

# MARKETING SERVICE

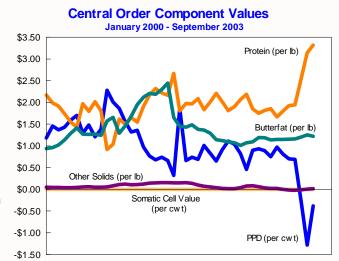
BULLETIN

### How Do I Know My Pay Price When Component Prices Look Like This?

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Many Central federal order producers quickly became subjected to new pricing mechanisms with the implementation of federal milk order reform in January 2000. The old "blend" price which was adjusted to each

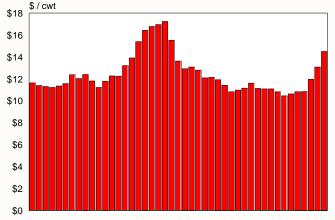
producer's butterfat test was replaced with five "new" prices. Protein, butterfat, other solids, somatic cells, and finally the "mysterious" producer price differential (PPD) all affect a producer's milk check. There was, and is, a new learning curve in understanding the relationship between these prices and how movements in each price affect a producer's pay price.



When producers examine the component prices which make up their milk check they are often perplexed. At times, these movements are counter to one another. Anyone examining price movements (top graph) can readily see that it is easy to be confused. However, movements in individual component prices used to determine a producer's pay price result in prices more easily understood. The graph below illustrates a typical producer's pay price using all the component prices illustrated above.

What about the PPD ??? The PPD represents the total dollars accumulated by the marketwide pool minus the amount paid to producers for their components; i.e., butterfat, protein, other solids, and the somatic cell price adjustment. The value of milk used in Class I is the largest contributor to the PPD. Although the PPD may receive the most attention, it is only one part of a producer's total revenue equation. Over the past 45 months, the PPD's proportion of a "typical" Central order producer's total revenue averaged less than 8%, with a range of -9.78 to 20.31%.

Effective Value Of Producer Milk @ 3.67% BF -- 3.10% Protein -- 5.70% OS -- 330,000 SCC



January 2000 - September 2003

The graphics and tables in this bulletin indicate how the PPD relates to dairy producers' federal order pay price. Looking at one particular milk check component may give false impressions. Often when the PPD declines the total return to a dairy farmer increases due to changes in the other "priced" milk components. For example, from April to May 2001 the PPD fell 39¢ per hundredweight. However, the total per hundredweight return registered its largest increase of \$1.47. Circumstances such as these make it necessary to understand how each of the components in a milk check are

other. These relationships are illustrated by the graphics and tables which follow.

priced and how these prices relate to each

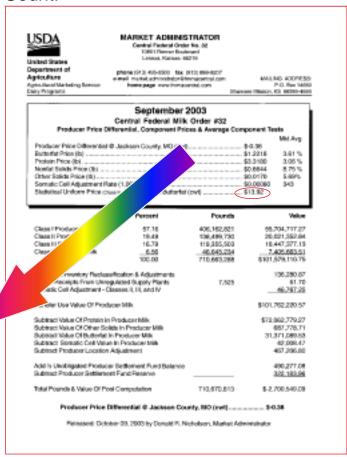
### **Central Federal Order Component Prices**

	<u>Butterfat</u>	<u>Protein</u>	Other <u>Solids</u>	<u>PPD</u>	<u>SCC</u>
Jan 2000	0.9366	2.1677	0.0503	1.18	0.00058
Feb	0.9588	1.9849	0.0432	1.46	0.00055
Mar	1.0191	1.9166	0.0424	1.37	0.00055
Apr	1.1352	1.7399	0.0408	1.43	0.00055
May	1.2854	1.5514	0.0403	1.59	0.00055
Jun	1.4128	1.4278	0.0438	1.70	0.00056
Jul	1.2691	1.9726	0.0557	1.29	0.00061
Aug	1.2659	1.7952	0.0577	1.48	0.00058
Sep	1.2707	2.0137	0.0502	1.21	0.00062
Oct	1.2444	1.8028	0.0471	1.38	0.00058
Nov	1.5745	0.9149	0.0565	2.28	0.00051
Dec	1.6534	1.0378	0.0829	2.01	0.00054
Jan 2001	1.2896	1.6181	0.1120	1.86	0.00056
Feb	1.4626	1.4951	0.1199	1.55	0.00057
Mar	1.6820	1.6498	0.1039	1.32	0.00064
Apr	1.9483	1.5443	0.1081	1.36	0.00067
May	2.1191	1.9108	0.1229	0.97	0.00076
Jun	2.2089	2.1670	0.1409	0.77	0.00081
Jul	2.1883	2.3175	0.1510	0.68	0.00083
Aug	2.2976	2.2188	0.1535	0.74	0.00083
Sep	2.4449	2.1647	0.1520	0.66	0.00085
Oct	1.6526	2.6664	0.1482	0.32	0.00078
Nov	1.4500	1.8045	0.1470	1.86	0.00062
Dec	1.4322	1.9782	0.1517	0.66	0.00064
Jan 2002	1.4846	1.9660	0.1392	0.74	0.00065
Feb	1.3817	2.0884	0.0965	0.69	0.00064
Mar	1.3638	1.8342	0.0688	1.01	0.00060
Apr	1.2890	2.0109	0.0566	0.83	0.00062
May	1.1433	2.2097	0.0374	0.65	0.00062
Jun	1.1211	2.0148	0.0247	0.91	0.00059
Jul	1.0929	1.8095	0.0150	1.11	0.00055
Aug	1.0701	1.9021	0.0177	1.04	0.00056
Sep	1.0099	2.0646	0.0367	0.82	0.00057
Oct	1.0726	2.1839	0.0755	0.46	0.00060
Nov	1.0923	1.8469	0.0850	0.90	0.00056
Dec	1.1922	1.7506	0.0584	0.93	0.00056
Jan 2003	1.1856	1.8164	0.0339	0.89	0.00057
Feb	1.1373	1.8538	0.0240	0.75	0.00056
Mar	1.1459	1.6648	0.0206	0.97	0.00054
Apr	1.1503	1.8006	-0.0008	0.81	0.00055
May	1.1512	1.9275	-0.0144	0.70	0.00057
Jun	1.1576	1.9434	-0.0200	0.69	0.00057
Jul	1.2055	2.5480	-0.0124	-0.29	0.00067
Aug	1.2514	3.1438	0.0026	-1.28	0.00077
Sep	1.2218	3.3180	0.0170	-0.38	0.00080

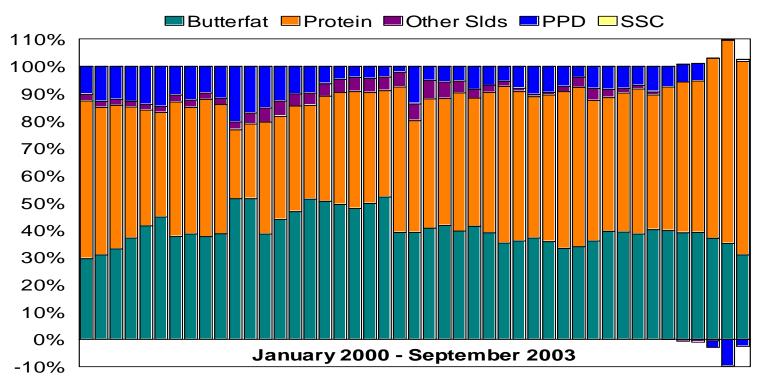
Producer price announcements may be obtained from the Market Administrator at the website, address, or phone number found on the back page. The prices used to calculate producer revenue can be found in the box located at the top of the price announcement. This table provides historical data on all producer component prices for the Central federal milk order since the inception of federal milk order reform in January 2000. These component prices can be used to calculate a producer's total revenue for any month.

A representation of producer values generated by these prices are illustrated by the graph at the right (page 3). It should be noted that the Producer Price Differential makes up a small percentage of a producer's total revenue.

A sample format used in calculating total producer revenue is also provided below the graph. The calculation assumes a 200,000 pound producer with a 3.67% BF test, 3.10% Protein test, 5.70% Other Solids test, and a 330,000 Somatic Cell Count.



### Component Values As A Percent Of 100 Lbs. Producer Milk At 3.67% BF - 3.10% Protein - 5.70% OS - 330,000 SCC Central Federal Order



#### A Look At How You Can Calculate Your Pay Price

Assume a dairy producer with:

200,000 pounds of marketings 3.67% Butterfat test 3.10% Protein test 5.70% Other Solids test Producer Price Differential (PPD) 330.000 Somatic Cell Count

**Total Federal Order Value Of Milk Marketed: September 2003** 

Sep '03 Prices: \$1.2218 /lb \$3.3180 /lb \$0.0170 /lb - \$0.38 /cwt

\$0.00080 / 100,000 cells / cwt

Prices For Different Months May Be Found In The Table On Page 2

\$29,013.41

\$14.51

Component	Avg Test		undred Weights			Lbs npone rketed	nt Co	Sep '03 mponent Prices			Total Value
Butterfat	3.67	Х	2,000	)	=	7,340	) x	\$1.2218	=	\$8	,968.01
Protein	3.10	Χ	2,000	)	=	6,200	) x	\$3.3180	=	\$20	,571.60
Other Solids	5.70	Χ	2,000	)	=	11,400	) x	\$0.0170	=	\$	193.80
PPD			2,000	)			Х	\$-0.38	=	\$	-760.00
Somatic Cell Count (Calculate Adjuster)	330,000										
(350-330=20)	20 x	\$0.	08000	=	\$0.02	2 x	2,000		=	\$	40.00

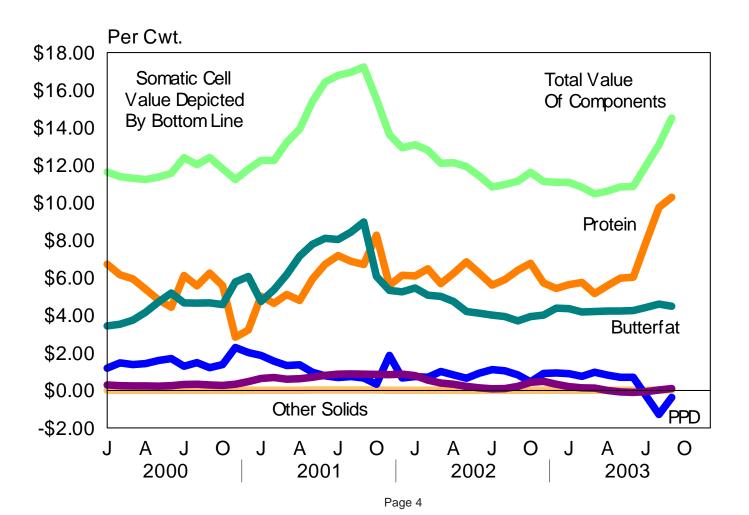
Note: The September 2003 price announcement on the previous page published a Central order statistical blend price of \$13.92. This price is published at 3.5% BF, 2.99% Protein, and 5.69% Other Solids. Individual producers should be aware their price can vary from that published price. In the above example, the price is 59¢ above the published price.

**Effective Price Per Hundredweight** 

## Total Federal Order Value Of Milk Marketed By Month <sup>1</sup> For A 200,000 Pound Producer With 3.67% BF, 3.10% Protein, 5.70% Other Solids, & 330,000 SCC

Monthly calculations were performed (holding test averages constant) to arrive at the values in the table on page 5. These calculations use the prices found in the table on page two and the formula at the bottom of page three. This table may be useful in examining the relationships between actual component prices (page 2) as they compare with each other in determining the total component value to the producer (table on page 5). Highs are denoted in blue and lows in red. The PPD value during the last 45 months was always less than either the butterfat or protein values, and it comprised less than 8% of the total producer revenue. In comparison, protein values accounted for over 48% of total revenue while butterfat values comprised over 40%. Moreover, total producer revenue increased during numerous months when the PPD decreased, and vice-versa. Despite these facts, the PPD remains the most closely watched, quoted, and compared dairy price by many in the dairy industry, especially when the value is negative. The graph below illustrates the dollar values found in the table at the right (page 5) on a per cwt. basis.

Note: The PPDs used in this illustration are for milk marketed at plants located in Jackson or St. Louis County Missouri (\$2.00 location differential). The PPD would be reduced for milk delivered to plants north of these counties while deliveries south would be higher.



### Total Federal Order Value Of Milk Marketed By Month <sup>1</sup>

	<u>Butterfat</u>	<u>Protein</u>	Other <u>Solids</u>	<u>PPD</u>	SCC	Total <u>Value</u>	Effective <u>Price</u>
Jan 2000	6,874.64	13,439.74	573.42	2,360.00	20.00	23,267.80	11.63
Feb	7,037.59	12,306.38	492.48	2,920.00	20.00	22,776.45	11.39
Mar	7,480.19	11,882.92	483.36	2,740.00	20.00	22,606.47	11.30
Apr	8,332.37	10,787.38	465.12	2,860.00	20.00	22,464.87	11.23
May	9,434.84	9,618.68	459.42	3,180.00	20.00	22,712.94	11.36
Jun	10,369.95	8,852.36	499.32	3,400.00	20.00	23,141.63	11.57
Jul	9,315.19	12,230.12	634.98	2,580.00	20.00	24,780.29	12.39
Aug	9,291.71	11,130.24	657.78	2,960.00	20.00	24,059.73	12.03
Sep	9,326.94	12,484.94	572.28	2,420.00	20.00	24,824.16	12.41
Oct	9,133.90	11,177.36	536.94	2,760.00	20.00	23,628.20	11.81
Nov	11,556.83	5,672.38	644.10	4,560.00	20.00	22,453.31	11.23
Dec	12,135.96	6,434.36	945.06	4,020.00	20.00	23,555.38	11.78
Jan 2001	9,465.66	10,032.22	1,276.80	3,720.00	20.00	24,514.68	12.26
Feb	10,735.48	9,269.62	1,366.86	3,100.00	20.00	24,491.96	12.25
Mar	12,345.88	10,228.76	1,184.46	2,640.00	20.00	26,419.10	13.21
Apr	14,300.52	9,574.66	1,232.34	2,720.00	20.00	27,847.52	13.92
May	15,554.19	11,846.96	1,401.06	1,940.00	40.00	30,782.21	15.39
Jun	16,213.33	13,435.40	1,606.26	1,540.00	40.00	32,834.99	16.42
Jul	16,062.12	14,368.50	1,721.40	1,360.00	40.00	33,552.02	16.78
Aug	16,864.38	13,756.56	1,749.90	1,480.00	40.00	33,890.84	16.95
Sep	17,945.57	13,421.14	1,732.80	1,320.00	40.00	34,459.51	17.23
Oct	12,130.08	16,531.68	1,689.48	640.00	40.00	31,031.24	15.52
Nov	10,643.00	11,187.90	1,675.80	3,720.00	20.00	27,246.70	13.62
Dec	10,512.35	12,264.84	1,729.38	1,320.00	20.00	25,846.57	12.92
Jan 2002	10,896.96	12,189.20	1,586.88	1,480.00	20.00	26,173.04	13.09
Feb	10,141.68	12,948.08	1,100.10	1,380.00	20.00	25,589.86	12.79
Mar	10,010.29	11,372.04	784.32	2,020.00	20.00	24,206.65	12.10
Apr	9,461.26	12,467.58	645.24	1,660.00	20.00	24,254.08	12.13
May	8,391.82	13,700.14	426.36	1,300.00	20.00	23,838.32	11.92
Jun	8,228.87	12,491.76	281.58	1,820.00	20.00	22,842.21	11.42
Jul	8,021.89	11,218.90	171.00	2,220.00	20.00	21,651.79	10.83
Aug	7,854.53	11,793.02	201.78	2,080.00	20.00	21,949.33	10.97
Sep	7,412.67	12,800.52	418.38	1,640.00	20.00	22,291.57	11.15
Oct	7,872.88	13,540.18	860.70	920.00	20.00	23,213.76	11.61
Nov	8,017.48	11,450.78	969.00	1,800.00	20.00	22,257.26	11.13
Dec	8,750.75	10,853.72	665.76	1,860.00	20.00	22,150.23	11.08
Jan 2003	8,702.30	11,261.68	386.46	1,780.00	20.00	22,150.44	11.08
Feb	8,347.78	11,493.56	273.60	1,500.00	20.00	21,634.94	10.82
Mar	8,410.91	10,321.76	234.84	1,940.00	20.00	<u>20,927.51</u>	<u>10.46</u>
Apr	8,443.20	11,163.72	-9.12	1,620.00	20.00	21,237.80	10.62
May	8,449.81	11,950.50	-164.16	1,400.00	20.00	21,656.15	10.83
Jun	8,496.78	12,049.08	<u>-228.00</u>	1,380.00	20.00	21,717.86	10.86
Jul	8,848.37	15,797.60	-141.36	-580.00	20.00	23,944.61	11.97
Aug	9,185.28	19,491.56	29.64	<u>-2,560.00</u>	40.00	26,186.48	13.09
Sep	8,968.01	<u>20,571.60</u>	193.80	-760.00	40.00	29,013.41	14.51

<sup>&</sup>lt;sup>1</sup> Your pay price or the federal order value of milk marketed is the minimum federal order price that dairy producers or their cooperative associations must be paid under the order. The price does not include authorized deductions, marketing service fees, etc.

	Statistical Uniform Price		Produce Differ		Class I Utilization		
	9/2003	8/2003	9/2003	8/2003	9/2003	8/2003	
Pacific Northwest	12.54	11.66	-1.76	-2.14	46.67	40.64	
Western	13.40	12.10	-0.90	-1.70	56.33	50.39	
Arizona-Las Vegas	13.98	12.94			35.82	34.73	
Central	13.92	12.52	-0.38	-1.28	57.16	59.75	
Southwest	14.48	12.93	0.18	-0.87	65.42	61.04	
Upper Midwest	13.23	12.22	-1.07	-1.58	53.95	50.64	
Southeast	15.65	13.54			72.08	79.17	
Mideast	13.93	12.60	-0.37	-1.20	54.74	53.82	
Appalachian	15.57	13.52			77.60	78.22	
Northeast	15.01	13.72	0.71	-0.08	49.11	44.86	
Florida	16.99	14.53			90.23	87.78	

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