sooner as evidenced by Crestwood Midstream Partners LP's proposal to construct an 88 million gal propane storage facility in upstate New York.

Over $1 billion of propane export projects are in some stage of planning or completion in the U.S., all predicated on the industry's knowledge that U.S. propane production will far exceed any U.S. demand for decades to come.

Evidently, some of the best ideas are born in garages rather than in House and Senate chambers. ■

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