In Support of Testimony of Mary Keough Ledman

On Behalf of

The Dean Foods Company

Hearing to consider amendments to the Upper Midwest

Federal Milk Marketing Order

Docket No. AO-361-A39; DA-04-01

August 16 et seq, 2004
At a recent industry meeting I was asked by a dairy producer, “how can I calculate my PPD – Producer Price Differential?” This is the type of question that warms a dairy economist’s heart because it indicates a producer’s interest in milk pricing.

For years, the dairy industry, producers and processors alike, have heard of the complexities in milk pricing, which seemed to build a mental block hindering the understanding of the system. Is milk pricing complicated? The simple answer is yes, but not any more complicated than signing up for FSA programs.

This article aims to provide the reader an introduction to the Federal Milk Marketing Orders (FMMOs) classified milk pricing system, and the impact of pooling and depooling milk on setting the PPD.

Most dairy producers outside of California market their milk within the FMMOs. The FMMOs were established in 1937 to provide orderly marketing conditions for interstate commerce, income parity for farmers and to increase bargaining power of farmers.

Today, the primary function of the FMMOs is to set “class” prices, “pool” farmers receipts so that farmers receive the weighted average price “blend price” for milk marketed in their FMMO and audit processors to assure that producers are paid the regulated market-average price.

Milk marketed in the FMMOs is used in one of four classes of milk: Class I milk you drink; Class II milk is spooned (yogurt and ice cream); Class III milk is cheese milk; and Class IV milk is used in butter and powder production.

The onset of the futures market and forward contracts has made many producers aware of how the Class III and IV prices are calculated. On a daily basis producers can check out the Class III and IV futures prices for the next 12 to 18 months on several websites. Since January 2000, the Class II price is set by adding a $0.70 differential to the Class IV price. The Class I price is a little trickier because it is established by adding the Class I differential (by county) to either the higher of the Class III or Class IV price.

Next the FMMO establishes the regulated minimum milk price officially referred to as Uniform Blend Price. The Blend Price is the average of the class prices weighted by the amount of milk used in each class. The difference between the Blend Price and the Class III price is the PPD.
Table 1 illustrates a simplistic calculation of the Blend Price and Producer Price Differential for the Upper Midwest Order in July 2002.

**Simplified Calculation of the Upper Midwest July 2002 Blend Price**

<table>
<thead>
<tr>
<th>Class</th>
<th>Price</th>
<th>Utilization</th>
<th>Blend Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>$12.42</td>
<td>21%</td>
<td>$2.61</td>
</tr>
<tr>
<td>Class II</td>
<td>$11.14</td>
<td>3%</td>
<td>$0.33</td>
</tr>
<tr>
<td>Class III</td>
<td>$9.33</td>
<td>75%</td>
<td>$7.00</td>
</tr>
<tr>
<td>Class IV</td>
<td>$10.45</td>
<td>1%</td>
<td>$0.10</td>
</tr>
</tbody>
</table>

**Simply Blend Price Calculation**

<table>
<thead>
<tr>
<th>Add or Subtract FMMO Adjustments</th>
<th>Blend Price Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Announced Uniform Blend Price</td>
<td>$10.13</td>
</tr>
<tr>
<td>Minus Class III Price</td>
<td>($9.33)</td>
</tr>
<tr>
<td>Equals Producer Price Differential</td>
<td>$0.80</td>
</tr>
</tbody>
</table>

In this case, the Simple Blend Price calculation yields a price of $10.04 per cwt. However, adjusted by inventory from the previous month, transportation and assembly credits the Announced Uniform Blend Price was $10.13, or $0.80 per cwt above the Class III price.

The Blend Price serves several important roles. First, the announced Blend Price is the lowest price a proprietary plant can by law pay its producers and cooperatives. Cooperatives are not obligated to pay their members the Blend Price. Second, the difference between the Blend Price and the Class III price is the PPD. And finally, the Blend Price plays a role in determining whether a plant pools or “depools” its milk.

By “depooling” its milk, a plant is no longer responsible to pay into the market order pool the minimum class price. This happens when manufacturing prices are higher than the Blend Price making it advantageous for the plant to “depool” the milk rather than pay into the market pool.

It is mandatory that all milk used in Class I is pooled. However, milk used in Class II, III and IV is not required to be pooled. In the above example, Class I handlers using all their milk in Class I paid $2.29 per cwt into the pool. That reflects the difference in the Class I price of $12.42 and the Blend Price of $10.13 per cwt.

Very little Class II and IV milk was pooled during July 2002 because those class prices exceeded the $10.13 per cwt Blend Price. That is not to say that only 4% of the milk in the Upper Midwest was converted into Class II and IV products during the month. On the contrary several million lbs. of milk was converted into Class II and IV products during the month but was “depoooled” because the Class II and IV prices handlers would have had to pay $1.01 and $0.32 per cwt., respectively into
the marketing pool. As a result of depooling, the revenue from that milk was not shared amongst all producers in the pool.

It was an advantage for all Class III milk to be pooled during the month. Manufacturers of Class III products withdrew $0.80 per cwt from the pool. That reflects the difference between the $10.13 Blend Price and the $9.33 per cwt. Class III price.

Historically, the concept of pooling within the Federal Orders was designed for all producers to share equally in the pool while the system of classified pricing ensured that milk was utilized in the highest valued class. Unfortunately neither is true today.

The system worked well when there was just two or three classes of milk and when Class I utilization dominated the market. However, increased U.S. milk production in tandem with lower per capita milk consumption has resulted in greater manufacturing utilization and has increased the incentive for manufacturers to jump in and out of the pool. Further the ability to depool milk provides a disincentive to move milk into its highest valued use. An excellent example of this occurred in November 2000.

In November 2000, the FMMO announced Class III and IV milk prices were $8.57 and $13.00, respectively. The average FMMO Blend Price for all orders was $12.11 per cwt. If the classified pricing system truly moves milk to its highest valued use, Class III manufacturers would sell their milk to butter-powder plants. Even if the cheese manufacturer received just the blend price of $12.11 for its milk, it would seem as if it were better off by $3.54 per cwt.

In the real world the cheese manufacturer is indifferent to selling its milk to the butter-powder plant because it will draw the difference between the Blend Price and the Class III price to pay its producers. On the other hand, selling the milk to the Class IV manufacturer that depools the milk will place the cheese manufacturer at a competitive disadvantage in procuring milk from dairy producers. The Class IV manufacturer depools its milk and could pay its patrons $12.50 per cwt. The patrons would be “better off” by $0.39 cwt vs. the Blend Price and the manufacturer could pocket the remaining $0.50 cwt for other uses.

Still, the other producers and manufacturers in the marketing area loose. Producers receive a lower Blend Price due to the depooling of the higher valued milk. Cheese manufacturers in the marketing area face greater competition procuring milk in the market area, and have no incentive to sell milk to the Class IV manufacturer that does not pool the milk.

Depooling does not promote orderly marketing or income parity for dairy producers, two of the early goals of the FMMOs. How much money is left on the table due to depooling? In November 2000, it is estimated that the Uniform Blend
Price and the PPD in the Upper Midwest Order would have been a dime higher if all the Class II and IV milk would have been pool. That would have added an additional $2.3 million to producers in that market area.

If the FMMOs are to keep four classes of milk, perhaps the Federal Orders would be wise to take a page from the California Pooling and Pricing Plan. A few years ago, the California system was faced with producers, not manufacturers, opting out of the pool. As a result, the California Pooling and Pricing Plan now requires producers to state by January 1 of each year whether they will participate in the pool. Once they are in - they are in. Closing the depooling loophole within the FMMOs would promote orderly marketing, greater equity amongst producers in a marketing area and a more predictable PPD.