FEDERAL ORDER REFORM: THE FINAL RULE

Tom Cox and Bob Cropp

The Federal Agriculture Improvement and Reform Act of 1996 (FAIR ACT) required that by April 4, 1999, the current Federal milk marketing orders (FMMOs) issued under the Agricultural Marketing Agreement Act of 1937, as amended, be consolidated into between 10 and 14 orders. The Secretary of Agriculture is also directed to designate the State of California as a FMMO if California dairy producers petition for and approve such an order. In addition, the FAIR Act provided that the Secretary may address related issues such as the use of utilization rates and multiple basing points for the pricing of fluid milk and the use of uniform multiple component pricing when developing one or more basic prices for manufacturing milk.

The Omnibus Consolidation and Emergency Supplemental Appropriations Bill, passed in October 1998, extended the time frame for implementing Federal milk order reform amendments from April 4, 1999, to October 1, 1999. The extension specifies that the final decision, defined as the final rule, will be issued between February 1 and April 4, 1999, with the new amendments becoming effective on October 1, 1999. The legislation also provides that California has from the date of issuance of the final decision until September 30, 1999, to become a separate FMMO.

The Secretary of Agriculture issued the final rule on March 31, 1999. This paper highlights major pricing provisions of the final rule and the potential impacts on dairy producer prices.

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Summary of the Reform Procedure

The Federal order reform is operating under an "informal" rather than a "formal" rulemaking procedure. The formal rulemaking process requires that decisions by USDA be based solely on the evidentiary record of a public hearing held before an administrative law judge. Formal rulemaking involves the presentation of sworn testimony, the cross-examination of witnesses, the filing of exceptions, the issuance of a final decision that is voted on by affected producers, and upon approval by producers, the issuance of a final order.

The informal rulemaking process does not require these procedures. Instead, informal rulemaking provides for the issuance of a proposed rule by the Agricultural Marketing Service, a period of time for the filing of comments by interested parties, and the issuance of a final decision by the Secretary. Referendums will be conducted to determine approval of the final rule by producers before the new orders will become effective.

The first phase of the informal rule making procedure was the development phase. USDA interacted freely with the public to develop proposals for amending FMMOs. USDA held meetings with the public and requested input of all aspects of the Federal order program. This development phase began on April 4, 1996 and concluded with the issuance of the proposed rule on January 21, 1998.

The second phase of this rulemaking began with the issuance and publication of this proposed rule. The proposed rule provided the public 60 days to submit written comments on the reform proposal. The comment period was extended 30 days to April 30, 1998. In addition to requests for written comments, four listening sessions were held to receive verbal comments. These comments were considered prior to issuing the final rule.

The third and final phase is the implementation phase. The implementation phase began after the final rule was published in the Federal Register on April 2, 1999. This phase consists of informational meetings conducted by the Market Administrator personnel. After the informational meetings a producer referendum will be conducted in each of the new orders. Bloc voting by dairy cooperatives is allowed. Favorable approval is required of two-thirds of the producers or producers having two-thirds of the milk in a given order. Upon favorable approval, the final order implementing the new orders will be issued and published in the Federal Register. For any order that does not receive favorable approval, the order will be terminated.

Challenges of Federal Order Reform

Interest in Federal order reform has been going on for some time. The Upper Midwest requested and the Secretary of Agricultural held national hearings in 1990 to consider amendments to the Federal order program. Only minor changes resulted from these hearings. The Upper Midwest continued to push for more major Federal order changes, arguing that significant shifts in national milk production and modern
technologies in milk procurement, processing, packaging and transportation no longer justifies the current class I pricing system and that it discriminated against them. Most of the rest of the country has been more content with the existing Federal order program. Hence, there are major regional differences of opinion in how the Federal order system should be amended. These major regional differences led to the provisions in the FAIR ACT requiring the Federal order reform process we are now experiencing. These major regional differences have challenged the Secretary of Agriculture in bringing forth Federal order amendments equally acceptable to all regions.

U.S. agriculture is transitioning to a more market-oriented sector, free from traditional government involvement typified by price and income support programs. The FAIR Act mandates the gradual phase-out of traditional price and income support programs, including the dairy price support program that existed for 50 years. The Secretary is instructed to be consistent with this more market oriented approach in the Federal order reform process.

It is important to recognize that Federal order reform that makes appropriate amendments to the current system can not impact every region exactly the same. In fact, appropriate amendments consistent with market orientation may not make all regions better off, at least in the short run, from that which exists with the current system. One must also recognize that Federal order reform is more than just Class I differentials. Minimum prices for manufacturing uses of milk, class I/II movers, classification and pooling provisions are also very important aspects. The final rule needs to be considered as entire package. Finally, Federal orders cannot replace the price stabilizing and price enhancement functions of the federal dairy price support program.

**Highlights of Major Provisions of the Final Rule**

Major pricing provisions contained in the final rule that mainly impact how dairy producers will be paid are covered here. Various pooling provisions for milk handlers are only briefly mentioned. Pooling provisions do vary some among the Federal orders and therefore, should be reviewed by individuals in each of the orders. As already indicated the FAIR ACT only required the Secretary of Agriculture to consolidate the number of existing FMMOs. The Secretary should be complimented for doing much more than order consolidation. The final rule addresses several existing pricing issues or problems of the current Federal order program.

1) **Order Consolidation:**

The final rule consolidates the existing 31 FMMOs (See Figure 1) to 11 (see Figure 2). California is not one of the 11 orders. California producers have until September 30,1999 to petition for and approve a separate order for their state. Various criteria were considered for consolidation of orders, but two criteria were considered most important: overlapping route disposition and overlapping areas of milk supply. In addition, Class I use percentages and regulation on the basis of handler location were noted as important
Figure 1: Current Federal Milk Marketing Order Areas.

Figure 2: Consolidated Federal Milk Marketing Order Areas Under Final Rule.
criteria to consider. To some extent, the consolidated marketing areas included in the final decision do combine market areas with similar Class I utilization rates rather than markets that would result in Class I use percentages being more uniform across FMMO markets.

The overlapping of route disposition recognizes that packaged milk moves between Federal orders and that milk plants from different markets do compete with each other for Class I sales. Overlapping of areas of milk supply recognizes areas in which major proportions of the milk supply are shared between more than one order. The competitive factors affecting the cost of a milk handler's milk are influenced by the location of the supply.

In general, order consolidation in the final rule does not have significant impacts on dairy producer pay prices. This is because of the combining of orders having similar Class I utilization. But there are some major exceptions to this general statement. At the fringes of the new order boundaries and in the consolidation of some orders, some producers are impacted by higher or lower Class I utilization than what they currently experience. Higher Class I utilization increases producer blend prices and lower utilization decreases producer blend prices. But in general the level of class prices and the movers of class prices contained in the final rule, rather than order consolidation, have the greatest impact on producer pay prices.

2) **BFP Replacement:**

There is general industry agreement that the existing Basic Formula Price (BFP) needs to be replaced. The production of Grade B milk in Minnesota and Wisconsin continues to decline and an increasing share of cheese production (the primary mover of the BFP) is shifting to the West. In 1990, the percentage of Minnesota and Wisconsin milk production and pounds of milk that was Grade B was respectively, 24% or 2.4 billion pounds, and 14% or 3.4 billion pounds. In 1998, these numbers declined to 8% or 0.7 billion pounds and 6% or 1.4 billion pounds. In summary, since 1990 Minnesota experienced a 71% decline in Grade B milk production and Wisconsin a 59% decline. The combined Grade B milk production in Minnesota and Wisconsin represents just 1.3% of total U.S. milk production.

The final rule replaces the BFP with a multiple component pricing (MCP) formula. Further, the current BFP serves two functions--as the minimum price for Class III milk (hard cheese) and as the mover of Class I (beverage milk) and Class II (soft manufactured dairy products). In the final rule these functions are separated. The Class III MCP will provide the minimum price for Class III but a separate mover is used for Class I and Class II.

The following milk component values will be calculated for Class III: butterfat, protein, and other solids. Existing MCP programs under FMMOs de-compose the announced BFP into component values starting with butterfat value, then protein and
ending with a residual value for other solids. The problem with this method is that when the price of butterfat is relatively high the value of protein had to be reduced and other solids price was set at zero in order for the sum of the component values per hundredweight of milk to not exceed the announced BFP. When butter prices were relatively high producers raised the question as to why they were being paid a relatively low price for protein and nothing for the other solids. MCP included in the final rule solves this problem by not de-composing an announced BFP, but rather calculating a value for each component based on dairy product prices. The value of butterfat is based off of the price of butter, protein off of the price of cheese and other solids value off of the price of dry whey. Formulas use yields of these products and plant make allowances (what it costs to make dairy products). The Class III component values will be computed as follows:

**Butterfat price per pound** = \(\left(\frac{\text{NASS AA Butter survey price} - 0.114}{0.82}\right)\)

The $0.114 is the cost to make a pound of butter and the 0.82 is the butterfat content of butter.

**Protein price per pound** = \(\left(\frac{\text{NASS cheese survey price} - 0.1702}{1.405}\right) + \left(\frac{\text{NASS cheese survey price} - 0.17020 + 1.582 - \text{butterfat price}}{1.28}\right)\)

The $0.1702 is the cost to make one pound of cheese. The 1.405 and 1.582 are the cheese yields if an additional tenth of a pound of protein or butterfat is contained in milk, holding everything else constant; The yields are based on a "true protein" test rather than total nitrogen as is currently done. The formula recognizes a different value of butterfat in cheese by attributing the additional value to protein. The formula recognizes that the combination of protein and butterfat in milk contribute to the cheese yield. The 1.28 factor is the ratio of butterfat to protein in cheese. An alternative to incorporating the additional value of butterfat to the protein price would be to compute a separate butterfat price for Class III. But having multiple butterfat prices would complicate the procedure for plants when accounting for all milk components.

NASS survey prices are used in the formula rather than Chicago Mercantile Exchange prices. NASS survey 40 pound cheddar block cheese prices are currently used in the BFP adjustment and in the computation of the price per pound of protein. But the final rule differs in that the NASS survey will include both 40-pound cheddar block and 500 pound cheddar barrel prices. This recognizes that a larger share of cheese production is barrel versus block cheese and therefore, the minimum protein price should be based on both cheddar barrels and blocks. The NASS survey price will be determined by adding three cents to the moisture-adjusted barrel price and

\(^2\) Some orders with MCP have a fluid carrier rather than the other solids value as the residual value.
then computing a weighted average price using the block cheese price and the adjusted barrel price times the pounds of each cheese type in the NASS survey. This total cheese revenue is then divided by the total pounds of block and barrel cheese in the NASS survey to yield an average barrel/block cheese price. The $0.03 adjustment to the barrel price is to account for the difference in cost to make block versus barrel cheese.

**Other solids price per pound** = \(((\text{NASS dry whey survey price} - .137)/0.968\)

The $0.137 is the cost to make a pound of dry whey and the 0.968 represents the pounds of solids contained in a pound of dry whey.

The final rule MCP system eliminates the need to adjust for differences in regional and/or seasonal yields of cheese due to differences in milk components. The value of milk will be adjusted automatically based on the level of components contained in milk in each order and each season even though the component prices are the same nationally.

Of the 11 consolidated new orders, 4 currently don't use MCP and therefore, for these orders a hundredweight Class III price will be calculated as follows:

Class III price per hundredweight = 3.5 times the butterfat price per pound + the protein price per pound times 3.1 + the other solids price per pound times 5.9.

Table 1 summarizes the annual average Class III prices contained in the final rule summary documents.

| Table 1: Comparison of Current and FINAL Rule FMMO Class III Prices. |
|--------------------------|--------------------------|--------------------------|
|                         | BFP          | Final Class III | Final Class III - BFP |
| 1994                    | 12.00        | 11.47          | -0.53                  |
| 1995                    | 11.83        | 11.50          | -0.33                  |
| 1996                    | 13.39        | 12.91          | -0.48                  |
| 1997                    | 12.05        | 11.43          | -0.62                  |
| 1998                    | 14.20        | 13.84          | -0.36                  |
| 60 Month Average        | 12.70        | 12.23          | -0.47                  |

The final rule MCP formula results, on the average, in a lower manufacturing price per hundredweight than the current BFP. USDA data show for a 60 month period, January 1994 through December 1998, the final rule Class III price averaged $12.23 versus an average BFP of $12.70, a difference of $0.47. The make allowances used in the formulas and including both block and barrel cheese push the average Class III price closer to the traditionally lower California Class 4b, the price for milk used in cheese.
3) **Class IV Price (milk used for dry milk powder and butter):**

Class IV replaces the existing Class III-A. Class IV includes milk used for dry milk products plus butter. MCP will be used in pricing Class IV but the components priced will be butterfat and nonfat solids. The butterfat price is the same as for Class III and the nonfat solids price is based off of the NASS survey price for nonfat dry milk. The nonfat solids price is computed as follows:

\[
\text{Nonfat solids price per pound} = \frac{(\text{NASS nonfat dry milk survey price} - 0.137)}{1.02}
\]

The \$0.137 is the cost to make one pound of nonfat dry milk and the 1.02 is the yield factor which accounts for both the yield of nonfat dry milk (.96) and the yield of dry buttermilk powder (.06), also a product from making nonfat dry milk and butter.

The Class IV price per hundredweight is computed as follows:

\[
\text{Class IV price per hundredweight} = 0.965 \times \text{Class IV skim milk price} + 3.5 \times \text{butterfat price per pound}. \text{The Class IV skim milk price is the nonfat solids price per pound times 9.}
\]

Table 2 summarizes the annual average Class IIIa and IV prices contained in the final rule summary documents.

<table>
<thead>
<tr>
<th></th>
<th>BFP</th>
<th>Class IIIa</th>
<th>Class IIIa - BFP</th>
<th>Final Class IV</th>
<th>Final Class IV - Final Class III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>12.00</td>
<td>10.27</td>
<td>-1.73</td>
<td>10.26</td>
<td>-1.21</td>
</tr>
<tr>
<td>1995</td>
<td>11.83</td>
<td>10.74</td>
<td>-1.09</td>
<td>10.70</td>
<td>-0.80</td>
</tr>
<tr>
<td>1996</td>
<td>13.39</td>
<td>13.00</td>
<td>-0.39</td>
<td>12.88</td>
<td>-0.03</td>
</tr>
<tr>
<td>1997</td>
<td>12.05</td>
<td>12.36</td>
<td>0.31</td>
<td>12.34</td>
<td>0.91</td>
</tr>
<tr>
<td>1998</td>
<td>14.20</td>
<td>14.85</td>
<td>0.65</td>
<td>14.79</td>
<td>0.95</td>
</tr>
<tr>
<td>60 Month Average</td>
<td>12.70</td>
<td>12.24</td>
<td>-0.46</td>
<td>12.20</td>
<td>-0.03</td>
</tr>
</tbody>
</table>

These data indicate that final rule Class IV MCP tracks the current Class IIIa price quite closely over time. Note however, that the discount (or premium) of Class IIIa/IV relative to the BFP/Class III price varies by an average of 43 cents/cwt over the 60 month period. That is, the Class IIIa price was discounted $0.46 relative to the BFP (the current Class III price), while the final Class IV price is discounted only $0.03 relative to the final Class III price. While Class IIIa/IV (milk used for powdered products) historically were value less than Class III (milk used for cheese), this relationship changed in 1997 and 1998. Note
that in these years (1997-98) the implied pricing incentives for Class IV relative to Class III are much greater under the final rule than under current Class IIIa/BFP pricing. Similarly, the disincentives for Class IV relative to Class III during 1994-96 are much less under the final rule than under current Class IIIa/BFP pricing.

4) **Class I pricing (milk used for fluid milk products):**

The final rule does flatten the Class I price surface (see Table 3). Class I differentials have been the Upper Midwest's major criticism of existing FMMOs. The final rule lowers Class I differentials in the Northeast ($0.67), Appalachia ($0.45), Southeast ($0.18), Southwest ($0.98), Arizona-Las Vegas ($0.97), Western ($0.36), Pacific Northwest ($0.45) and Central ($0.17) orders, but raises them in the Upper Midwest ($0.49), Florida ($0.40), and Mideast ($0.01) orders. In particular, the large increases in Class I differentials in the Northeast and Southwest under the 1985 farm bill, are substantively reduced.

<table>
<thead>
<tr>
<th>Region</th>
<th>Current</th>
<th>Final Rule</th>
<th>Change from Current</th>
<th>% Change From Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>3.13</td>
<td>2.46</td>
<td>-0.67</td>
<td>-21%</td>
</tr>
<tr>
<td>Appalachia</td>
<td>2.8</td>
<td>2.35</td>
<td>-0.45</td>
<td>-16%</td>
</tr>
<tr>
<td>Florida</td>
<td>3.96</td>
<td>4.36</td>
<td>0.4</td>
<td>10%</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.08</td>
<td>2.9</td>
<td>-0.18</td>
<td>-6%</td>
</tr>
<tr>
<td>Mideast</td>
<td>1.94</td>
<td>1.95</td>
<td>0.01</td>
<td>1%</td>
</tr>
<tr>
<td>Upper Midwest</td>
<td>1.32</td>
<td>1.81</td>
<td>0.49</td>
<td>37%</td>
</tr>
<tr>
<td>Central</td>
<td>2.17</td>
<td>2</td>
<td>-0.17</td>
<td>-8%</td>
</tr>
<tr>
<td>Southwest</td>
<td>3.03</td>
<td>2.04</td>
<td>-0.99</td>
<td>-33%</td>
</tr>
<tr>
<td>Western</td>
<td>1.83</td>
<td>1.47</td>
<td>-0.36</td>
<td>-20%</td>
</tr>
<tr>
<td>Northwest</td>
<td>1.9</td>
<td>1.45</td>
<td>-0.45</td>
<td>-24%</td>
</tr>
<tr>
<td>Arizona</td>
<td>2.52</td>
<td>1.55</td>
<td>-0.97</td>
<td>-38%</td>
</tr>
<tr>
<td>USA</td>
<td>2.57</td>
<td>2.28</td>
<td>-0.29</td>
<td>-11%</td>
</tr>
</tbody>
</table>

Table 3: Comparison of Current and Final Rule Class I Differentials.

In general, this new price surface is an improvement over the current system. The Class I differentials better reflect where milk is produced and procured, and modern processing, transportation and packaging technologies. While this is an improvement, the flattening of differentials is less than what the Upper Midwest advocated based on regional shifts in milk production and these modern technologies.

A major change from the current system in Class I pricing is a mover other than the Class III price. Currently, the Class I price is determined by adding a Class I differential to the announced BFP two months previous. For example, the April Class I price would be the February BFP plus the Class I differential. This two-month advanced pricing experienced problems when the BFP increased by more than the Class I differential
over the two months. When this happened, the Class III price was greater than the Class I price, that is, a price inversion occurred. Price inversion was experienced during the summer and fall months of 1998. When price inversion occurs, the price incentive to supply Grade A milk for Class I use is gone. This is because the Class I price is lower than both the Class III price and the blend price (weighted average producer price). Cheese plants rather than drawing out of the Federal order pool (pool draw) the difference between the blend price and the Class III price to share with their dairy producers, they had to pay into the pool the price difference. As a result, some cheese plants decide to de-pool their milk from the FMMO. A better decision for these cheese plants was to share the higher returns from making cheese with their dairy producers rather than paying into the pool and sharing some of the funds with the Class I handlers. De-pooling reduced the total pool dollars and lowered the blend price. Class I handlers found themselves at a price competitive disadvantage to cheese plants in competing for producer milk. This situation is contrary to the purpose of Federal orders, that is to assure an adequate supply of Grade A milk for Class I use. Because handlers compete for the same milk for different uses, Class I prices should exceed Class III and Class IV prices to ensure an adequate supply of milk for fluid use.

The final rule addresses this price inversion problem by using a separate mover for Class I prices. The advanced pricing procedure contained in the final rule results in a Class I price that is based on a more recent manufacturing price -- that is, it ties the Class I price closer to changes in the manufacturing use prices. The Class I skim milk price will be determined by adding the fixed Class I differential for each order to the "higher" of an advanced Class III or Class IV skim milk price. These advanced prices are calculated using the same product price formulas discussed above but using the most recent two-week period for which NASS product prices are available on the 23rd day of the current month. These prices will then apply to the following month. Thus, Class I price for a given month will be announced on or before the 23rd of the previous month. This change in advance pricing is illustrated below.

**Current Class I pricing for month of March:**

Class I differential is added to the announced January BFP
The January BFP is announced on February 5th
Thus, Class I handlers know the March Class I price on February 5th.
This is 23 days of advance pricing.

**Final rule Class I pricing for month of March:**

Class I differential is added to the "advanced" February Class III or Class IV skim milk price, which ever is higher. The advanced Class III and Class IV prices are based on the product price formulas using NASS survey prices available the most recent two-weeks prior to February 23rd (prices announced on Friday, February 19th for the weeks ending February 5th and 12th).
Thus, the Class I handler knows on February 23rd the March Class I price.
This is only 7 days of advance pricing.
Some handlers are concerned that the Class I advanced pricing has been shortened about 18 days. They argue that this does not leave sufficient time to advance price Class I products to their customers. But handlers may use the product price formulas to closely estimate the upcoming announced Class I price on or before the 25th.

Table 4 summarizes the annual averages for final rule Class I mover relative to the BFP contained in the final rule summary documents. This comparison with the BFP indicates that the final rule mover will lower the Class I spatial price surface in some years relative to the current BFP (i.e., lower Class I prices -31¢/cwt in 1994 and -16¢/cwt in 1995) and raise it in other years (i.e., +28¢/cwt in 1996, +35¢/cwt in 1997, and +88¢/cwt in 1998). On average over the 60 month period, the final rule Class I mover would add an additional +20¢/cwt to the Class I differentials in Table 3 relative to the current BFP.

<table>
<thead>
<tr>
<th>Year</th>
<th>BFP</th>
<th>Final Class III</th>
<th>Final Class I Mover</th>
<th>Final Class I Mover - BFP</th>
<th>Final Class I Mover - Final Class III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>12.00</td>
<td>11.47</td>
<td>11.69</td>
<td>-0.31</td>
<td>0.22</td>
</tr>
<tr>
<td>1995</td>
<td>11.83</td>
<td>11.50</td>
<td>11.67</td>
<td>-0.16</td>
<td>0.17</td>
</tr>
<tr>
<td>1996</td>
<td>13.39</td>
<td>12.91</td>
<td>13.67</td>
<td>0.28</td>
<td>0.76</td>
</tr>
<tr>
<td>1997</td>
<td>12.05</td>
<td>11.43</td>
<td>12.40</td>
<td>0.35</td>
<td>0.97</td>
</tr>
<tr>
<td>1998</td>
<td>14.20</td>
<td>13.84</td>
<td>15.08</td>
<td>0.88</td>
<td>1.24</td>
</tr>
<tr>
<td>60 Month Average</td>
<td>12.70</td>
<td>12.23</td>
<td>12.90</td>
<td>0.20</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Table 4 also indicates that the final rule Class I mover generates considerable additional Class I premiums compared to the final rule Class III price. These additional premiums for fluid over cheese usage average 67¢/cwt over the 60-month period. Thus, these Class I mover premiums will tend to favor regions with high Class I usage and hurt regions with primarily manufacturing milk usage.

Note that this 60 month average Class I relative to Class III premium is larger than the average decrease in Class I differentials in Table 3. This means that, on average, the Class I mover impacts of the final rule more than offset the impacts due to decreases in Class I differentials. For many regions with decreased Class I differentials in the final rule, this Class I mover premium will more than offset their Class I differential decrease in many years, especially 1996, 1997 and 1998 where butter/nonfat dry milk prices (hence, the Class IV non-fat solids price) were high relative to cheese prices (hence, the Class III non-fat solids price). These results indicate that the "higher of Class III or IV non-fat solids price" impacts of the final rule Class I mover are substantive. These effects are often overlooked if one focuses solely on Class I differentials in final rule.
The final rule addresses another problem inherent in the current method of announcing Class I prices in advance. That is, the advance price is established for milk containing 3.5 percent butterfat. But the current system does not determine the price of butterfat in advance. The Class I handler does not know the value of milk at butterfat content other than 3.5% until the butterfat differential is announced in the month "following" sale of the fluid product. For example, the butterfat differential for March milk is announced on April 5th when the March BFP is announced. With the volatility that now exists with butter prices, handlers experience considerable risk in pricing fluid milk products. The butterfat value and the resulting skim milk value may change significantly for a given month under the current system. Under the final rule handlers will have advanced pricing of the butterfat value. The Class I butterfat price will be determined by adding a fixed Class I differential (divided by 100) using the same advanced two-week period for which NASS butter prices are available on the 23rd of the month (using the Class III butterfat value formula). This Class I butterfat value will apply to the following month.

In summary, with the new advanced pricing of the skim milk and butterfat values for Class I, there no longer will be an announced 3.5 butterfat percent Class I price. However, a per hundredweight Class I price may still be derived by multiplying .965 times the Class I skim milk price plus 3.5 times the butterfat price. And finally, the advance pricing sends a better supply and demand price signal to dairy producers, especially in markets with relatively high Class I utilization. Under the current system Class I prices and producer blend prices in these high Class I markets lag changes in manufacturing milk prices by two months.

5) Class II Pricing (milk used in soft manufactured dairy products):

Under the current Federal order pricing system, Class II milk is determined like Class I by adding a fixed differential ($0.30) to the announced BFP two-months previous. It is charged that under this system the separate product class for nonfat dry milk (Class III-A) resulted in a competitive advantage over producer milk used to producer Class II products. Similar to the Class I price inversion problem, this Class II problem is intensified by the using the two-month previous BFP and the fact that the BFP value may change rather dramatically over a two-month period. At times, it is charged, producer milk may be made into nonfat dry milk and later re-wetted to make Class II products and at a lower ingredient cost than directly paying the Class II price for producer milk.

The final rule addresses this problem using an advanced pricing procedure similar to that used in Class I, but tied only to the advanced Class IV price. The Class II skim milk price per hundredweight will be the advanced Class IV skim milk price (the advanced Class IV nonfat solids price per pound times 9) plus a fixed differential of $0.70. The $0.70 is an estimate of the cost of drying condensed milk and re-wetting the solids to be used in Class II products.
Table 5 summarizes the annual averages for current and final rule Class II prices relative to the BFP and final Class III prices contained in the final rule summary documents. This comparison with the BFP/Class III prices indicates that the final rule Class II price will increase the premium for soft/frozen products usage (Class II) relative to cheese usage (BFP/Class III). On average over the 60-month period, current Class II pricing generated a +13¢/cwt Class II premium relative to milk used in cheese (BFP). In contrast, the final rule generates sizeable Class II premiums relative to Class III whenever Class IV is higher than Class III (e.g., 1996, 1997, ands 1998). On average over the 60 month period, the final rule Class II pricing adds an additional 48¢/cwt Class II premium over current Class II pricing. This will tend to favor regions with high Class II usage (they tend to be regions with high Class I usage as well) and hurt regions more Class III/IV usage. In contrast, in years when Class IV is more than 70¢/cwt below the Class III price (e.g., 1994 and 1995), the final rule Class II pricing generates discounts for Class II relative to Class III usage. This will tend to hurt regions with high Class II usage and favor manufacturing regions.

<table>
<thead>
<tr>
<th>Year</th>
<th>BFP</th>
<th>Current Class II</th>
<th>Current Class II - BFP</th>
<th>Final Class II</th>
<th>Final Class II - Final Class III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>12.00</td>
<td>12.45</td>
<td>0.45</td>
<td>10.95</td>
<td>-0.52</td>
</tr>
<tr>
<td>1995</td>
<td>11.83</td>
<td>11.84</td>
<td>0.01</td>
<td>11.31</td>
<td>-0.19</td>
</tr>
<tr>
<td>1996</td>
<td>13.39</td>
<td>13.93</td>
<td>0.54</td>
<td>13.47</td>
<td>0.56</td>
</tr>
<tr>
<td>1997</td>
<td>12.05</td>
<td>12.07</td>
<td>0.02</td>
<td>13.06</td>
<td>1.63</td>
</tr>
<tr>
<td>1998</td>
<td>14.20</td>
<td>13.84</td>
<td>-0.36</td>
<td>15.42</td>
<td>1.58</td>
</tr>
<tr>
<td>60 Month Average</td>
<td>12.70</td>
<td>12.83</td>
<td>0.13</td>
<td>12.84</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Again, these results indicate that the final ruling will have differential Class II impacts (similar to those from the Class I differentials and Class I mover results discussed above), depending on the relative value of Class III and Class IV. This means that the full regional impacts of the final rule will be difficult to determine as these impacts are likely to be year specific and will depend crucially on the relative Class III/IV values and regional milk utilization.

Unlike Class I, there is no advanced pricing of the Class II butterfat value. The price used for valuing Class II butterfat will be the current month's butterfat price for Class III.

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3 In general, this premium is 30¢/cwt over the BFP lagged 2 months under current Class II pricing. Annual averages distort this type of underlying relationship to a lagged price series.
and Class IV plus $0.007 per pound to incorporate the Class II differential. The Class II price per hundredweight will be the Class II skim milk price plus 3.5 times the Class II butterfat price.

In essence there will be three different butterfat values: the advanced Class I butterfat value, the Class II butterfat value, and the Class III and Class IV butterfat value.

6) **Quality Adjustment:**

The final rule provides for the adjustment of producer payments for the somatic cell count of producers’ milk under most FMMOs using MCP. Payments made by handlers for milk used in Class II, Class III and Class IV also will be adjusted on the basis of the somatic cell count (SCC) of the milk. SCC is an indicator of milk quality and it affects the yield of cheese and other dairy products that require casein for their structure and body.

The somatic cell adjustment will apply on a hundredweight basis and be computed by subtracting the SCC (in thousands) from 350 and multiplying the results by the product of .0005 times the monthly average NASS survey cheese price used to compute the protein price.

7) **Farm Separated Milk:**

The final rule both recognizes and prices farm-separated milk. Both ultra-filtration (UF) and reverse osmosis (RO) on farm membrane technologies are recognized. The retentate received from the farm with a UF or RO unit will be treated as producer milk and will be priced at the pool plant at which the milk is physically received. The pounds of UF or RO retentate received will be priced according to the skim-equivalent pounds of such milk. To be considered as producer milk, as opposed to plant or handler milk, an UF or RO unit must be under the same ownership as the farm on which it is located and only milk from that farm or other farms under the same ownership may be processed through the unit.

The Food and Drug Administration (FDA) has not yet decided whether UF retentate can be reconstituted and sold as fluid milk. However, FDA has approved the use of UF retentate in certain cheese products on a trial basis.

8) **Producer Payments:**

For each producer who has not discontinued shipments as of 23rd of the month, a “partial” payment shall be made so that it is received by the producer on or before the 26th of the month for milk received during the first 15 days of the month. The price shall not be less than the lowest announced class price for the preceding month, less proper deductions authorized in writing by the producer. The “final” payment for milk received during the
month shall be made so that it is received by each producer no later than the 16th after the end of each month.

Producers in a FMMO with MCP will be paid as follows:
- Producer price differential (added value over the Class III price for milk used in the order for Class I, Class II and Class IV) per hundredweight of milk
- Pounds of butterfat times the butterfat price
- Pounds of protein times the protein price
- Pounds of other solids times the other solids price
- Hundredweight of milk times the SCC adjustment

Producers in a FMMO not using MCP will be paid as follows:
- Hundredweight of milk times the skim milk price
- Pounds of butterfat times the butterfat price.

Summary

The 1996 FAIR ACT only required the Secretary of Agriculture to consolidate the number of existing orders. The Secretary should be complimented for doing much more than order consolidation. The final rule addresses several existing pricing issues or problems of the current Federal order program. The final rule consolidates the existing 31 orders into 11. Because orders having similar class utilizations were combined, in general the impact on producer blend prices is minimal, with some major exceptions. The BFP is replaced with a multiple component pricing formula (MCP) that prices butterfat, protein and other solids. The current BFP serves as the Class III price and as a mover of Classes II and I. The replacement is the Class III price, but a separate mover is used for Class II and I. The final rule greatly improves upon the current MCP system. Currently, some component values are residuals of the announced BFP, and at times, these residual values have a relatively low or zero value. MCP under the final rule derives all component values from dairy product prices. The final rule MCP formula results, on the average, in a lower manufacturing value price per hundredweight than the current BFP (47 cents over a 60 month period). It moves the average BFP closer to the traditionally lower California Class 4b, the price for milk used in cheese.

Class IV replaces the existing Class IIIa. A MCP formula is used to price butterfat and non-fat-solids. The Class IV price tracks the Class IIIa price quite closely over time. However, the discount (or premium) of Class IIIa/IV relative to the BFP/final rule Class III varies by 43 cents, on average, over a 60 month period.

The final rule does flatten the Class I price surface. The average Class I differential in the final rule is 29 cents lower than the average of existing differentials. In general, the new surface is an improvement over the current system. A major change in Class I pricing is a mover other than the Class III price. The Class I skim milk price will be the determined adding a fixed class I differential in each order to the higher of an advance
Class III or Class IV skim milk price. Tying the Class I price closer to manufacturing values reduces the current problem of class price inversion and de-pooling.

The final rule Class I mover generates a considerable additional Class I premium compared to the final rule Class III price -- an additional 67 cents, on average, over a 60 month period. In several years this additional Class I premium generated by the final rule mover will be larger than the average decrease in Class I differentials. This means that for many regions with decreased Class I differentials under the final rule, this Class I mover premium will more than offset their Class I differential decrease in many years. This aspect of the final rule may well be overlooked if one focuses solely on Class I differentials. The final rule also has advance pricing for Class I butterfat. This eliminates the current problem bottlers have of not knowing the butterfat value until after they price their fluid products.

The final rule advance prices skim milk in Class II similar to the advance Class I pricing, except that a fixed differential of $0.70 is added to the advance Class IV price. Butterfat is the IV butter fat price plus a differential of $.007 per pound. This pricing procedure reduces the existing Class II price inversion problem and the competitive price advantage experienced at times of nonfat dry milk over producer milk used for Class II products. The final rule Class II price will also generate sizeable premiums for Class II relative to Class III usage when compared to the current Class II pricing (premiums of 48 cents, on average, over a 60 month period). These premiums occur whenever the Class IV price is either greater than the Class III price or less than 70 cents below Class III. In contrast, in years when the Class IV price is more than 70 cents below the Class III price, the final rule Class II pricing generates discounts for Class II relative to Class III usage.

In summary, the final rule must be analyzed in its entirety in order to estimate net producer price impacts on any region. Depending upon the year, lower Class I differentials for a region may be partially or more than offset by the advance Class I mover and/or higher Class II premiums relative to Class III. This means that the regional impacts of the final rule will likely vary depending on the year chosen for the analysis.

A forthcoming Marketing and Policy Briefing Paper will analyze regional producer price and revenue impacts of the final rule under two base scenarios: a 1995 base, where Class III is greater than Class IV; and, a 1997 base where Class IV is greater than Class III. The differential regional impacts of the final rule, depending on the relative values of Class III and Class IV, are striking.