

MARKETING SERVICE

B U L L E T I N

Realities or Myths?

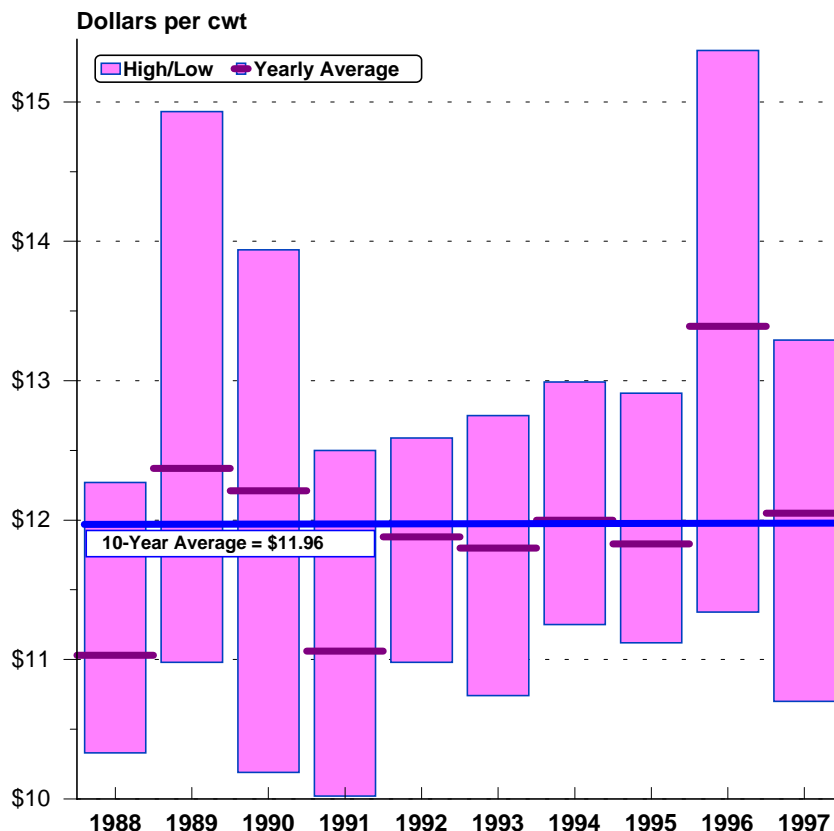
1. Volatility of the Basic Formula Price

Price volatility has been a dairy industry concern over the past few years. The perceived degree of volatility may be substantially greater than reality, however, if prices are examined on an annual basis. Basic Formula Price (BFP) data for the ten year period 1988 through 1997 is depicted in the graph below. The BFP's annual range, yearly average, and ten-year average are portrayed on this graph. The annual BFP average has fallen within +/- 37 cents of \$12.00 per hundredweight during seven out of the last ten years. Moreover, during five of the last six years the annual BFP average has been within +/- 20 cents of

\$12.00. "Outliers" during the last ten years were 1988, 1991, and 1996 when the annual BFP averaged \$11.03, \$11.06, and \$13.39, respectively.

Basic Formula Price Yearly Data

1988 through 1997



The BFP exhibits a much greater degree of volatility when viewed on a monthly basis, as indicated by the yearly high and low prices displayed on the graph to the left. The majority of the years during this ten year period encompass a substantial price range. This range was more than \$2.00 during six of the last ten years, while the smallest range was \$1.61 per hundredweight.

J
A
N
U
A
R
Y

1
9
9
8

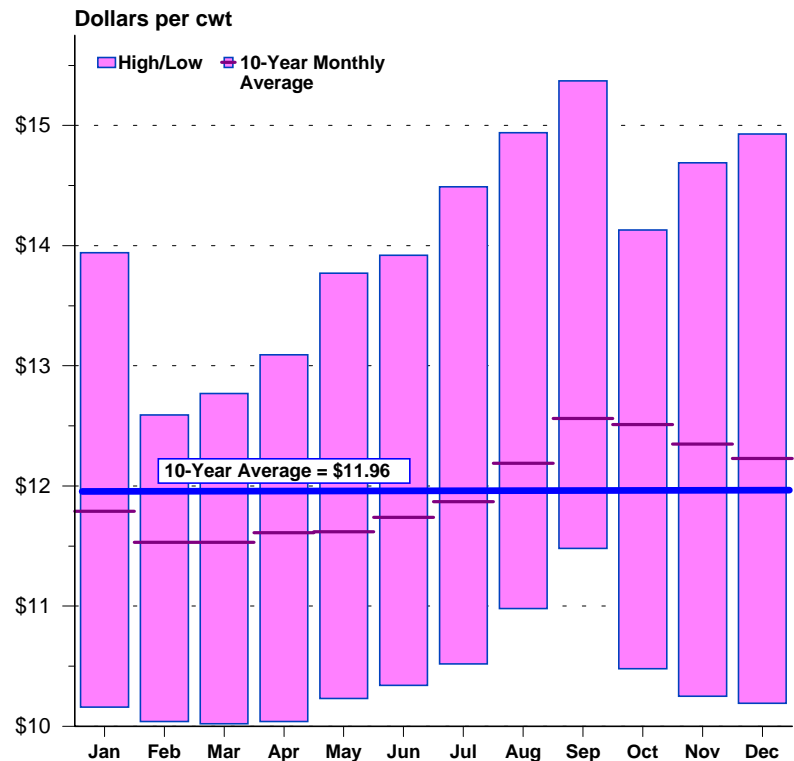


The graph on this page depicts BFP data for the last ten years on a monthly basis. Displayed on this graph are the ten-year average BFP for each month, the high and low BFP for each month during the ten-year period, and the ten-year BFP average. The data indicates a substantial amount of price variation for each month during the past ten years. The smallest BFP variation was recorded for February with a range of \$2.55, while December had the largest range at \$4.74. An examination of the monthly BFP averages implies a rather modest seasonal price pattern.

Are dairy prices volatile? The answer to this question appears to be dependent on the time frame in question. The amount of volatility appears minimal if only annual data over the past ten years are analyzed. Moreover, a prediction of an annual BFP of \$12.00 per hundredweight would have been appropriate for seven of the last ten years. However, if month-to-month changes are examined the degree of volatility becomes significant. Variations within any particular year will be substantial, based on data from the recent past. The predictability of the monthly variations is, at best, an inexact science.

Basic Formula Price Monthly Data

1988 through 1997



2. Basic Formula Price Calculations: Effect of Using Different Cheese Price Series

Attention has been directed toward the use of the National Agriculture Statistics Service (NASS) price survey in the calculation of the Basic Formula Price (BFP). The NASS U.S. average 40-pound block cheese price has been used in these calculations since trading was terminated at the National Cheese Exchange (NCE) in April 1997. Interest has centered on alleged downward pressure the NASS series has on the BFP. Some industry observers speculate that a negative effect is attributable to using the NASS series rather than an alternative price, such as the Chicago Mercantile Exchange (CME) cheese price series. The negative effect of using the NASS series has allegedly averaged 30 cents per hundredweight or more, according to some observers. The following tables and graphs illustrate that this speculation is unfounded.

The difference attributable to using the NASS series versus the CME price has averaged two cents during the eight months since the NCE was terminated. Stated differently, the BFP average for May through December would be two cents higher had the CME cheese price been used instead of the NASS U.S. average price. However, the BFP would have been lower in four of these eight months, and would have been 51 cents less in September. The table on page 3 details these data on a monthly basis for the last eight months of 1997.

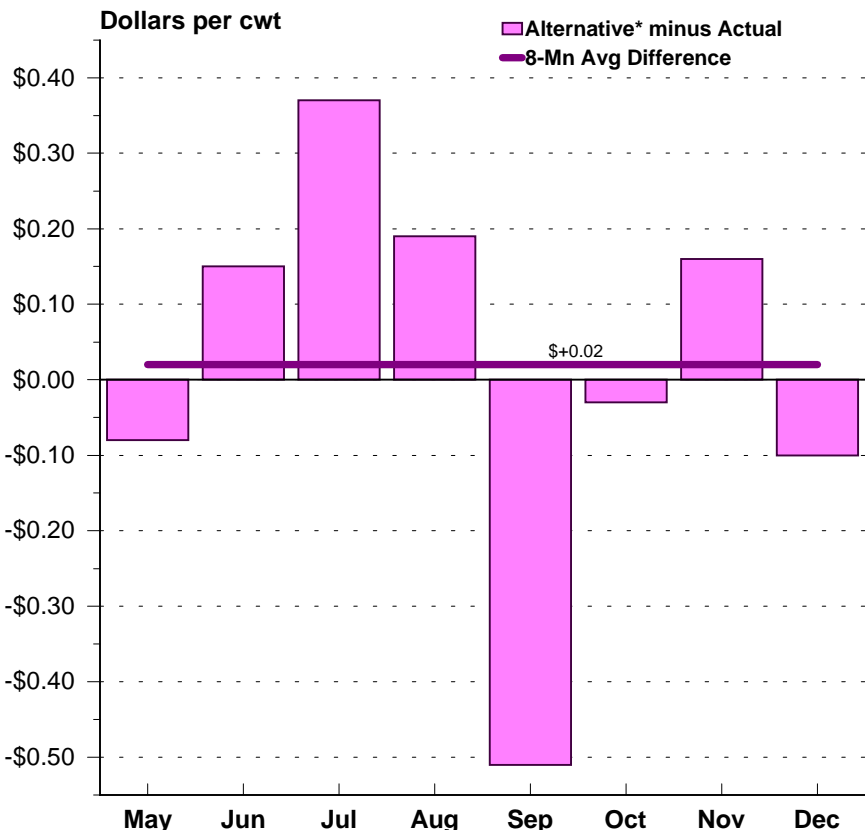
	NASS US Avg (A)	CME Avg (B)	Difference B minus A (C)	Actual BFP (E)	Alternative¹ BFP (F)	Difference F minus E (G)
	----- Block Cheese \$ per lb. -----			----- \$ per hundredweight -----		
May	1.1664	1.1588	-0.0076	10.70	10.62	-0.08
June	1.1583	1.1666	+0.0083	10.74	10.89	+0.15
July	1.1767	1.2244	+0.0477	10.86	11.23	+0.37
August	1.3024	1.3705	+0.0681	12.07	12.26	+0.19
September	1.3782	1.3925	+0.0143	12.79	12.28	-0.51
October	1.3835	1.3951	+0.0116	12.83	12.80	-0.03
November	1.3852	1.4129	+0.0277	12.96	13.12	+0.16
December	1.4163	1.4335	+0.0172	13.29	13.19	-0.10
8-mn Avg.	1.2959	1.3193	+0.0234	12.03	12.05	+0.02

A comparison of monthly changes in NASS and CME cheese prices, versus a comparison of absolute levels of these prices, is the central issue in explaining the small difference between the average BFP prices in the previous table. Pricing mechanisms that rely on mathematical formulas are sensitive to month-to-month changes in the inputs used in the formula, rather than the actual level of these inputs. *Thus, monthly changes in the block cheese price are a primary mover of the BFP price series, since the cheese price is a prominent input in this formula.*

Many confuse the importance of the absolute level of the inputs in the BFP formula with the monthly change in these inputs. This confusion results in a comparison of the absolute price levels of the commodities used in the BFP calculation, rather than a comparison of the differences in monthly changes in these commodity prices. A result of this inappropriate comparison is the misinformation regarding the alleged negative effect of using the NASS US average cheese price in the calculation of the BFP.

Alternative* BFP minus the BFP

May though December 1997



* CME block cheese price used in place of NASS U.S. average price.

The table below provides a comparison of the month-to-month changes in the NASS U.S. average and CME block cheese prices. Also included is a comparison of the difference between the BFP and an alternative BFP using the CME price series. The difference in the month-to-month change between the two cheese price series (column E) multiplied by 10 approximates the difference in the actual and alternative BFPs.

	NASS US Avg (A)	Monthly Change (B)	CME Avg (C)	Monthly Change (D)	Difference D vs B (E)	BFP Diff.² (F)
	---- Block Cheese \$ per lb. ----		---- Block Cheese \$ per lb. ----		-- \$ per lb. --	- \$ per cwt -
May	1.1664	n/a	1.1588	n/a	n/a	-0.08
June	1.1583	-0.0081	1.1666	+0.0078	+0.0159	+0.15
July	1.1767	+0.0184	1.2244	+0.0578	+0.0394	+0.37
August	1.3024	+0.1257	1.3705	+0.1461	+0.0204	+0.19
September	1.3782	+0.0758	1.3925	+0.0220	-0.0538	-0.51
October	1.3835	+0.0053	1.3951	+0.0026	-0.0027	-0.03
November	1.3852	+0.0017	1.4129	+0.0178	+0.0161	+0.16
December	1.4163	+0.0311	1.4335	+0.0206	-0.0105	-0.10
8-mn Avg.	1.2959		1.3193			+0.02

(Another alternative to using the NASS U.S. average block cheese price series is the NASS Minnesota/Wisconsin (M/W) average cheese price. The data indicates the BFP average would have been four cents higher over the last eight months of 1997 if the NASS M/W block cheese price had been used in the BFP calculations.)

1/ CME block cheese price used in place of the NASS average price.

2/ Difference between the alternative BFP, using the CME block cheese price in place of the NASS average price, versus the actual BFP.

Selected Producer Marketing Data

The following three pages provide a summary of selected 1997 marketing data for the Southern Illinois-Eastern Missouri, Central Illinois, and Southwest Plains Federal Milk Orders.

The first table (page 5) summarizes milk marketings by the top ten counties for each order. The average number of farms marketing milk on each order is also provided.

The second table (page 6) provides the total 1997 milk marketings from states which marketed milk under each order. A comparison is provided with comparable 1996 data.

The last table (page 7) provides a monthly summary of total producer receipts, producer receipts in Class I, and the average daily marketings per farm for both 1997 and 1996.

Top Ten Counties Supplying Milk To Handlers On The Southern Illinois-Eastern Missouri, Central Illinois, and Southwest Plains, Federal Orders During 1997

County	State	Rank In 1996	Pounds Of Producer Milk Marketed	Percent Of Total Producer Milk	Average Number Of Farms	Percent Of Total Number Of Farms
--------	-------	--------------	----------------------------------	--------------------------------	-------------------------	----------------------------------

SOUTHERN ILLINOIS-EASTERN MISSOURI

Clinton	IL	1	236,913,711	12.14	154	7.81
Washington	IL	2	129,528,237	6.64	81	4.11
Effingham	IL	3	95,558,747	4.90	63	3.20
Winona	MN	4	91,016,054	4.66	38	1.93
Bond	IL	5	52,967,140	2.71	38	1.93
Houston	MN	7	46,202,966	2.37	38	1.93
Allamakee	IA	9	45,048,951	2.31	51	2.58
Adams	IL	12	40,893,903	2.09	30	1.52
Grant	WI	6	39,042,877	2.00	54	2.74
Madison	IL	8	38,174,550	1.96	26	1.32
Ten County Total			815,347,136	41.78	573	29.07
Market Total			1,951,601,225		1,971	

CENTRAL ILLINOIS

Jackson	IA	1	48,080,910	25.79	49	23.67
Livingston	IL	2	18,830,307	10.10	15	7.25
Tazewell	IL	3	15,345,915	8.23	14	6.76
Iroquois	IL	4	14,220,098	7.63	14	6.76
Dubuque	IA	5	12,000,874	6.44	15	7.25
McLean	IL	14	11,840,730	6.35	10	4.83
Clinton	IA	6	11,724,794	6.29	11	5.31
Peoria	IL	7	5,773,802	3.10	8	3.86
Woodford	IL	10	4,345,504	2.33	6	2.90
Champaign	IL	30	4,104,851	2.20	2	0.97
Ten County Total			146,267,785	78.46	144	69.56
Market Total			186,427,647		207	

SOUTHWEST PLAINS

Grady	OK	2	274,613,476	8.92	49	2.04
Curry	NM	1	249,564,308	8.11	6	0.25
Webster	MO	3	132,251,694	4.30	139	5.80
Hamilton	KS	13	112,179,512	3.64	2	0.08
Polk	MO	5	88,862,093	2.89	73	3.04
Sedgwick	KS	8	79,321,883	2.58	49	2.04
Mayes	OK	9	72,181,265	2.34	67	2.79
Adair	OK	10	72,031,873	2.34	77	3.21
Lawrence	MO	6	71,201,002	2.31	67	2.79
Gray	KS	17	68,146,246	2.21	2	0.08
Ten County Total			1,220,353,352	39.64	531	22.12
Market Total			3,078,562,267		2,400	

**Federal Order Producer Milk Marketings By State
1997 Compared With 1996**

State	1997 Pounds	% of Total	1996 Pounds	% of Total	% Change '97 vs. '96
SOUTHERN ILLINOIS-EASTERN MISSOURI					
Arkansas	19,587,565	1.00	3,844,661	0.20	+410.87
Illinois	975,980,773	50.01	981,179,366	50.80	-0.26
Indiana	14,915,880	0.76	15,642,054	0.81	-4.38
Iowa	111,503,134	5.71	124,602,296	6.45	-10.27
Kansas	4,928,729	0.25	76,949	0.00	+6,322.84
Kentucky	13,590,806	0.70	12,997,421	0.67	+4.85
Michigan	-0-	0.00	1,101,624	0.06	N/A
Minnesota	159,138,988	8.15	134,833,638	6.98	+18.35
Mississippi	99,168	0.01	615,451	0.03	-83.84
Missouri	387,919,485	19.88	340,073,528	17.61	+14.38
New Mexico	2,957,693	0.15	-0-	0.00	N/A
Ohio	437,514	0.02	1,213,280	0.06	-63.84
Oklahoma	39,853,405	2.04	52,031,339	2.69	-23.20
Tennessee	2,679,498	0.14	5,512,487	0.29	-51.26
Texas	16,115,706	0.83	11,106,258	0.58	+45.50
Wisconsin	<u>201,892,881</u>	<u>10.35</u>	<u>246,696,086</u>	<u>12.77</u>	<u>-17.94</u>
Total	1,951,601,225	100.00	1,931,526,438	100.00	+1.32

CENTRAL ILLINOIS

Illinois	108,383,672	58.14	88,210,469	50.38	+23.21
Iowa	77,721,684	41.69	86,727,643	49.54	-10.14
Minnesota	185,125	0.10	22,614	0.01	+720.83
Wisconsin	<u>137,166</u>	<u>0.07</u>	<u>128,670</u>	<u>0.07</u>	<u>+6.89</u>
Total	186,427,647	100.00	175,089,396	100.00	+6.77

SOUTHWEST PLAINS

Arkansas	205,281,373	6.67	185,205,572	5.27	+11.14
Kansas	770,506,163	25.03	709,905,317	20.20	+8.83
Missouri	841,580,126	27.33	1,252,680,743	35.65	-32.63
Nebraska	849,223	0.03	1,465,093	0.04	-41.88
New Mexico	289,699,598	9.41	343,469,203	9.77	-15.42
Oklahoma	944,508,642	30.68	925,842,986	26.35	+2.30
Texas	<u>26,137,142</u>	<u>0.85</u>	<u>95,421,184</u>	<u>2.72</u>	<u>-72.53</u>
Total	3,078,562,267	100.00	3,513,990,098	100.00	-12.15

**Producer Receipts, Producer Receipts in Class I, and Average Daily Marketings Per Farm
for the Southern Illinois-Eastern Missouri, Central Illinois, and Southwest Plains Federal Orders
1997 Compared With 1996**

Month	Producer Receipts			Producer Receipts In Class I			Average Daily Marketings Per Farm			
	(1,000 lbs.)	Percent Change		(1,000 lbs.)	Percent Change	(pounds)	Percent Change			
	1997	1996		1997	1996		1997	1996		
Southern Illinois-Eastern Missouri	Jan	163,053	168,334	-3.14	93,859	102,030	-8.01	2,707	2,824	-4.14
	Feb	151,984	180,062	-12.58	82,703	93,052	-7.95	2,538	2,855	-11.10
	Mar	184,195	198,742	-7.32	88,362	97,318	-9.20	2,817	3,024	-6.85
	Apr	186,394	190,744	-2.28	85,744	97,879	-12.40	3,012	2,984	+0.94
	May	204,572	156,845	+30.43	88,337	96,769	-8.71	3,042	2,628	+15.75
	Jun	189,137	151,120	+25.16	77,557	82,058	-5.48	2,998	2,423	+23.73
	Jul	176,790	164,502	+7.47	83,661	87,822	-4.74	2,787	2,500	+11.48
	Aug	141,516	137,965	+2.57	87,697	91,509	-4.17	2,371	2,209	+7.33
	Sep	128,057	141,380	-9.42	87,103	88,693	-1.79	2,312	2,262	+2.21
	Oct	134,227	153,748	-12.70	89,098	92,177	-3.34	2,476	2,700	-8.30
	Nov	138,984	139,557	-0.41	82,057	89,563	-8.38	2,842	2,437	+16.62
	Dec	152,692	148,527	+2.80	87,585	84,380	+3.80	2,555	2,564	-0.35
	Total	1,951,601	1,931,526	+1.32	1,033,763	1,103,250	-6.04	2,713	2,618	+3.63
Central Illinois	Jan	14,777	15,896	-7.04	13,201	12,757	+3.77	2,314	2,146	+7.83
	Feb	13,383	14,630	-5.26	11,928	11,865	+0.80	2,309	2,510	-8.01
	Mar	16,428	15,839	+3.71	12,556	12,447	+1.15	2,523	2,568	-1.75
	Apr	16,518	15,281	+8.10	12,597	12,088	+4.50	2,634	2,547	+3.42
	May	17,331	15,303	+13.25	13,184	12,033	+9.87	2,781	2,481	+12.09
	Jun	16,499	14,059	+17.36	10,719	10,104	+6.38	2,750	2,320	+18.53
	Jul	16,282	13,941	+16.79	11,840	11,000	-1.19	2,653	2,295	+15.60
	Aug	15,635	14,070	+11.12	12,077	11,517	+5.15	2,547	2,281	+11.66
	Sep	13,974	13,427	+4.08	12,708	11,273	+13.04	2,317	2,260	+2.52
	Oct	15,218	14,236	+6.89	13,202	12,357	+7.13	2,063	2,136	-3.42
	Nov	14,659	14,044	+4.38	12,029	12,289	-1.84	2,349	2,229	+5.38
	Dec	15,724	14,363	+9.48	12,207	12,528	-2.30	2,474	2,185	+13.23
	Total	186,428	175,089	+6.77	148,248	142,258	+4.50	2,467	2,322	+6.24
Southwest Plains	Jan	280,447	278,192	+0.81	133,066	130,861	+1.68	3,232	3,263	-0.95
	Feb	241,354	283,147	-11.72	114,299	119,310	-0.78	3,688	3,265	+12.96
	Mar	268,552	302,069	-11.10	121,628	119,230	+2.01	3,908	3,280	+19.15
	Apr	267,449	329,846	-18.92	120,754	128,143	-5.77	3,996	3,728	+7.19
	May	275,820	337,726	-18.33	120,733	122,361	-1.33	4,026	3,668	+9.76
	Jun	262,510	304,938	-13.91	112,149	113,638	-1.31	3,801	3,297	+15.29
	Jul	281,904	292,524	-3.63	123,460	125,819	-1.88	3,424	3,298	+3.82
	Aug	255,009	285,642	-10.72	124,884	135,035	-7.52	3,210	3,176	+1.07
	Sep	196,675	269,488	-27.02	131,648	125,433	+4.96	3,011	3,119	-3.46
	Oct	262,391	282,038	-6.97	132,753	132,783	-0.02	3,462	3,140	+10.25
	Nov	255,878	266,111	-3.85	121,894	128,959	-5.48	3,506	3,220	+8.88
	Dec	230,573	282,269	-18.31	109,044	121,364	-10.15	3,057	3,231	-5.39
	Total	3,078,562	3,513,990	-12.15	1,466,312	1,502,936	-2.17	3,514	3,308	+6.23

A comparison of Blend Prices for milk of 3.5% butterfat content is provided for selected Federal milk marketing orders:		Dec 1997	Nov 1997	Dec 1996
	Southeast (Zone 7)	15.43	15.33	\$15.91
Chicago Regional (Zone I)	13.62	13.34	12.34	
Greater Kansas City	14.76	14.51	15.52	
Indiana	14.21	14.13	14.83	
Iowa (Zone I)	13.65	13.48	12.88	
Southwest Plains (Zone I)	14.63	14.41	14.34	
Central Illinois (Zone I)	14.27	14.16	15.21	
Southern Illinois - Eastern Missouri (Base Zone)	14.21	14.13	14.47	

Actions Affecting Dairy Producers.....

A **Notice of Hearing** was issued January 21, 1998, in response to industry requests to consider flooring the level of the basic formula price for the purpose of determining Class I and Class II prices through December 1998. Mid-America Dairywomen, Inc. (now Dairy Farmers of America) was the proponent of the proposed amendment and has requested the issue be handled on an emergency basis. The hearing will be held on February 17, 1998. Copies of the Notice may be obtained by contacting this office at 918-742-0415.

On January 23, 1998, Agriculture Secretary Dan Glickman announced proposed changes to the 60-year old Federal Milk Marketing Order program that will streamline and introduce more market orientation into the program. The 1996 farm bill mandated that milk marketing orders be consolidated by April 1999. A **Recommended Decision** proposed changes which reduces the number of Federal milk orders, provides for a replacement of the basic formula price, and provides for replacing the way that minimum fluid milk prices are determined.



FIRST CLASS
 U.S. POSTAGE
 PAID
 TULSA, OK
 PERMIT NO. 784

FEDERAL MILK MARKET ADMINISTRATOR
 P.O. BOX 701440
 TULSA, OKLAHOMA 74170-1440

FIRST CLASS

ADDRESS CORRECTION REQUESTED