

The negative Producer Price Differentials (PPD) in many Federal Orders with multiple component pricing have been caught many dairy producers by surprise over the past three months. Under Federal Order pricing, producers are paid for their milkfat, protein and other solids based on the Class III component values. The remainder of their payment, which reflects the difference between the average milk value in an order, and the Class III Component values, is paid on a hundredweight (cwt.) basis as the *Producer Price Differential*.

By simple definition, the Producer Price Differential represents the difference between the weighted average milk value for a Federal Milk order, minus the Class III milk value for that order. The PPD is usually a positive number because the value for milk used for Class I and Class II products is generally higher than the Class III price. The Class IV price can also often be higher than the Class III price. As a result, when all milk class prices are averaged together within a Federal Order, this weighted average value, called the statistical blend price is usually higher than the Class III price. In fact, the greater the advantage for Class I, II and IV milk prices compared to Class III price, the larger the PPD. Of course, if the other Federal Order class prices are significantly below the Class III price, as was the case in recent months, the PPD can dive into negative territory.

Table 1 shows the Producer Price Differentials over the past three months in MCP orders. In August, the difference between the Federal Order blend price and the Class III price was negative for all orders except Florida, resulting in a negative Producer Price Differential in all Federal markets using multiple component pricing (MCP). The PPD was negative for the base cities in six Federal Order producers in both July and September. Even the Northeast and Southwest Federal Orders, which had positive PPD's for their base cities of Boston and Dallas for July and September, had negative PPD's for milk-rich regions distant from these towns during all three months.

A negative PPD has not been a common occurrence in recent years. Changes made to Federal order pricing under FMMO reform were designed to prevent the likelihood of negative PPD's. The graph at right shows the monthly average Federal Order blend price and Producer Price Differential in the seven Federal Orders using MCP since Federal Order reform began in January 2000. The upper line (with the axis on the left) represents the Federal Order Blend price, which has varied between \$10 and \$16.50 since FMMO reform began. The lower line (with axis on the right) shows the Producer Price Differential over the same period of time. Note the average PPD did not hit negative territory for this entire period of time until this past July. The average negative PPD's occurred only in the last three months, and are circled in the lower right corner of the graph.

Since July, an uncommon set of circumstances have worked together to create the recent negative Producer Price Differentials. Table 2 on the next page helps to illustrate some of the factors causing the negative PPD's.

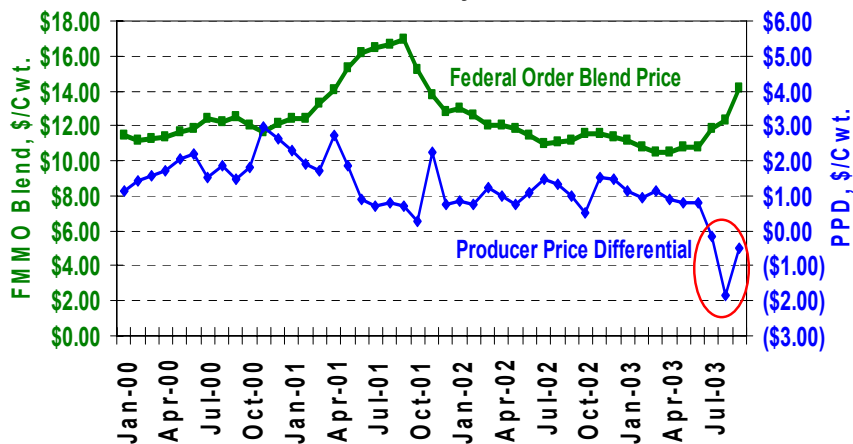
Factor 1: Low Class IV (and II) Prices. The August Class IV price was significantly below the Class III price because the value of milk used for butter and nonfat dry milk (NFDM) manufacturing was significantly below the value of milk used to make cheese. Based on FMMO price formulas,

Table 1. FMMO Blend Price Comparisons July - September, 2003

MCP MARKETS: FMMO Market (Price Location)	3.5% STATISTICAL PRICE			PRODUCER PRICE DIFF:		
	JUL	AUG	SEP	JUL	AUG	SEP
Northeast (Boston)	\$12.46	\$12.10	\$15.01	\$0.68	(\$1.70)	\$0.71
Mideast (Cleveland)	\$11.68	\$12.60	\$13.93	(\$0.10)	(\$1.20)	(\$0.37)
Upper Midwest (Chicago)	\$11.37	\$12.22	\$13.23	(\$0.41)	(\$1.58)	(\$1.07)
Central (Kansas City)	\$11.49	\$12.52	\$13.92	(\$0.29)	(\$1.28)	(\$0.38)
Southwest (Dallas)	\$12.01	\$12.93	\$14.48	\$0.23	(\$0.87)	\$0.18
Western (Salt Lake City)	\$11.44	\$12.10	\$13.40	(\$0.34)	(\$1.70)	(\$0.90)
Pacific Northwest (Seattle)	\$10.93	\$11.66	\$12.54	(\$0.85)	(\$2.14)	(\$1.76)
MCP MARKET AVERAGE:	\$11.87	\$12.31	\$14.17	\$0.09	(\$1.49)	(\$0.13)

FAT-SKIM MARKETS: FMMO Market (Price Location)	3.5% STATISTICAL PRICE:			COMPARED TO CLASS III:		
	JUL	AUG	SEP	JUL	AUG	SEP
Appalachian (Charlotte)	\$12.49	\$13.52	\$15.57	\$0.71	(\$0.28)	\$1.27
Southeast (Atlanta)	\$12.47	\$13.54	\$15.65	\$0.69	(\$0.26)	\$1.35
Florida (Tampa)	\$13.46	\$14.53	\$16.99	\$1.68	\$0.73	\$2.69
Arizona-Las Vegas (Phoenix)	\$11.53	\$12.94	\$13.98	(\$0.25)	(\$0.86)	(\$0.32)
FAT-SKIM MARKET AVERAGE:	\$12.47	\$13.59	\$15.55	\$0.69	(\$0.21)	\$1.25
ALL MARKET AVERAGE:	\$12.00	\$12.57	\$14.46	\$0.22	(\$1.23)	\$0.16

Federal Order Blend Price & the Producer Price Differential, January 2000 - Date



the difference between the July Class III and IV prices was \$1.83 per cwt. That Class III Price advantage over Class IV grew to \$3.66 in August, and \$4.25 in September.

Because the Class II milk price is always based on the price of butter and NFDM, the Class III price was also significantly higher than the Class II price for the past three months. Although the Class II price does use advance pricing for skim solids, the wide price difference from Class III was again due to the higher value for cheese, which is used to determine the Class III Price.

For comparison, Table 2 also includes the class price example for November 2000, the month with the highest Producer Price Differential since January 2000. For November 2000, The Class IV Price was \$13.00, a remarkable \$4.43 above the Class III Price of \$8.57. That advantage also carried over into Class II prices for November.

Factor 2: Class I Advance Pricing. The FMMO Class I mover fell far behind the Class III price in July and August, and finally began to catch up in September. Under FMMO rules, the Class I price for any given month is determined by dairy product prices during the first two weeks of the previous month, thus allowing Class I plants to know their milk price about two weeks before the first of the month. The Class I price is based on the *higher* of the milk value for use in manufacturing *either* cheese or butter/NFDM.

For example, the August Class I mover was based on the cheese milk value, which was higher than the butter/NFDM milk value during the first two weeks of July.

However, the sharp run-up in cheese prices this summer created an inverse relationship between the normally higher Class I price and the Class III price in 2003. The cheese market has determined the Class I price since July, but the cheese price survey used to determine the Class I price rose so much between the first two weeks of July and the end of August that there was still a \$2.83 difference in the two prices. Table 2 demonstrates this difference. The impact of advance pricing was smaller in July (-\$2.01 less than Class III) and September (\$-0.59 less) but the impacts still contribute to a lower blend price. In November, 2000, that situation was reversed, and the Class I mover was \$3.25 higher than the cheese market, due to higher butter/NFDM milk value, which determined the mover at that time.

The Class I mover provides the base point for local Class I prices, but is not the total price. A local Class I differential is added to the Class I mover to determine the minimum Class I price paid by a beverage milk manufacturer. Although the Class I mover has been lower than the Class III price for the past three months, the local Class I price in any given order may not be lower. **But for many parts of the country, the local Class I price (with differential) was still lower than the Class III price during July and August.** The Class I differential ranges from \$1.60 per cwt. in parts of the Upper Midwest and West, to \$4.30 in south Florida.

Factor 3: Local Milk Utilization. Class II and IV milk prices have been significantly below Class III prices since July, and thus markets with a high percentage of Class II or IV use have been hit especially hard by the wide price difference. Markets such as the Pacific Northwest (high Class IV use), East Central (high Class II) and Northeast (high Class II,IV) have had greater proportions of their milk supplies valued at the lower Class II and IV prices. This leads in turn to lower aggregate market values, and thus lower Producer Price Differentials.

Factor 4: De-pooled milk. The level of the negative PPD was amplified in many markets over the past three months because much of the milk used in cheese plants that would normally be pooled on some Federal Orders has not been pooled. Pooling rules vary between individual orders, and thus the impact of de-pooling also varies significantly. While some orders have more rigorous pooling requirements, others are quite liberal. Plants do know the pooling rules in their milk order, and when it became apparent that the Producer Price Differential for their plant location would be negative, they only pooled the minimum amounts of milk required under their order rules. While lower levels of Class III Pooling would not have prevented a negative PPD, levels would have been much higher in some orders if pooling had been required. This phenomenon was especially notable in the Pacific Northwest Order, where about 30% of the milk utilization is normally Class III, but only 6% and 1% were pooled in July and August, respectively.

The current wide price difference between milk used in cheese and butter/NFDM will likely keep the Producer Price Differentials negative in some markets at least through October, if not longer. De-pooled cheese milk only contributes to the problem. California is holding a hearing to limit de-pooling on November 3, and both producer and processor sides of the industry are supporting the change. Expect the industry to propose changes that deal with de-pooling concerns in Federal Orders as well.

**Table 2. Federal Order Class Prices:
Timeline and Price Comparisons**

Example for August, 2003

<u>Milk Class</u>	<u>Products in Class</u>	<u>Determination Time Period</u>	<u>Price per Cwt. 3.5%F</u>	<u>Compared to Class III</u>
Class I (Mover)	Fluid Milk	July 1-12	\$10.97	-\$2.83
Class II	Ice Cream, Cottage Cheese, Cream	July 1-12 (Skim) August 2-30 (Fat)	\$10.81	-\$2.99
Class III	Hard Cheese	August 2-30	\$13.80	--
Class IV	Butter, NFDM	August 2-30	\$10.14	-\$3.66

Average August 2003 PPD for MCP Federal Orders: -\$1.49

Example for November, 2000

<u>Milk Class</u>	<u>Products in Class</u>	<u>Determination Time Period</u>	<u>Price per Cwt. 3.5%F</u>	<u>Compared to Class III</u>
Class I (Mover)	Fluid Milk	October 3-14	\$11.82	+\$3.25
Class II	Ice Cream, Cottage Cheese, Cream	Oct. 3-14 (Skim) Oct 31-Nov 28 (Fat)	\$13.68	+\$5.11
Class III	Hard Cheese	Oct 31 - Nov 28	\$ 8.57	--
Class IV	Butter, NFDM	Oct 31 - Nov 28	\$13.00	+\$4.43

Average November 2000 PPD for MCP Federal Orders: +\$3.10