

Appendix B

Effects of Combined Proposals from Dairy Producers of New Mexico Class III and IV Price Formulas

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This appendix has been included to illustrate the effects of combining certain proposals of DPNM as their proposed language indicates. This appendix also provides a more thorough analysis of DPNM's proposal to use a separate Class III butterfat price.

Brief descriptions of scenarios analyzed for this Appendix are listed in Table B-1.

Table B-1. Scenarios analyzed using Econometric Model

Scenario	Proponent	Description
K	Dairy Producers of New Mexico	Change yield factors, make allowances, and price series
L	Dairy Producers of New Mexico	Change yield factors and adopt separate Class III butterfat price
M	Dairy Producers of New Mexico	Change yield factors, make allowances, and price series and adopt separate Class III butterfat price

DPNM includes two proposed language sets with their submitted proposals. The first includes all of their proposed changes to Federal order formulas, with the exception of their proposal for a separate Class III butterfat price. Scenario K simulates changes matching this proposal language. It combines proposed yield factor changes (Scenarios D), use of CME price series (Scenario F), and make allowance changes (Scenario G). Proposed changes for Scenario K are listed in Table B-2. A summary of the results of an econometric analysis of Scenario K is in Table B-3. Scenario K results are very close to the results of adding Scenarios D, F, and G. The all-milk price rises by \$0.10 per cwt, and producer revenue rises by \$239 million on average over the nine-year period.

The second proposed language set provided by DPNM includes all of their proposed changes to Federal order formulas including their proposal for a separate Class III butterfat price. Scenario M simulates changes matching this proposal language. It combines proposed yield factor changes (Scenarios D), use of CME price series (Scenario F), make allowance changes (Scenario G), and use of separate pricing for Class III butterfat (Scenario H). Scenario L illustrates the effects combining proposed changes in yield factors (Scenario D) with the proposed separate Class III butterfat price (Scenario H). Proposed changes for Scenarios L and M are listed in Table B-2. Summaries of the results of econometric analyses of Scenarios L and M are in Table B-3.

Since adopting a separate Class III butterfat price and changing the protein price as proposed by DPNM substantially alters the structure of Federal order formulas, the results of adding impacts for Scenarios D and H do not closely approximate the results for Scenario L. The results of adding impacts for Scenarios D, F, G, and H do not closely approximate the results for Scenario M.

With Scenario L, average Class I and III prices at 3.5 percent butterfat fall by \$0.06 per cwt, and Class II and IV prices at 3.5 percent butterfat rise by \$0.38. It may appear strange, at first glance, that the Federal order blend price falls by \$0.20, more than any of the class prices. This can be explained by changes in milk allocation. As Class II and IV prices rise, Class II and IV uses fall by 135 million pounds and 198 million pounds respectively. As the Class I price falls, Class I use rises by 77 million pounds. For Class III the price falls, and Class III use also falls by 27 million pounds. Changes in

class uses are a result of changes in demand for fluid milk and dairy products. As prices for dairy products rise, uses for all of the manufacturing class decline. As the Class I price falls, Class I use rises. The all-milk price falls by \$0.10 per cwt, and producer revenue falls by \$242 million on average over the nine-year period.

The results for Scenario M are difficult to explain because of the aggregate and sometimes counteracting effects of the many changes. Although the class prices rise, the blend price falls. Average Class I and III prices at 3.5 percent butterfat rise by \$0.04 per cwt, and Class II and IV prices at 3.5 percent butterfat rise by \$0.70 per cwt. The blend price at 3.5 percent butterfat rises by \$0.07 per cwt. As with Scenario L, the contrasting change in the blend price can be explained by changes in milk allocation. Classes I and III, which have relatively small price increases at 3.5 percent butterfat, have increases in class uses of 62 million pounds and 35 million pounds respectively. Classes II and IV, which have relatively large price increases at 3.5 percent butterfat, have decreases in class uses of 153 million pounds and 67 million pounds respectively. The all-milk price falls by \$0.03 per cwt, and producer revenue falls by \$84 million on average over the nine-year period.

Comparisons of several model scenarios to each other provide a better understanding of the effect of the proposed separate Class III butterfat price and the accompanying proposed change to the protein price. Scenario H is similar to the baseline scenario; the only difference with Scenario H is the use of the proposed separate Class III butterfat price and the accompanying proposed change to the protein price. There are no changes to yield factors, make allowance, or the pricing series. Likewise, Scenario L is similar to Scenario D. Both have changes in yield factors, but Scenario L also has the effects of the separate Class III butterfat price and the accompanying proposed change to the protein price. Likewise, Scenario M is similar to Scenario K. Both have changes to yield factors, make allowances, and pricing series; but Scenario K also has the effect of the separate Class III butterfat price and the accompanying proposed change to the protein price.

Table B-4 displays three comparisons: Scenario H results minus the baseline, Scenario L results minus Scenario D results, and Scenario M results minus Scenario K results. Results for all three comparisons are similar, although differences for the first comparison are generally greater than for the latter two comparisons. Changes are in the same directions for all three comparisons. In adopting the separate Class III butterfat structure, Class I and III prices rise and Class II and IV prices fall. The blend price difference is negative. With the tighter milk supply brought about by the lower milk prices, dairy product prices rise. Class use falls for the manufacturing classes. With the decrease in the Class I price, Class I use rises. For the first comparison, the all-milk price falls by \$0.18 per cwt, and producer revenue falls by \$447 million on average over the nine-year period. For the second two comparisons, the all-milk price falls by \$0.13 per cwt, and producer revenue falls by \$328 million and \$324 million respectively on average over the nine-year period.

Detailed tables B-5 through B-15 are provided for Scenarios K, L, and M.

Table B-2. Scenarios Combining More Than Two Proposals by Dairy Producers of New Mexico

Scenario Proponent	Units	Baseline	K DPNM	Separate Class III Butterfat Scenarios ¹	
				L DPNM	M DPNM
Changes to Pricing Factors					
Make Allowances					
Butter	\$/pound	0.1202	-0.0094		-0.0094
NFDM	\$/pound	0.1570	-0.0160		-0.0160
Cheese	\$/pound	0.1682	-0.0044		-0.0044
Whey	\$/pound	0.1956	-0.0458		-0.0458
Protein Price					
Protein yield factor		1.383	0.022	0.022	0.022
Butterfat yield factor		1.572	0.081	0.081	0.081
Butterfat recovery factor		0.90	0.04		
Cheese price adjustment	\$/pound		0.0056		0.0056
Butterfat Price					
Butterfat yield factor		1.200	0.0200	0.0200	0.0200
Butter price adjustment	\$/pound		0.0183		0.0183
Nonfat Solids Price					
Nonfat solids yield factor		0.99	0.03	0.03	0.03
NFDM price adjustment	\$/pound		0.0397		0.0397

¹ Scenarios L and M use separate butterfat prices for Class III and protein prices computed as follows:

Class III butterfat price = (cheese price -make allowance) X 1.653

Protein price = (cheese price - make allowance) X 1.405

If the Class IV price is higher than the Class III price

 then: Class I butterfat price = Class IV butterfat pricing factor + (applicable Class I differential divided by 100)

 else: Class I butterfat price = Class III butterfat pricing factor + (applicable Class I differential divided by 100)

If the Class IV price is higher than the Class III price

 then: Class I skim price = Class IV skim milk pricing factor + applicable Class I differential

 else: Class I butterfat price = Class III skim milk pricing factor + applicable Class I differential

All other formulas are the same as those applicable to the Interim Final Rule of December 26, 2006

Table B-3. Changes from Baseline: Scenarios Combining More Than Two Proposals by Dairy Producers of New Mexico
 Nine-year averages, 2007 through 2015

Scenario ¹		Baseline ²	K	L	M
Proponent			DPNM	DPNM	DPNM
	Units		Change from baseline		
F.O. Minimum Prices, 3.5% BF					
Class I	\$/cwt	16.35	0.15	-0.06	0.04
Class II	\$/cwt	12.68	0.43	0.38	0.70
Class III	\$/cwt	13.64	0.15	-0.06	0.04
Class IV	\$/cwt	11.98	0.43	0.38	0.70
Blend	\$/cwt	14.28	0.21	-0.20	-0.07
F.O. Minimum Prices at Test					
Class I	\$/cwt	13.95	0.24	-0.72	-0.58
Class II	\$/cwt	20.46	0.11	0.61	0.69
Class III	\$/cwt	13.61	0.16	-0.07	0.04
Class IV	\$/cwt	13.45	0.33	0.51	0.75
Blend	\$/cwt	14.63	0.20	-0.15	-0.02
NASS Wtd. Avg. Product Prices					
Cheddar	\$/pound	1.4713	-0.0394	0.0085	-0.0168
Butter	\$/pound	1.5630	-0.1024	0.0183	-0.0473
NFDM	\$/pound	0.8456	-0.0025	0.0027	0.0009
Whey	\$/pound	0.2765	-0.0050	0.0012	-0.0020
Retail fluid milk price ³	\$/gal.		0.0208	-0.0620	-0.0502
Component Prices					
Protein	\$/pound	2.3759	0.0415	-0.5331	-0.5545
Class IV Butterfat ⁴	\$/pound	1.7313	-0.0623	0.0512	0.0050
Class III butterfat	\$/pound			0.4818	0.4115
Other solids	\$/pound	0.0834	0.0420	0.0012	0.0451
Nonfat solids	\$/pound	0.6817	0.0749	0.0234	0.0784

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Table B-3 Continued. Changes from Baseline: Scenarios Combining More Than Two Proposals by Dairy Producers of New Mexico

Scenario		Baseline	K	L	M
Proponent			DPNM	DPNM	DPNM
	Units		Change from baseline		
Skim Milk Prices					
Class I skim price	\$/cwt	10.5671	0.3767	-1.6455	-1.4530
Class II skim price	\$/cwt	6.8352	0.6739	0.2104	0.7057
Class III skim price	\$/cwt	7.8571	0.3767	-1.6455	-1.4530
Class IV skim price	\$/cwt	6.1352	0.6739	0.2104	0.7057
Federal Order Class Uses					
Class I	mil. pounds	45,892	-26	77	62
Class II	mil. pounds	17,464	-25	-135	-153
Class III	mil. pounds	51,122	96	-27	35
Class IV	mil. pounds	15,597	201	-198	-67
Total F.O. Marketings	mil. pounds	130,075	245	-282	-123
Federal Order Cash Receipts	mil. \$	19,040	291	-228	-40
All Milk Price	\$/cwt	14.73	0.10	-0.10	-0.03
Milk Cows	1000s	8,884	13	-13	-4
Yield per Cow	pounds	21,660	15	-14	-5
U.S. Marketings ⁵	mil. pounds	191,649	407	-402	-138
Government removals of NFDM	mil. pounds	282	17	-17	-6
U.S. Producer Revenue ⁶	mil. \$	28,274	239	-242	-84

¹ See Table B-1 for brief description of scenarios.

² For these analyses, the baseline reflects adjustments from the published USDA baseline to reflect changes in manufacturing (make) allowances per the Interim Final Rule issued by USDA on December 26, 2006.

³ Retail fluid milk prices are not projected in the model. Projected impacts are calculated by multiplying the Class I price per pound at test by 8.62 pounds of milk per gallon.

⁴ For Scenario K, the "Class IV butterfat price" applies to both Class III and Class IV butterfat.

⁵ U.S. Marketings differs from U.S. milk production due to farm use of milk.

⁶ U.S. Producer Revenue includes Milk Income Loss Contract payments for 2007.

Table B-4. Comparisons of Scenarios with Separate Butterfat Pricing to Similar Scenarios Without Separate Class III Butterfat Pricing
 Nine-year averages, 2007 through 2015

Scenario Differences ¹		H - Baseline ²	L - D	M - K
Proponent		DPNM	DPNM	DPNM
	Units			
F.O. Minimum Prices, 3.5% BF				
Class I	\$/cwt	-0.30	-0.12	-0.11
Class II	\$/cwt	0.34	0.27	0.27
Class III	\$/cwt	-0.30	-0.12	-0.11
Class IV	\$/cwt	0.34	0.27	0.27
Blend	\$/cwt	-0.32	-0.27	-0.28
F.O. Minimum Prices at Test				
Class I	\$/cwt	-0.86	-0.80	-0.82
Class II	\$/cwt	0.74	0.58	0.58
Class III	\$/cwt	-0.32	-0.13	-0.12
Class IV	\$/cwt	0.55	0.42	0.42
Blend	\$/cwt	-0.27	-0.21	-0.22
NASS Wtd. Avg. Product Prices				
Cheddar	\$/pound	0.0290	0.0225	0.0226
Butter	\$/pound	0.0710	0.0546	0.0552
NFDM	\$/pound	0.0048	0.0036	0.0035
Whey	\$/pound	0.0038	0.0029	0.0030
Retail fluid milk price ³	\$/gal.	-0.0738	-0.0692	-0.0710
Component Prices				
Protein	\$/pound	-0.5335	-0.5744	-0.5960
Class IV butterfat	\$/pound	0.0853	0.0666	0.0673
Class III butterfat	\$/pound	0.3628	0.4818	0.4115
Other solids	\$/pound	0.0039	0.0030	0.0030
Nonfat solids	\$/pound	0.0047	0.0037	0.0035

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Table B-4 Continued. Comparisons of Scenarios with Separate Butterfat Pricing to Similar Scenarios Without Separate Class III Butterfat Pricing

Scenario		H - Baseline	L - D	M - K
Proponent		DPNM	DPNM	DPNM
	Units			
Skim Milk Prices				
Class I skim price	\$/cwt	-1.6308	-1.7629	-1.8296
Class II skim price	\$/cwt	0.0426	0.0333	0.0318
Class III skim price	\$/cwt	-1.6308	-1.7629	-1.8296
Class IV skim price	\$/cwt	0.0426	0.0333	0.0318
Federal Order Class Uses				
Class I	mil. pounds	92	87	89
Class II	mil. pounds	-162	-127	-128
Class III	mil. pounds	-78	-61	-62
Class IV	mil. pounds	-352	-272	-268
Total F.O. Marketings	mil. pounds	-500	-374	-368
Federal Order Cash Receipts	mil. \$	-422	-329	-331
All Milk Price	\$/cwt	-0.18	-0.13	-0.13
Milk Cows	1000s	-23	-17	-17
Yield per Cow	pounds	-26	-20	-19
U.S. Marketings ⁴	mil. pounds	-734	-552	-545
Government removals of NFDMM	mil. pounds	-31	-24	-23
U.S. Producer Revenue ⁵	mil. \$	-447	-328	-324

¹ See Tables 1 and B-1 for brief description of scenarios.

² For these analyses, the baseline reflects adjustments from the published USDA baseline to reflect changes in manufacturing (make) allowances per the Interim Final Rule issued by USDA on December 26, 2006.

³ Retail fluid milk prices are not projected in the model. Projected impacts are calculated by multiplying the Class I price per pound at test by 8.62 pounds of milk per gallon.

⁴ U.S. Marketings differs from U.S. milk production due to farm use of milk.

⁵ U.S. Producer Revenue includes Milk Income Loss Contract payments for 2007.

Table B-5. Milk Production Variables

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Milk Cows	1000s	Baseline	9,083	9,054	8,999	8,944	8,888	8,831	8,770	8,720	8,665	8,884
	1000s	K	6	10	12	14	14	15	15	15	15	13
	1000s	L	-5	-9	-12	-13	-14	-15	-15	-15	-15	-16
	1000s	M	-2	-3	-4	-4	-5	-5	-5	-5	-5	-4
Yield per Cow	pounds	Baseline	20,266	20,657	20,989	21,344	21,688	22,069	22,330	22,644	22,954	21,660
	pounds	K	0	6	11	15	17	19	20	21	22	15
	pounds	L	0	-6	-11	-14	-16	-18	-20	-21	-22	-14
	pounds	M	0	-2	-4	-5	-6	-6	-7	-7	-8	-5
Milk Production	mil. pounds	Baseline	184,072	187,030	188,881	190,898	192,767	194,894	195,836	197,460	198,907	192,305
	mil. pounds	K	112	256	354	418	461	492	511	524	533	407
	mil. pounds	L	-108	-246	-339	-402	-449	-484	-508	-531	-549	-402
	mil. pounds	M	-37	-89	-119	-138	-152	-163	-170	-182	-191	-138
Farm Use	mil. pounds	Baseline	900	800	800	700	700	600	500	500	400	656
Marketings	mil. pounds	Baseline	183,172	186,230	188,081	190,198	192,067	194,294	195,336	196,960	198,507	191,649
	mil. pounds	K	112	256	354	418	461	492	511	524	533	407
	mil. pounds	L	-108	-246	-339	-402	-449	-484	-508	-531	-549	-402
	mil. pounds	M	-37	-89	-119	-138	-152	-163	-170	-182	-191	-138

Table B-6. Product Prices

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Cheddar cheese	\$/pound	Baseline	1.4700	1.4800	1.4500	1.4500	1.4700	1.4700	1.4600	1.4900	1.5000	1.4700
	\$/pound	K	-0.0208	-0.0316	-0.0363	-0.0400	-0.0427	-0.0441	-0.0448	-0.0471	-0.0472	-0.0394
	\$/pound	L	0.0009	0.0046	0.0068	0.0087	0.0099	0.0106	0.0108	0.0118	0.0119	0.0085
	\$/pound	M	-0.0124	-0.0155	-0.0163	-0.0168	-0.0173	-0.0176	-0.0180	-0.0186	-0.0185	-0.0168
Butter	\$/pound	Baseline	1.4000	1.4200	1.5200	1.5500	1.5900	1.6300	1.6400	1.6300	1.6900	1.5600
	\$/pound	K	-0.0908	-0.0983	-0.1023	-0.1045	-0.1051	-0.1048	-0.1058	-0.1066	-0.1035	-0.1024
	\$/pound	L	-0.0029	0.0142	0.0194	0.0216	0.0226	0.0225	0.0227	0.0234	0.0210	0.0183
	\$/pound	M	-0.0613	-0.0486	-0.0455	-0.0448	-0.0444	-0.0444	-0.0456	-0.0455	-0.0454	-0.0473
Nonfat dry milk	\$/pound	Baseline	0.8900	0.8600	0.8300	0.8400	0.8400	0.8300	0.8300	0.8400	0.8500	0.8500
	\$/pound	K	-0.0036	-0.0026	-0.0019	-0.0024	-0.0024	-0.0023	-0.0021	-0.0025	-0.0030	-0.0025
	\$/pound	L	0.0034	0.0027	0.0018	0.0024	0.0025	0.0025	0.0023	0.0029	0.0035	0.0027
	\$/pound	M	0.0011	0.0009	0.0006	0.0008	0.0008	0.0008	0.0008	0.0011	0.0013	0.0009
Dry whey	\$/pound	Baseline	0.2500	0.2500	0.2500	0.2600	0.2800	0.2800	0.2900	0.3100	0.3100	0.2800
	\$/pound	K	-0.0033	-0.0049	-0.0053	-0.0054	-0.0055	-0.0053	-0.0052	-0.0052	-0.0049	-0.0050
	\$/pound	L	0.0002	0.0008	0.0011	0.0013	0.0014	0.0014	0.0014	0.0015	0.0014	0.0012
	\$/pound	M	-0.0019	-0.0023	-0.0022	-0.0021	-0.0020	-0.0019	-0.0019	-0.0019	-0.0018	-0.0020
Retail fluid milk ¹	\$/gallon	K	0.0391	0.0300	0.0235	0.0200	0.0175	0.0158	0.0147	0.0139	0.0129	0.0208
	\$/gallon	L	-0.0868	-0.0844	-0.0645	-0.0600	-0.0568	-0.0527	-0.0488	-0.0546	-0.0494	-0.0620
	\$/gallon	M	-0.0666	-0.0692	-0.0514	-0.0484	-0.0464	-0.0429	-0.0394	-0.0463	-0.0410	-0.0502

¹Retail fluid milk prices are not projected in the model. Projections are calculated by multiplying the Class I price per pound at test by 8.62 pounds of milk per gallon.

Table B-7. Federal Order Component Prices and Pricing Factors

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Butterfat	\$/pound	Baseline	1.5400	1.5600	1.6800	1.7200	1.7600	1.8100	1.8200	1.8100	1.8800	1.7300
	\$/pound	K	-0.0513	-0.0603	-0.0630	-0.0651	-0.0651	-0.0638	-0.0649	-0.0661	-0.0610	-0.0623
Class IV butterfat	\$/pound	L	0.0221	0.0432	0.0517	0.0550	0.0569	0.0577	0.0580	0.0588	0.0570	0.0512
	\$/pound	M	-0.0154	0.0004	0.0063	0.0077	0.0090	0.0098	0.0086	0.0085	0.0099	0.0050
Class III butterfat	\$/pound	L	0.6776	0.6437	0.5766	0.4589	0.4463	0.4090	0.3390	0.3798	0.4053	0.4818
	\$/pound	M	0.6127	0.6093	0.4307	0.3969	0.3701	0.3317	0.2967	0.3547	0.3007	0.4115
Protein	\$/pound	Baseline	2.5800	2.6000	2.3700	2.3300	2.3300	2.2900	2.2400	2.3400	2.3000	2.3800
	\$/pound	K	0.1007	0.0749	0.0526	0.0412	0.0316	0.0238	0.0204	0.0182	0.0100	0.0415
	\$/pound	L	-0.7480	-0.7455	-0.5531	-0.5161	-0.4880	-0.4477	-0.4099	-0.4730	-0.4166	-0.5331
	\$/pound	M	-0.7527	-0.7597	-0.5715	-0.5378	-0.5122	-0.4733	-0.4364	-0.5016	-0.4454	-0.5545
Nonfat Solids	\$/pound	Baseline	0.7300	0.7000	0.6700	0.6700	0.6700	0.6700	0.6700	0.6800	0.6900	0.6800
	\$/pound	K	0.0752	0.0753	0.0751	0.0748	0.0747	0.0747	0.0749	0.0748	0.0746	0.0749
	\$/pound	L	0.0255	0.0238	0.0221	0.0229	0.0229	0.0228	0.0225	0.0235	0.0244	0.0234
	\$/pound	M	0.0800	0.0789	0.0776	0.0780	0.0780	0.0779	0.0778	0.0784	0.0790	0.0784
Other Solids	\$/pound	Baseline	0.0600	0.0600	0.0600	0.0700	0.0800	0.0900	0.1000	0.1200	0.1200	0.0800
	\$/pound	K	0.0438	0.0422	0.0418	0.0416	0.0415	0.0418	0.0418	0.0418	0.0422	0.0420
	\$/pound	L	0.0002	0.0008	0.0011	0.0014	0.0015	0.0015	0.0014	0.0015	0.0014	0.0012
	\$/pound	M	0.0452	0.0448	0.0449	0.0450	0.0451	0.0452	0.0452	0.0452	0.0454	0.0451

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Table B-7 continued. Federal Order Component Prices and Pricing Factors

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Class I Skim	\$/cwt	Baseline	11.06	11.10	10.38	10.35	10.41	10.35	10.24	10.68	10.54	10.57
	\$/cwt	K	0.57	0.48	0.41	0.37	0.34	0.32	0.31	0.30	0.28	0.38
	\$/cwt	L	-2.32	-2.31	-1.71	-1.59	-1.50	-1.38	-1.26	-1.46	-1.28	-1.65
	\$/cwt	M	-2.07	-2.09	-1.51	-1.40	-1.32	-1.20	-1.09	-1.29	-1.11	-1.45
Class II Skim	\$/cwt	Baseline	7.25	6.98	6.71	6.77	6.74	6.72	6.69	6.78	6.88	6.84
	\$/cwt	K	0.68	0.68	0.68	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	\$/cwt	L	0.23	0.21	0.20	0.21	0.21	0.20	0.20	0.21	0.22	0.21
	\$/cwt	M	0.72	0.71	0.70	0.70	0.70	0.70	0.70	0.71	0.71	0.71
Class III Skim	\$/cwt	Baseline	8.35	8.39	7.67	7.64	7.70	7.64	7.53	7.97	7.83	7.86
	\$/cwt	K	0.57	0.48	0.41	0.37	0.34	0.32	0.31	0.30	0.28	0.38
	\$/cwt	L	-2.32	-2.31	-1.71	-1.59	-1.50	-1.38	-1.26	-1.46	-1.28	-1.65
	\$/cwt	M	-2.07	-2.09	-1.51	-1.40	-1.32	-1.20	-1.09	-1.29	-1.11	-1.45
Class IV Skim	\$/cwt	Baseline	6.55	6.28	6.01	6.07	6.04	6.02	5.99	6.08	6.18	6.14
	\$/cwt	K	0.68	0.68	0.68	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	\$/cwt	L	0.23	0.21	0.20	0.21	0.21	0.20	0.20	0.21	0.22	0.21
	\$/cwt	M	0.72	0.71	0.70	0.70	0.70	0.70	0.70	0.71	0.71	0.71

Table B-8. Federal Order Milk Prices at 3.5 Percent Butterfat

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Class I	\$/cwt.	Baseline	16.15	16.25	15.99	16.09	16.31	16.42	16.36	16.74	16.86	16.35
	\$/cwt.	K	0.37	0.25	0.17	0.13	0.10	0.09	0.07	0.06	0.06	0.15
	\$/cwt.	L	-0.07	-0.03	-0.07	-0.06	-0.06	-0.06	-0.07	-0.05	-0.07	-0.06
	\$/cwt.	M	0.15	0.11	0.05	0.04	0.02	0.00	-0.01	0.00	-0.02	0.04
Class II	\$/cwt.	Baseline	12.40	12.20	12.38	12.56	12.71	12.84	12.86	12.92	13.26	12.68
	\$/cwt.	K	0.47	0.44	0.43	0.42	0.42	0.43	0.42	0.42	0.43	0.43
	\$/cwt.	L	0.30	0.36	0.37	0.39	0.40	0.40	0.40	0.41	0.41	0.38
	\$/cwt.	M	0.64	0.69	0.70	0.70	0.71	0.71	0.71	0.71	0.71	0.72
Class III	\$/cwt.	Baseline	13.44	13.54	13.28	13.38	13.60	13.71	13.65	14.03	14.15	13.64
	\$/cwt.	K	0.37	0.25	0.17	0.13	0.10	0.09	0.07	0.06	0.06	0.15
	\$/cwt.	L	-0.07	-0.03	-0.07	-0.06	-0.06	-0.06	-0.07	-0.05	-0.07	-0.06
	\$/cwt.	M	0.15	0.11	0.05	0.04	0.02	0.00	-0.01	0.00	-0.02	0.04
Class IV	\$/cwt.	Baseline	11.70	11.50	11.68	11.86	12.01	12.14	12.16	12.22	12.56	11.98
	\$/cwt.	K	0.47	0.44	0.43	0.42	0.42	0.43	0.42	0.42	0.43	0.43
	\$/cwt.	L	0.30	0.36	0.37	0.39	0.40	0.40	0.40	0.41	0.41	0.38
	\$/cwt.	M	0.64	0.69	0.70	0.70	0.71	0.71	0.71	0.71	0.71	0.72
Uniform at 3.5% BF	\$/cwt.	Baseline	14.10	14.11	13.95	14.06	14.25	14.37	14.31	14.61	14.77	14.28
	\$/cwt.	K	0.39	0.30	0.23	0.20	0.18	0.17	0.16	0.15	0.15	0.21
	\$/cwt.	L	-0.38	-0.33	-0.22	-0.19	-0.17	-0.15	-0.13	-0.14	-0.12	-0.20
	\$/cwt.	M	-0.15	-0.15	-0.07	-0.06	-0.05	-0.03	-0.02	-0.04	-0.02	-0.07

Table B-9. Average Class Butterfat Test

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Class I	percent	Baseline	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
	percent	K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	percent	L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	percent	M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Class II	percent	Baseline	8.19	8.18	8.18	8.17	8.17	8.16	8.14	8.13	8.12	8.16
	percent	K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	percent	L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	percent	M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Class III	percent	Baseline	3.49	3.48	3.48	3.48	3.48	3.48	3.48	3.49	3.49	3.48
	percent	K	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	percent	L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	percent	M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Class IV	percent	Baseline	4.51	4.48	4.50	4.46	4.42	4.37	4.32	4.24	4.18	4.39
	percent	K	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03
	percent	L	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	percent	M	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.03

Table B-10. Federal Order Milk Prices at Test

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Class I	\$/cwt.	Baseline	14.04	14.10	13.65	13.70	13.85	13.90	13.81	14.22	14.23	13.95
	\$/cwt.	K	0.45	0.35	0.27	0.23	0.20	0.18	0.17	0.16	0.15	0.24
	\$/cwt.	L	-1.01	-0.98	-0.75	-0.70	-0.66	-0.61	-0.57	-0.63	-0.57	-0.72
	\$/cwt.	M	-0.77	-0.80	-0.60	-0.56	-0.54	-0.50	-0.46	-0.54	-0.48	-0.58
Class II	\$/cwt.	Baseline	19.30	19.19	19.96	20.30	20.65	21.00	21.04	21.03	21.68	20.46
	\$/cwt.	K	0.20	0.13	0.11	0.09	0.09	0.10	0.09	0.08	0.12	0.11
	\$/cwt.	L	0.40	0.56	0.61	0.64	0.66	0.66	0.66	0.67	0.66	0.61
	\$/cwt.	M	0.54	0.66	0.70	0.71	0.72	0.72	0.71	0.71	0.73	0.69
Class III	\$/cwt.	Baseline	13.42	13.51	13.24	13.34	13.56	13.68	13.62	14.02	14.14	13.61
	\$/cwt.	K	0.38	0.26	0.19	0.14	0.11	0.10	0.08	0.07	0.07	0.16
	\$/cwt.	L	-0.08	-0.05	-0.08	-0.07	-0.07	-0.07	-0.08	-0.05	-0.07	-0.07
	\$/cwt.	M	0.15	0.11	0.05	0.03	0.02	0.00	-0.01	0.00	-0.02	0.04
Class IV	\$/cwt.	Baseline	13.19	12.96	13.29	13.45	13.56	13.67	13.61	13.51	13.80	13.45
	\$/cwt.	K	0.39	0.34	0.31	0.30	0.30	0.32	0.32	0.32	0.35	0.33
	\$/cwt.	L	0.37	0.46	0.50	0.53	0.54	0.54	0.54	0.55	0.55	0.51
	\$/cwt.	M	0.65	0.72	0.74	0.76	0.77	0.77	0.77	0.78	0.79	0.75
Uniform	\$/cwt.	Baseline	14.41	14.42	14.29	14.41	14.61	14.73	14.69	14.98	15.16	14.63
	\$/cwt.	K	0.38	0.28	0.22	0.18	0.16	0.15	0.14	0.13	0.13	0.20
	\$/cwt.	L	-0.31	-0.25	-0.16	-0.13	-0.11	-0.10	-0.08	-0.09	-0.07	-0.15
	\$/cwt.	M	-0.08	-0.08	-0.02	-0.01	0.00	0.01	0.02	0.00	0.02	-0.02

Table B-11. Federal Order Marketings

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Class I	mil. pounds	Baseline	45,748	45,905	45,865	45,890	45,895	46,030	45,926	45,886	45,883	45,892
	mil. pounds	K	-52	-39	-30	-25	-22	-19	-18	-17	-15	-26
	mil. pounds	L	114	110	82	75	70	64	58	64	57	77
	mil. pounds	M	88	90	65	61	57	52	47	54	47	62
Class II	mil. pounds	Baseline	16,719	16,984	17,026	17,192	17,375	17,611	17,826	18,116	18,322	17,464
	mil. pounds	K	-39	-27	-24	-21	-21	-24	-23	-22	-29	-25
	mil. pounds	L	-76	-111	-125	-136	-144	-150	-154	-160	-161	-135
	mil. pounds	M	-103	-132	-144	-153	-160	-166	-168	-173	-178	-153
Class III	mil. pounds	Baseline	47,803	48,975	49,907	50,657	51,305	52,049	52,608	53,136	53,656	51,122
	mil. pounds	K	30	53	71	88	103	116	126	136	144	96
	mil. pounds	L	-7	-14	-18	-23	-28	-33	-36	-40	-44	-27
	mil. pounds	M	12	20	27	32	37	41	45	48	49	35
Class IV	mil. pounds	Baseline	14,628	14,920	15,029	15,397	15,721	16,021	15,955	16,215	16,488	15,597
	mil. pounds	K	114	164	198	215	223	228	226	220	221	201
	mil. pounds	L	-100	-154	-178	-200	-215	-225	-229	-239	-239	-198
	mil. pounds	M	-31	-54	-54	-63	-70	-74	-77	-91	-88	-67
Total	mil. pounds	Baseline	124,898	126,785	127,827	129,137	130,297	131,711	132,316	133,352	134,350	130,075
	mil. pounds	K	53	150	215	256	283	301	311	318	321	245
	mil. pounds	L	-68	-169	-239	-284	-317	-343	-360	-375	-387	-282
	mil. pounds	M	-34	-77	-106	-122	-136	-146	-153	-162	-170	-123

Table B-12. Federal Order Cash Receipts

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Class I	mil. \$	Baseline	6,421	6,474	6,262	6,286	6,358	6,398	6,344	6,525	6,530	6,400
	mil. \$	K	200	154	121	103	90	82	76	72	66	107
	mil. \$	L	-446	-435	-333	-310	-293	-273	-252	-282	-255	-320
	mil. \$	M	-342	-357	-265	-250	-239	-222	-204	-239	-212	-259
Class II	mil. \$	Baseline	3,227	3,259	3,398	3,489	3,588	3,697	3,751	3,810	3,972	3,577
	mil. \$	K	26	17	13	10	10	12	11	10	16	14
	mil. \$	L	51	73	78	82	83	84	84	87	85	79
	mil. \$	M	70	86	89	90	91	92	90	92	94	88
Class III	mil. \$	Baseline	6,416	6,618	6,609	6,756	6,959	7,121	7,164	7,448	7,588	6,964
	mil. \$	K	184	135	102	85	73	66	61	57	56	91
	mil. \$	L	-40	-24	-41	-38	-39	-43	-46	-34	-44	-39
	mil. \$	M	72	57	28	21	14	6	1	7	-3	23
Class IV	mil. \$	Baseline	1,929	1,933	1,997	2,071	2,133	2,190	2,172	2,191	2,276	2,099
	mil. \$	K	72	72	74	76	79	83	82	83	89	79
	mil. \$	L	40	49	51	54	55	55	54	56	56	52
	mil. \$	M	91	100	104	108	111	113	112	113	118	108
Total	mil. \$	Baseline	17,993	18,284	18,265	18,603	19,038	19,406	19,431	19,974	20,366	19,040
	mil. \$	K	483	379	310	274	252	242	230	222	227	291
	mil. \$	L	-394	-338	-245	-212	-193	-177	-160	-174	-158	-228
	mil. \$	M	-109	-113	-43	-31	-24	-11	-1	-27	-4	-40

Table B-13. U.S. Class Use ¹

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Class I	mil. pounds	Baseline	55,519	55,710	55,662	55,692	55,698	55,862	55,735	55,687	55,684	55,694
	mil. pounds	K	-63	-48	-37	-31	-27	-24	-22	-20	-18	-32
	mil. pounds	L	139	133	100	91	85	78	71	78	69	94
	mil. pounds	M	106	109	79	74	69	63	57	66	58	76
Class II	mil. pounds	Baseline	19,555	19,865	19,913	20,108	20,322	20,597	20,849	21,188	21,430	20,425
	mil. pounds	K	-45	-32	-28	-24	-25	-28	-27	-25	-34	-30
	mil. pounds	L	-88	-129	-146	-160	-169	-175	-180	-187	-189	-158
	mil. pounds	M	-121	-155	-169	-179	-187	-194	-197	-202	-209	-179
Class III	mil. pounds	Baseline	87,072	89,208	90,906	92,271	93,452	94,808	95,826	96,786	97,735	93,118
	mil. pounds	K	54	96	129	160	187	211	230	248	263	175
	mil. pounds	L	-12	-25	-32	-43	-52	-59	-65	-73	-81	-49
	mil. pounds	M	22	36	49	59	68	75	82	87	89	63
Class IV	mil. pounds	Baseline	21,355	21,782	21,940	22,477	22,951	23,389	23,292	23,671	24,070	22,770
	mil. pounds	K	167	240	290	314	325	333	330	321	322	293
	mil. pounds	L	-146	-225	-260	-292	-314	-328	-335	-349	-349	-289
	mil. pounds	M	-45	-79	-79	-91	-102	-108	-113	-132	-129	-98
Total Class Use	mil. pounds	Baseline	183,501	186,565	188,421	190,549	192,423	194,655	195,703	197,332	198,918	192,007
	mil. pounds	K	112	256	354	418	461	492	511	524	533	407
	mil. pounds	L	-108	-246	-339	-402	-449	-484	-508	-531	-549	-402
	mil. pounds	M	-37	-89	-119	-138	-152	-163	-170	-182	-191	-138

¹ U.S. Class Use differs from U.S. Marketings due to the presence of imported dairy ingredients.

Table B-14. Domestic Commercial Disappearance

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
American Cheese	mil. pounds	Baseline	3,897	3,998	4,062	4,119	4,178	4,243	4,291	4,352	4,400	4,171
	mil. pounds	K	7	11	13	14	15	16	16	17	17	14
	mil. pounds	L	0	-2	-2	-3	-3	-4	-4	-4	-4	-3
	mil. pounds	M	4	5	6	6	6	6	6	7	7	6
Other Cheese	mil. pounds	Baseline	5,830	5,969	6,084	6,188	6,275	6,388	6,472	6,562	6,654	6,269
	mil. pounds	K	6	11	15	18	20	22	24	25	26	18
	mil. pounds	L	0	-2	-3	-4	-4	-5	-6	-6	-7	-4
	mil. pounds	M	3	5	7	8	8	9	9	10	10	8
Butter	mil. pounds	Baseline	1,364	1,379	1,399	1,423	1,441	1,457	1,442	1,438	1,449	1,421
	mil. pounds	K	3	4	5	5	5	5	5	5	5	5
	mil. pounds	L	0	0	-1	-1	-1	-1	-1	-1	-1	-1
	mil. pounds	M	2	2	2	2	2	2	2	2	2	2
Nonfat dry milk	mil. pounds	Baseline	995	1,049	1,106	1,193	1,227	1,267	1,286	1,389	1,507	1,225
	mil. pounds	K	3	2	2	2	2	2	2	3	4	3
	mil. pounds	L	-3	-2	-2	-2	-3	-3	-2	-3	-4	-3
	mil. pounds	M	-1	-1	-1	-1	-1	-1	-1	-1	-2	-1
Dry whey	mil. pounds	Baseline	921	909	894	876	853	829	802	774	749	845
	mil. pounds	K	2	4	6	8	9	10	11	11	12	8
	mil. pounds	L	0	0	-1	-1	-2	-2	-2	-3	-3	-2
	mil. pounds	M	1	2	3	3	4	4	4	5	5	3

Table B-15. Milk Income Loss Contract (MILC) Payments and Net Government Removals of Nonfat Dry Milk Through the Milk Price Support Program (MPSP)

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Class I Price at Boston (3.5 percent butterfat)	\$/cwt.	Baseline	16.15									
	\$/cwt.	K	0.37									
	\$/cwt.	L	-0.07									
	\$/cwt.	M	0.15									
MILC Payments	mil. \$	Baseline	214									
	mil. \$	K	-69									
	mil. \$	L	10									
	mil. \$	M	-20									
NDM Net	mil. pounds	Baseline	145	147	310	366	370	365	326	291	214	282
Govt. Removals ¹	mil. pounds	K	0	11	19	21	22	23	22	20	18	17
	mil. pounds	L	0	-11	-17	-19	-22	-23	-23	-22	-19	-17
	mil. pounds	M	0	-4	-6	-6	-7	-8	-8	-9	-7	-6
MPSP Outlays ²	mil. \$	K	0	9	15	16	18	18	18	16	14	14
	mil. \$	L	0	-8	-14	-15	-17	-18	-18	-17	-15	-14
	mil. \$	M	0	-3	-4	-5	-6	-6	-6	-7	-6	-5
Total Govt. Outlays	mil. \$	K	-69	9	15	16	18	18	18	16	14	6
	mil. \$	L	10	-8	-14	-15	-17	-18	-18	-17	-15	-13
	mil. \$	M	-20	-3	-4	-5	-6	-6	-6	-7	-6	-7

¹ Net government removals equals support price purchases plus Dairy Export Incentive Program (DEIP) removals minus unrestricted sales. To be consistent with the USDA baseline, there is no change to NDM removals for 2007 because the DEIP is assumed to be fully funded.

² MPSP outlays are not projected in the model. The change is computed by multiplying NDM net removal quantities by the NDM support price of \$0.80. No attempt is made to estimate changes in storage, handling, transportation, processing, and packaging.