

Alternatives to High Propane Prices

Interest expense and the cost of utilities are the two largest “out of pocket” expenses facing most broiler growers. There is little a grower can do to reduce interest costs, short of major mortgage refinancing. However, costs associated with utilities are another matter. The topics we have addressed in most past issues of this newsletter have all dealt with housing and ventilation factors which can result in improved flock performance and in reduced levels of energy being used, which directly reduces costs to the grower. Electricity rates are typically fixed and are highly regulated. However, the price of heating fuel, specifically propane (liquefied petroleum gas or LPG), has varied widely up and down in most recent years, depending on the time of year and numerous supply and demand conditions.

What growers should be aware of is that there are ways to reduce the risk that they will have to buy propane at one of those times when the price is highest. This newsletter explains several alternative methods growers can use to get lower and more stable propane costs over time.

Growers can choose from several good alternatives to paying consistently high prices for propane.

Understanding the Basics of Propane Pricing

The most fundamental factor in propane pricing is that propane is basically a fossil fuel, being derived from raw natural gas during the oil refining process. And, since propane only accounts for about 3 percent of the volume per barrel of crude oil, propane price directly follows crude oil price.

In addition, the price of propane is largely determined by the supply at a single source. Although much of the Northeast and Eastern seaboard are served through ports in New Hampshire, Rhode Island, and Virginia by propane tankers originating at refineries in the North Sea and Middle East, most of the propane used across the U.S. Broiler Belt originates from storage facilities located in Mont Belvieu, Texas, just east of Houston. Propane dealers across the U.S. Broiler Belt then draw their supplies from major pipelines originating in Mont Belvieu, running through the southeastern U.S., and extending into the middle Atlantic region. While a propane futures contract is traded on the New York Mercantile Exchange (NYMEX), it is not a heavily traded commodity. Thus, most propane pricing is based on the Mont Belvieu spot price, although some downward pressure is placed on the Mont Belvieu spot price when supplies of imported propane are high.

The price of propane is usually lowest in spring and summer, and price is determined by supply at a single source.

Propane dealers charge a premium above the Mont Belvieu spot price, which covers the cost of pipeline transit, local transportation, storage, and overhead. This is referred to as the basis. Locally quoted prices are typically derived from the Mont Belvieu spot price plus the basis (Mont Belvieu + 25 cents / gal. is the way this is commonly stated).

There is a close relationship between the Mont Belvieu spot price and the near month NYMEX futures propane price. Only on rare occasions are the two prices more than 1 or 2 cents apart. Therefore, the near month NYMEX propane price will usually be almost identical to the Mont Belvieu spot price, so it is a very good approximation for the Mont Belvieu spot price. The Mont Belvieu spot price is presently reported in the Wall Street Journal every business day and on-line at the Commercial Services Company Ltd web site (www.waterbornelpg.com). CSC also offers a variety of services and expertise related to

the propane market. Propane futures prices are available at any time on-line from www.nymex.com or www.ino.com.

Seasonality of Propane Pricing

While world crude oil price is the most basic factor in propane pricing, seasonal supply and demand for propane are also significant factors that cause large ups and downs in the propane price. The chart on page 3 shows the general price trend observed for the Mont Belvieu spot price over the past 10 years. As you can see, the July price in most years is well below that of the following January. In most years, prices typically are at their highest levels between October and February and at their lowest levels between April and July. Therefore, the most desirable time to set a price for propane is usually in spring to mid-summer, when seasonal prices are usually at their lowest levels. This approach, with few exceptions, will result in excellent propane price levels and will offer growers excellent price protection in most years.

Seasonal price differences for propane are expected to be even more pronounced in the next few years.

According to several propane industry experts, it is quite likely that propane imports will far exceed exports for the next few years. This is because propane is a by-product of the refining process, and with the high price levels of oil, excess propane is being shipped to the U.S. This means that there should be no problems in obtaining supplies on a contractual basis for the next few years, and that the seasonal factor in propane pricing is likely to be relatively even more important.

Alternative Pricing Arrangements

There are three methods a grower can use to arrange payments for propane in a way to lessen the risk of getting stuck with the year's highest price. One way, the simplest and most direct, is to negotiate pre-payment terms for next year's propane in late spring or summer. A second way is to join with other growers in a group, which will be better able to negotiate prices since a much larger quantity of propane is on the table. Pooled group buying usually also takes advantage of seasonal purchasing. The third way for a grower to lower his propane price risk is to install large bulk tanks and become a quantity buyer himself by buying tanker loads.

Seasonal Negotiation for Lower Prices

A common and usually easy way an individual grower can obtain propane price risk protection is by negotiating pre-payment terms in late spring or summer for an estimated amount of gas for the entire year. The grower can then take out a short term loan to pre-pay for his propane and pay off the loan in after-flock settlements during the year. As mentioned above, in a typical year, the most desirable time

Advance purchase of propane in spring or summer more often than not locks in the lowest price of the year.

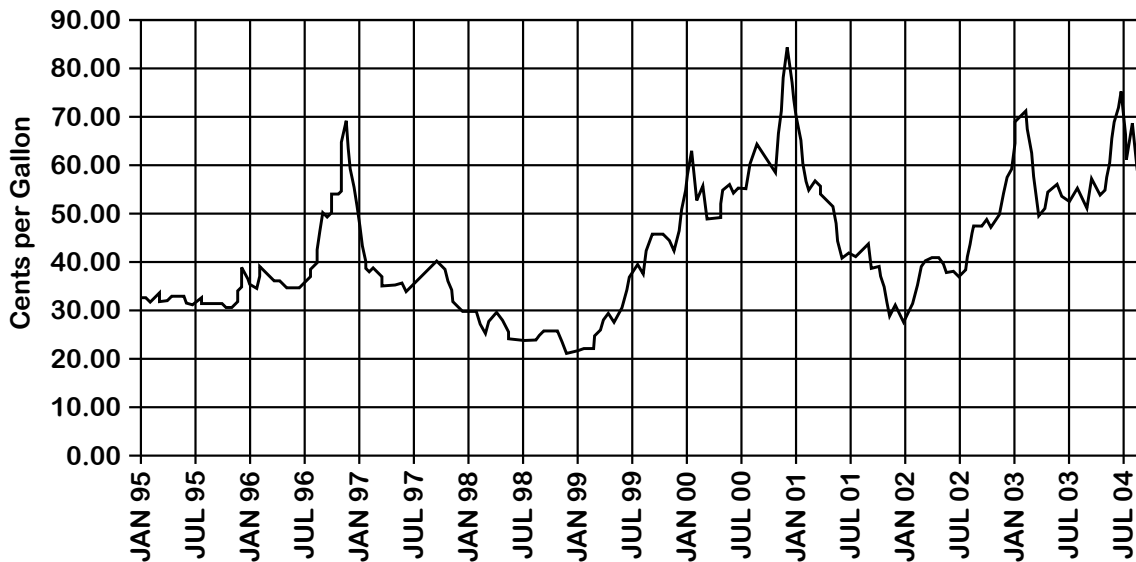
to negotiate pre-payment terms is between spring and mid-summer. For example, if a grower expects to burn 20,000 gallons over the upcoming year, he might negotiate to pre-pay at a rate of 75 cents per gallon sometime during this spring/summer timeframe. Let's assume he would borrow \$15,000 at 7 percent interest, and pay back \$2,603 per flock for each of the 6 flocks during the remainder of the year. His total repayment would be \$15,619 (\$15,000 principal and \$619 interest), or a net price of 78.10 cents per gallon. This means that the fall-winter price of propane only has to go

3.1 cents higher to justify the pre-payment contract. The table on page 3 shows several pre-payment scenarios for 20,000 gallons at 7% interest and 6 installment payments spaced 2 months apart, roughly a payment after each flock.

Group Buying for Lower Prices

We know of several groups of concerned poultry growers in local areas who have formed associations over the past few years with the express purpose of contracting for stable propane prices. This is referred to as "group booking," and works on the same principle as companies using the futures markets to obtain price stability on feed ingredients, such as corn and soybean meal. Typically, an association of growers will estimate the annual amount of propane that its individual members expect to burn. This estimate, plus or minus, say 10 percent, is then used to contract more favorable pricing terms with the available propane dealers serving that area. These negotiations usually result in the growers having the opportunity to set a fixed contract price for the upcoming year, or to set a price several cents above the

Mont Belvieu Propane Prices 1995-2004



Data source: Commercial Services Company, Ltd., 2020 Southwest Freeway, Houston, TX 77098, (713)526-1555

In late spring to midsummer, propane prices are usually lower than they are in fall and winter, when demand for propane is at its highest. As the chart above shows, in the period 1995-2004, the January price of propane at Mont Belvieu was lower than the preceding July price in only three years, 1998, 1999, and 2002. Note that propane prices for these years were at or near their lows for the entire period. This means that the losses a grower would have had in those years would have been considerably less in cents per gallon than the cents per gallon gains the grower would have had by pre-paying for propane in any of the other years.

Spring-summer propane advance purchase scenario: For 20,000 gallons at 7% interest and 6 payments over 12 months.

Booking Price (Cents/gal)	Principal Cost (Dollars)	Interest Cost (Dollars)	Total Cost (Dollars)	Payment Amount (Dollars)	Net Price (Cents/gal)
50.00	10,000	412	10,412	1,735	52.06
55.00	11,000	454	11,454	1,909	57.27
60.00	12,000	495	12,495	2,083	62.30
65.00	13,000	536	13,536	2,256	67.68
70.00	14,000	577	14,577	2,430	72.89
75.00	15,000	619	15,619	2,603	78.10
80.00	16,000	660	16,660	2,777	83.30
85.00	17,000	701	17,701	2,950	88.51
90.00	18,000	742	18,742	3,124	93.71

Shaded area example: If the advance “booking” price of propane is 75 cents/gallon and you buy 20,000 gallons, the advance prepayment price will be \$15,000. Financed at 7% over one year, interest cost will be \$619, making the total financed cost \$15,619. Payments will be \$2,603 every other month for a year. The financed price per gallon you will end up paying will be 78.10 cents.

This advance purchasing arrangement, in other words, will be advantageous if the late fall to winter propane price is 3.10 cents higher than the 75 cents/gallon you are arranging to pay in late spring or summer.

Several of the associations for group buying have saved members 10 to 20 cents per gallon in most recent years.

Mont Belvieu spot price. Both methods afford growers the benefit of being able to better forecast their financial position. Without this price protection, individual growers are exposed to the price risks of the open market.

For example, if 50 growers with 4 houses each expect to use 5,000 gallons per house during the year, the group represents a 1 million gallon (plus or minus 100,000) annual demand. The local propane dealer can then make plans for that quantity and should be quite willing to negotiate a favorable forward pricing contract, since he is armed with a knowledge of

the quantity of propane he will need to supply over the coming year. Several of these associations have a good track record of saving members 10 to 20 cents per gallon or more in most years.

Bulk Buying for Lower Prices

Pricing on tanker loads of propane (usually 9,000 gallons) is almost always much lower than the typical dealer-to-farm delivery price. Thus, installing bulk tanks, typically 18,000 to 30,000 gallons or larger, and purchasing tanker loads can also get a grower lower-priced propane. While pricing on tanker loads can be attractive, there are several disadvantages to this method. Bulk tanks are expensive initially, they require site preparation and professional installation, and most states require special fee-based permits with periodic inspections. There are also insurability issues associated with bulk tanks. This approach may be appropriate for some large-scale growers, but most growers should find one of the contract pricing alternatives more desirable.

The Bottom Line

One of the largest variable costs faced by broiler growers is propane. But there are ways growers can manage this cost. Propane prices tend to be seasonal in most years, with prices lower in the spring and early summer, and higher in the late fall and winter. Pre-payment, group forward pricing, and tanker load purchasing all offer growers the opportunity to insure themselves against major upward price movement during the year. The "best" approach for an individual grower will depend on his location and individual situation, as well as the situation facing the propane suppliers in his area. In any case, growers should consider taking steps to gain some degree of propane price protection.



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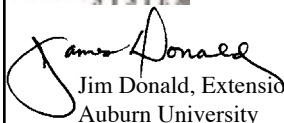
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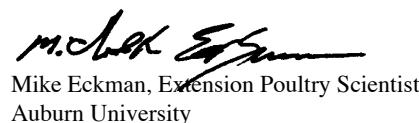
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