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Testimony of Dr. Roger Cryan, National Milk Producers Federation
In support of Proposals 1 through 5:
Update and Simplify Class I and II milk price formulas.
Federal Order Hearing, Week of December 11, 2006
Docket No. AO-14-A76, et al.

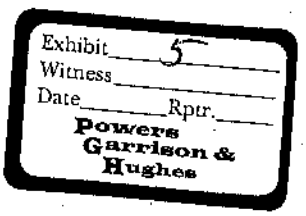
Introduction

My name is Roger Cryan. I have been Director of Economic Research for the National Milk Producers Federation (NMPF) for six years. For four years before that, I was the economist in the Atlanta Milk Market Administrator's office. I have my M.S. and Ph.D. in agricultural economics from the University of Florida. I currently serve as a Secretarial appointee to USDA's Advisory Committee on Agricultural Statistics.

Today I speak on behalf of the National Milk Producers Federation. NMPF is the voice of America's dairy farmers, representing three-quarters of America's 64,000 commercial dairy farmers through their membership in NMPF's 33 constituent cooperative associations. (A table, showing NMPF's members among the top 50 U.S. dairy cooperatives, is attached.)

NMPF developed Proposals 1 through 5 (published in the notice of this hearing) and now urges their adoption. These proposals are thoroughly consistent with the logic and principles of Federal order precedent, including the Federal order reform final decision. In summary, these proposals (as numbered by Dairy Programs staff) would:

1. **Add 77¢ per hundredweight to the Class I milk price by updating the cost-based elements of the national minimum Class I milk price.**
2. **Simplify the calculation of the cheese-based skim milk price used in setting the Class I skim milk price.**
3. **Simplify the calculation of the butter-and-powder-based skim milk price calculation used in setting the Class I skim milk price.**
4. **Simplify the calculation of the Class II skim milk price by removing two redundant and offsetting expressions of the nonfat dry milk make allowance.**
5. **Calculate the Class II butterfat price similarly to the minimum Class I butterfat price.**



Federal order language to effect these changes is attached to my statement.

NMPF's proposed amendments would maintain a direct relationship between dairy product prices and Class I and II prices; they would reestablish the appropriate relationship between the Class I and II prices and the Class III and IV prices, through those dairy product prices; they would complete the update of all cost considerations that define the current formulas, including both manufacturers' make allowances and fluid milk supply costs; and they may impel future amendments of the Class I and II price formulas to be based on full consideration of these costs. These proposals are all founded on well-established Federal order principles.

Regarding the Bases for Emergency Consideration.

The National Milk Producers Federation (NMPF) appreciates the timeliness of this hearing, and urges the Secretary to implement the noticed proposals on an emergency basis without a recommended decision.

The tentative final decision, recently issued under a previous docket (Docket No. AO-14-A74, et al.), addressed outdated manufacturing costs for certain Class III and IV uses, but applied these changes to all four classes. This increase of make allowances will reduce producer prices for all four classes of milk. This change was proposed to remedy an emergency situation faced by manufacturers of cheddar cheese, dry whey, butter, and nonfat dry milk.[1] However, based on current language and the defined scope of that

[1] As demonstrated by the hearing record in Docket No. AO-14-A74, the manufacturers of the four benchmark products (cheddar cheese, dry whey, nonfat dry milk, and butter) face higher costs than those upon which the current make allowances are based. At the same time, the margin between their average price and their minimum raw milk price are constrained by those make allowances. NMPF supported the proposed changes to the Class III and Class IV make allowances in that proceeding, but argued that Class I and Class II pricing should be held harmless from any changes, pending a full consideration of those prices.

proceeding, any changes to Class III and Class IV make allowances will also unnecessarily result in lower Class I and Class II prices and lower income for producers. This does not provide economic relief for dairy product processors, and it does not consider offsetting increases in the fluid milk supply costs originally incorporated into the Class I and II milk price formulas. Unless adjustments are made to the Federal order Class I and Class II prices, dairy producers will be faced with unnecessary and unjustified economic hardships.

1. The Tentative Final Decision will Impose an Undue Hardship upon Producers.

NMPF asserts that the same factors that have increased dairy product manufacturers' costs have also raised the costs to producers and cooperative associations of supplying Class I and II milk. The potential reduction of Class I and II milk prices under Docket No. AO-14-A74 does not give proper consideration to these costs. By Federal order precedent, discussed below, these costs should be acknowledged and Class I and II prices raised accordingly. It is important to state that NMPF's current proposal stands alone on its own merits. However, the incomplete results of the recent make allowance hearing (Docket No. AO-14-A74, et al.) would unduly deny producers well-justified offsetting compensation in the Class I and II price formulas. Our proposal does not depend, in principle, upon the results of the make allowance hearing. However, after giving full and expedited consideration to costs whose update will reduce farmer prices, it would be inequitable for the department to delay equal consideration of costs whose update would partially offset those reductions.

Unfortunately, both the "hold harmless" approach and the fuller consideration of Class I and II pricing were excluded from the scope of the hearing.

Fifty-two percent of milk pooled in the Federal orders in 2005 was Class I and II milk.[2] U.S. dairy producers are now experiencing an extended period of below average milk prices, high production costs, and exceptionally low farm returns. Unnecessarily large reductions in Class I and II revenues will further stress farm income and, undoubtedly will be disastrous for many producers.

USDA's economic analysis of the tentative final decision estimated that producer losses from lower Class I and II revenues would total nearly $500 million over nine years. This is 43% of the negative producer revenue impact of this change. In the first year alone, Class I and II revenues are down $93 million, according USDA.[3]

An expedited hearing and decision are necessary to provide a more complete consideration of the Class I and II price formulas. NMPF expects this fuller consideration will produce offsetting compensation in these formulas, and thereby avoid unnecessary and excessive reductions in producer income.

2. The Inadequacy of Current Class I and II Pricing Contributes to Disorderly Marketing in Federal Order Markets.

The Class I and II price formulas were defined during order reform, based on specific cost considerations, which are discussed in more detail below. These have not been updated since the proposed rule was issued in 1998 despite substantial changes in these costs. As a result, the Class I and II prices are inadequate to ensure orderly marketing, as evidenced by several conditions.

The growing difficulty of supplying local and regional deficit markets threatens orderly marketing in the Southeast and the Northeast, in particular. Current revenues are

[2] USDA/AMS *Dairy Market News*, February 10, 2006, p. 9.
[3] Found at "http://www.ams.usda.gov/dairy/proposals/econ_anal_tent_final_dec_2006-11-20.pdf"

often inadequate to maintain efficient local supplies of fluid milk. Additional Class I revenue will compensate producers and help maintain production for the future.

The costs of transportation are rising in all markets. The longer hauls allow processors to achieve savings through the operation of larger plants; but the higher hauling rates and longer hauls that allow these plant savings are imposed upon producers and their cooperatives. Class I over-order premiums in milk surplus regions have risen substantially, the result of inadequate uniform prices to compensate producers and cooperatives for the costs of participating in the Federal order pool.

There has also been a great increase in "de-pooling" in recent years, also associated with inadequate Class I and II pool revenue. This is discussed, and accompanying data presented, later in this testimony; but it fully applies to the need for an expedited decision, omitting a recommended decision.

An expedited decision can address these conditions of disorderly marketing.

Comment on Make Allowances, as Considered in this Proposal.

Before outlining our specific proposals, I'd like to comment on the parameters of our proposed price formulas. NMPF's original petition described a status quo based on the make allowances now in effect. We applied our proposed changes to these specific formulas in order to make clear how these changes would work.

On November 22, a tentative final decision was published in the Federal Register that proposed to adopt revised make allowances for Class III and IV product price formulas. (71 FR 67467, et seq.) We anticipate that these revised make allowances will be adopted in every Federal milk marketing order that continues to operate through 2007.

Therefore, and in order to present our proposals as we expect them to be applied, we have recalculated each Class I and II price formula, based upon these new make allowances. To these recalculated formulas, we have applied our proposals.

Again, these proposals do not depend upon the make allowances in principle; but the clearest way to demonstrate our proposals is to show their effect in connection with the new make allowances.

NMPF Proposes New Class I and II Formulas.

We propose simplified and updated Class I and II formulas based directly upon dairy product prices. If these formulas were applied, Class I and Class II prices would move in concert with the Class III and IV prices, as they do now, but in a form that maintains a proper consideration for the fluid supply costs borne by producers and handlers. NMPF's proposed Class I and II formulas would better describe the appropriate relationship among class prices and dairy product prices, consistent with Federal order precedent and principles.

The last time the relationship between Class I and II and Classes III and IV was fully considered was at the time of order reform, in 1996 through 1999. At that time, several specific costs of supplying Class I milk were applied to the establishment of the Class I price formula.

The May 2000 hearing considered updates to the Class III and IV price formulas only. The January 2006 national hearing considered the changes in Class III and IV manufacturing costs. The resulting tentative final decision, issued last month, applied these changes directly to the Class I and II price calculations. It did not, however,

consider changes in the costs borne by producers and handlers of maintaining Grade A milk supplies for Class I and II use and the competitive pressures that must be addressed to achieve orderly marketing through the Federal orders. Suppliers of Class I and II milk face additional costs which vary, sometimes exactly, with Class III and IV manufacturing costs; but while costs are subtracted in Class III and IV formulas, they are added in Class I and II. A full consideration of these Class I and II costs is a necessary and analogous complement to the make allowance changes recently issued.

1. Class I Skim Milk Formula

Expressed in its simplest form and applying the November 22 make allowance decision, the Class I skim milk mover formula is equal, per hundredweight, to the higher of:

Nonfat dry milk price x 8.9 - $1.40

or

Cheese price x 10.0 + Dry whey price x 6.1 – Butter price x 3.9 – $2.40.

The butter-powder-based calculation incorporates the yield of nonfat dry milk per hundredweight of skim milk, minus an aggregate make allowance ($1.40/cwt.). The cheese-based calculation incorporates yields for cheese, whey, and whey butter, minus a skim milk-equivalent make allowance ($2.40/cwt.).[4][5]

NMPF proposes the following replacement for the Class I skim milk price mover, equal to the higher of:

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[4] The make allowances in the current Class III calculation are only indirectly meaningful with respect to skim milk alone. However, for milk with a 3.16% butterfat test, the butterfat elements of the Class III formula cancel each other out, and only cheese and whey values remain.

[5] Derivations of these simplified formulas are attached to this statement.

NDM price x 8.9 – .63

or

Cheese price x 10.0 + Dry whey price x 6.1 – Butter price x 3.9 - $1.63

NMPF's proposed formula incorporates the same commodity values and yield factors as the current Class I formula (including all Class III and IV make allowances and yield factors), minus a Class I adjuster which combines product conversion costs and corresponding changes (77¢) in the estimated per hundredweight costs of supplying Class I milk. That is, it is the current formula, simplified, plus 77¢.

At the time of order reform, certain costs of supplying Class I milk were explicitly incorporated into the minimum Class I differential. NMPF does not propose to change the Class I differentials at this time, but maintains that any change in these Class I supply costs can be applied just as effectively to the Class I skim milk and butterfat movers. These Class I supply costs were built into the Class I differential during order reform only because the Class I mover directly incorporated the Class III and IV formulas by reference. Especially if the Class I mover is simplified according to the formula NMPF proposes, it is equally appropriate to apply adjustments in any fixed element of the Class I price to the mover calculation.

The Class I skim milk price and Class II price are currently calculated using the Class III and IV price formulas by reference, adding differentials that are designed to reflect their relationship to Class III and IV values.[6] These differentials are designed to compensate not processors, but rather the suppliers of Class I and II raw milk. In the Proposed Rule for Order Reform, USDA set the minimum Class I differential at $1.60

[6] *See* 7 CFR 1000.50.

per hundredweight, based upon several enumerated costs, beginning with the costs of maintaining Grade A standards.

> There are several requirements for producers to meet to convert to a Grade A dairy farm and then maintain it. A Grade A farm requires an approved water system (typically one of the greatest conversion expenses), specific facility construction and plumbing requirements, certain specifications on the appearance of the facilities, and specific equipment. After achieving Grade A status, producers must maintain the required equipment and facilities, and adhere to certain management practices.[7] Often, this will require additional labor, resource, and utility expenses. It has been estimated that this value may be worth approximately $0.40 per hundredweight. [8]

Grade A standards have only become more exacting in the meantime through a state-Federal process of review and revision culminating at the bi-annual National Interstate Milk Shippers conference.[9,10]

Of course, the "labor, resource, and utility expenses" of dairy farmers, cited above, rise along with those of milk processors. Non-feed costs in the production of milk, which closely correlate with "labor, resource, and utility expenses" plus the cited infrastructure costs, have risen by 38% between 1998 and 2005, according to USDA estimates. (Our initial proposal, which was based upon data through 2004, has been updated to reflect the new availability of date through 2005.) Based on the above, and applying the same 38% increase to the 40¢ cost of maintaining Grade A supplies, NMPF conservatively estimates the present costs of maintaining Grade A standards at 51¢ per hundredweight, an increase of 15¢ from the status quo.[11]

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[7] Management expenses include costs of hot water and steam for sanitation, additional bedding material, more frequent cleaning, and purchase of additional supplies and services necessary to maintain Grade A status. All these costs rise as processors' costs do.
[8] 63 FR 4908.
[9] *Grade "A" Pasteurized Milk Ordinance*, Food and Drug Administration. 1995 and 2005 Revisions.
[10] *Milk for Manufacturing Purposes and it Production and Processing: Recommended Requirements.* USDA/AMS/Dairy Programs. These are standards for milk used to make USDA graded dairy products; these standards are not necessarily enforced for Grade B milk used to produce non-graded dairy products.
[11] USDA/Economic Research Service. Milk Cost of Production data updated through 2005. Found December 7, 2006 at http://www.ers.usda.gov/data/CostsandReturns/testpick.htm

USDA's order reform decision also stated:

> Traditionally, the additional portion of the Class I differential reflects the marketing costs incurred in supplying the Class I market. These marketing costs include such things as seasonal and daily reserve balancing of milk supplies, transportation to more distant processing plants, shrinkage, administrative costs, and opportunity or 'give-up' charges at manufacturing milk plants that service the fluid Class I markets. This value has typically represented approximately $0.60 per hundredweight. [12]

Table 1. U.S. Milk Production Costs per cwt, 1993-2005

	Feed	Non-Feed	Total
1993	7.02	8.76	15.78
1994	7.17	9.32	16.49
1995	6.66	9.99	16.65
1996	7.53	9.60	17.13
1997	8.40	9.97	18.37
1998	7.51	9.74	17.25
1999	6.83	9.70	16.53
2000	6.49	11.53	18.02
2001	6.75	11.75	18.50
2002	7.01	11.86	18.87
2003	7.18	12.04	19.22
2004	7.47	12.36	19.83
2005	7.86	13.44	21.30

Source: USDA/ERS

Most of these are the same costs associated with operation of plants producing such products as cheese, dry whey, butter, and nonfat dry milk powder. The operators of cooperative supply plants often sacrifice plant profitability of their manufacturing operations in order to provide Class I and II milk supplies. The costs of this supply rise as energy costs and per-pound processing costs rise, and these costs should be offset in the Class I price. Shipping milk from distant sources imposes an even larger cost of balancing Class I markets; transportation costs also rise with higher energy prices, as has been acknowledged in a recent tentative partial decision on the transportation credits in the Southeast and Appalachian markets.[13] The manufacturing costs estimated from the recent surveys tend to reflect costs of plants running near full capacity; processing costs of balancing plants are higher, and should be reflected in the Class I price. In addition, some part of the costs of plant operation are associated with maintaining certification to supply milk to Grade A fluid milk plants, costs that are required of a plant before it may be pooled in the Federal order system. Very conservatively, the same percentage increase in the costs of butter and powder

[12] 63 FR 4908.

[13] *See* 71 FR 54118, et seq. Marketwide balancing assessments and credits may be ultimately be necessary to fully compensate balancing plants, as opposed to full-capacity manufacturers.

manufacture (the primary form of market balancing through manufacturing) that is applied to Class III and IV make allowances should also be applied to the 60¢ supply cost. The data presented at the January hearing suggested a 22% increase the costs of converting milk into butter and powder.[14] (This calculation is attached to my statement.) A 22% increase in the 60¢ handler fluid supply costs applied in the order reform decision would be 13¢ per hundredweight.

In addition, shifts in milk production and manufacturing consolidation have lead to longer hauls to Class I plants. Studies by the Minneapolis Market Administrator, and his Chicago predecessor concluded that the weighted average hauling charge in the Upper Midwest market in May 1998 was 17.6¢ per cwt. and the weighted average hauling charge in the Chicago Regional market in May 1999 (the first year for which data was compiled for this market) was 11.1¢ per cwt. The first data for the consolidated Upper Midwest market is for May 2001, when the average hauling rate was 17.1¢. By May 2006, the average weighted average for the consolidated Upper Midwest market was 23.5¢, 6½¢ higher than the 5 years earlier, and 6¢ and 12¢ higher than the figures for the predecessor markets.[15] Studies by the Seattle Market Administrator showed average hauling rates rising from 43.3¢ per cwt. in 2000 to 51.7¢ in 2005. [16] Based upon these studies, and the record in the ongoing transportation credit proceeding, we conservatively estimate an additional 10¢ per hundredweight increase in average Class I assembly costs,

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[14] This is based on a comparison of the 1998 butter-powder manufacturing costs determined by USDA as appropriate to the establishment of the current make allowances (65 FR 76832, et seq.), and an application of the same method of aggregating to comparable data for 2004, as presented in Exhibit 58 at the January 2006 make allowance hearing (Docket No. AO-14-A74, et al.)

[15] "Milk Hauling Charges in the Upper Midwest Marketing Area", Staff Paper 06-05, December 2006, and predecessor papers.

[16] "Analysis of Hauling Charges and Producer by Location and Size-Range of Production, Pacific Northwest Order, May 2005", Staff Paper 05-03, November 2005, and predecessor papers.

for a total increase of 23¢ in this component of the original $1.60 Class I cost. I again emphasize that this is a conservative estimate.

The last element of the minimum Class I price, per the proposed rule, was the "additional competitive factor", estimated at 60¢ per hundredweight based upon two price comparisons. The proposed rule reported that Grade A milk received an average premium above Class III in 1995 and 1996 of 86¢ in Minnesota and 89¢ in Wisconsin.[17] In 2004 and 2005, these average premiums were up to $1.33 in Minnesota and $1.53 in Wisconsin.[18] In addition, the proposed rule considered the substantial over-order premiums paid for Class I milk in Chicago, Milwaukee, and Minneapolis in 1996, ranging from $1.19 to $1.79. By 2005, these over-order premiums were now $2.10 in Minneapolis and $2.72 in Chicago and Milwaukee. These growing premiums are indication of the inadequacy of the current minimum Class I prices to draw milk to the pool to meet Class I needs, and of their failure to meet the objectives of the Act. In both cases, the competitive costs associated with Class I milk have risen by an average of about 65%. Applying this percentage increase to the 60¢ "competitive factor" incorporated at order reform would produce a 39¢ increase in the minimum Class I price.

Altogether, these considerations conservatively justify at least a 77¢ increase in the Class I skim milk price mover. I emphasize that these are conservative estimates. One could easily argue that the full increase in average fluid premiums over manufacturing grade milk, or even in average over-order Class I premiums should be applied to the Class I price. Our proposal is a modest one, aimed at striking a balance in the market.

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[17] 63 FR 4908-4909.
[18] USDA/NASS data, available at www.nass.usda.gov.

Certainly, no-one can believe that Class I supply costs are unchanged in 10 years, and that they should never be updated in the Class I price formula. It only follows from the updates in the Class III and IV make allowances – including the application of these updates to the Class I and II prices – that other cost-based elements of these price should be updated, as well. These Class I and II supply costs (hauling, assembly, Grade A standards, etc.) are primarily borne by producers, directly or through the cooperatives that they own. To delay that update would be to deny fair and offsetting compensation to producers, cooperatives, and other participants in the Federal order system.

2. Class I Butterfat Formula

In its current and simplest form, the current Class I butterfat price mover, adjusted for the newly announced make allowances, is calculated as:

(Butter price x 1.2) - $0.1442

This incorporates the butter yield (1.2 lbs. butter per lb. of butterfat) minus the make allowance ($0.1442/lb. bf).

NMPF proposes the following replacement:

(Butter price x 1.2) – $0.1365

This corresponds exactly to our proposal for Class I skim milk, adding the same 77¢ per hundredweight, or 0.77¢ per pound, estimated increase in fluid supply costs. Again, this is a conservative estimate, and we propose only this modest adjustment, although experience in California's state program has shown the feasibility of a substantially larger premium on Class 1 butterfat, vis-à-vis manufacturing classes.

3. Class II Skim Milk Formula

In its simplest form[19], the current Class II Skim Price is calculated as:

(Nonfat dry milk price x 8.9) - $1.40 + $0.70

= (Nonfat dry milk price x 8.9) - $0.70

This contains the nonfat dry milk yield (8.9 lbs./cwt.) and the 70¢ Class II differential minus make allowance ($1.40/cwt.)

NMPF proposes the following direct replacement for the Class II skim milk price:

(Nonfat dry milk price x 8.9) – $0.53

NMPF's proposed formula is equal to the full value of nonfat dry milk (NFDM) derived from a hundredweight of skim milk, minus condensing costs, plus the cost of rehydrating powder, and is similar to the current calculation, except that it avoids offsetting duplication of the cost of drying condensed skim milk in the formula.

In the Order Reform Proposed Rule and in the Final Decision, the calculation of the Class II price was based on the Class IV calculation, plus 70¢.[20] "The $0.70 differential represents the cost of converting concentrated milk to dry solids, plus rehydration."[21] "Only a small portion of the $0.70 is intended to represent the cost of rehydration. The majority of the $0.70, $0.57, represents the cost to dry condensed milk.... It should be noted that the cost to purchase or manufacture NFDM for use in Class II products would include not only the cost of milk at the Class IV price, but the cost of making NFDM."[22] This can be expressed mathematically as follows:

Class II skim milk price = Class IV skim milk price + 70¢

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[19] The derivation of this simplified form is attached to my statement.
[20] 63 FR 4882, 64 FR 16104.
[21] 64 FR 16104.
[22] 64 FR 16104. This indicates a rehydration cost of 13¢ per hundredweight.

= Class IV skim milk price + drying cost + rehydration cost

Recognizing that the Class IV skim milk price is equal to the powder value of skim minus the cost of condensing and dry milk, this is equal to:

= powder value – condensing cost - drying cost + drying cost + rehydration cost

Or,

Class II skim = powder value – condensing cost + rehydration cost

Adding condensing costs to both sides describes the heart of the matter, that Class II condensed skim must not be priced any higher than powder plus the cost of rehydrating:

Class II skim + condensing = powder value + rehydration cost

This is noted in the final decision:

> Generally, the source of inputs alternative to product milk for the manufacture of Class II products is dry milk products and butterfat that otherwise would be used in butter. Basing the price of milk used to make Class II products on these alternative ingredients should help considerably to remedy a situation in which it is perceived that a separate product class for dry milk (Class III-A) has resulted in a competitive advantage over producer milk used to produce Class II products. [23]

In other words, the relationship between the nonfat dry milk price and the Class II price is the objective of the 70¢ Class II differential. This relationship depends upon make allowances established at that time; it is therefore out of date and inconsistent with any update to the manufacturing make allowance. It is now appropriate to establish a direct relationship between the Class II skim milk price and the nonfat dry milk price, with only a negative allowance for condensing and a positive allowance for re-wetting. NMPF's proposal follows the same logic as the current Class II skim milk price formula, but simplifies it by canceling redundant elements.

Class II skim = powder value – condensing cost + rehydration cost

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[23] 64 FR 16104.

= (Nonfat dry milk price x 8.9) – $0.62 + $0.09

= (Nonfat dry milk price x 8.9) – $0.53

This is exactly the relationship intended at the time of order reform. This simplification makes it easier to understand, and less dependent upon regular corrections. Much Class II skim milk is sold as skim condensed milk, which competes with nonfat dry milk as an ingredient. Substitution between Class II skim condensed and nonfat dry milk can help balance markets, but the margin should be such that otherwise uneconomic permanent year-round substitution of nonfat dry milk is not made for skim condensed. Therefore, this formula is equal to the value of an equivalent volume of nonfat dry milk, minus a condensing cost, plus the cost of rehydrating powder.

I conducted a panel survey of dairy processors. This panel estimated direct costs of condensing skim milk at between 6¢ and 7½¢ per pound of solids, a bit higher than the conventional range of 6¢ to 7¢ range due to the current high energy prices. They estimated the cost of rehydration at 1¢ to 1½¢ per pound of solids. Conservatively applying the 7½¢ for condensing minus 1½¢ for rehydration gives a deduction of 53½¢ per cwt. of skim milk, nearly identical to the relationship defined at the time of order reform.

This is also consistent with the panel's consensus that the current relationship between powder price and Class II skim prices maintains a good balance, and that the current (pre-make allowance hearing) gap should be neither raised or lowered.

NMPF's proposed formula maintains this current effective balance between the use of Class II skim condensed milk and its occasional appropriate substitution with nonfat dry milk, based upon sound Federal order principles.

4. Class II Butterfat Formula

In its simplest form, the current Class II butterfat price is calculated as:

(Butter price x 1.2) - $0.1442 + $0.007

= (Butter price x 1.2) - $0.1372

This incorporates the butter yield (1.2 lbs./lb. of bf) minus the make allowance ($0.1442/lb. bf), plus the Class II differential ($0.007/lb. bf).

NMPF proposes the following replacement:

(Butter price x 1.2) – $0.1215

This is equivalent to the proposed Class I butterfat mover, plus the minimum Class I differential of 1.6¢/lb. ($1.60 per cwt.) That is, it sets the Class II butterfat price equal to the minimum Class I butterfat price, without applying any location differential, so that this is a price that is uniform across the country.

The average 2005 butterfat tests for Class I use and Class II use were 1.97% and 7.42%, respectively. Combined, however, their average butterfat test was 3.34%, close to the Federal order standard of 3.5%. Class I and II supplies are complementary, with much Class II butterfat use coming from the surplus butterfat at Class I bottling plants. In the 1994 Class II pricing decision that helped define current Federal order principles regarding Class II pricing, USDA concluded that "This decision makes a clear break from the past in that Class II milk pricing will function in a manner consistent with Class I pricing largely in recognition of the similarity of the distribution and marketing channels shared by milk used in both classes."[24] That is, Class II milk pricing should and would

[24] 59 FR 64524, et seq. (This December 14, 1994, Federal Register item is found online, but the pages are not numbered. See http://www.gpoaccess.gov/fr/index.html)

approximate Class I pricing, except for the potential substitution of nonfat dry milk powder in Class II uses.

Class II butterfat, however, is not constrained by competition with a manufactured substitute. Class IV and Class III butterfat can be used to produce butter, butteroil, plastic cream, and anhydrous milkfat. Under normal conditions, these are not viable economic substitutes for cream in Class II applications.

The clearest evidence of this can be found in the market's reaction to the California price and pooling system. Together, California Classes 2 and 3 contain the same uses as Class II in the Federal order system. The California Class 2 and 3 butterfat price formulas are 3.7¢ to 3.93¢ higher than the butterfat formula for California Class 4A (equivalent to Federal order Class IV). NMPF's proposal would set the Class II butterfat formula only 2.27¢ above Class IV butterfat formula. If substantial substitution of butter, butteroil, or anhydrous milkfat for cream has not occurred in California, where the gap is nearly 4¢, there is no reason to expect such substitution in the Federal order system when the gap is just over 2¢. In other words, if substitution of butter, butteroil, plastic cream, or anhydrous milkfat for Class II cream were economical at a 2.27¢ Class II butterfat premium, they would be economical at 3.93¢; since they are not economical substitutes at 3.93¢, they are not at 2.27¢.[25] As such it should be set equivalent to the minimum Class I butterfat price, excluding only the location component of the overall Class I butterfat price.

Class II skim needs can be balanced using nonfat dry milk. Since manufactured butterfat products are not economical tools for balancing Class II butterfat needs, they

[25] The California milk price formulas were on the website of the California Department of Food and Agriculture, as of December 7, 2006, at http://dairy.ca.gov/pdf/Steps_for_calc_minprices.pdf

must, instead, be supplied in the same way as Class I milk: through the participation of producers and their cooperatives to maintain pooled reserve surpluses. The reasonable conclusion, based on the 1994 decision and the lack of economic substitutability between Class II cream and manufactured butterfat products is that Class II butterfat should be priced at a price approaching the Class I butterfat price.

However, because some Class II products trade on a national market, the Class II butterfat price should uniform across the country, and set equal to the minimum Class I butterfat price. This will avoid creating regional disparities among the manufacturers of such products.

Economic Impacts.

According to a static analysis of our proposed changes, the Class I price would be increased by 77¢, the Class II skim milk price would be increased by 17¢, and the Class II butterfat price would be increased by 1.57¢. This would result in positive impacts on the blend price in all markets.

According to USDA's analysis, published in connection with the notice of this hearing and based upon our original calculation of slightly smaller increases in Class I and II price formulas, takes into account the response of supply and demand to these changes. This projects a positive impact on producer revenue averaging nearly $200 million over the first two years, and averaging nearly $150 million over 9 years. Based on USDA's projected Class price impacts, the blend price would be increased in all markets for at least the first two years.

However, econometric models necessarily depend upon past data to project the future, and they assume that the underlying market structure does not change. USDA's econometric model is based on data for the past ten years, and appears to be a very effective representation of the past ten years. However, I believe that the US dairy market is becoming, and will continue to become, more tied to world markets. Because the world market is larger than the U.S. market alone, that means that changes like the NMPF proposals will have a smaller impact on U.S. cheese, butter, and powder prices. For this reason, I believe that the positive impacts of this proposal will be larger than USDA projects. I also believe that they will be positive in all Federal order markets indefinitely.

Proposed Class I and II Formulas Better Meet the Objectives of the Act.

NMPF proposes that the Secretary establish new Class I and II milk price formulas. These would better meet the object of the Agricultural Marketing Agreement Act in several ways.

1. Class I and Class II are not Constrained by, and so are Only Incidentally Related to, Make Allowances for Class III and IV milk.

The manufacturers of cheddar cheese, dry whey, butter, and nonfat dry milk who receive Federal order milk are collectively constrained by the orders to operate within a margin between the average product prices that they must report to the National Agricultural Statistics Service, and the Federal order minimum prices for Class III and IV milk. The make allowance hearing was about establishing a margin wide enough to provide a reasonable opportunity to cover costs.

By contrast, the processors of Class I and Class II products are able to pass on increased costs to the market. Higher Class I and II product prices do not raise the minimum Class prices. The relationship between the Class I and II prices, on one hand, and the Class III and IV make allowances, on the other, is indirect.[26] Changes to these make allowances should only be applied to the Class I and II prices in connection with a direct consideration of the Class I and II formulas. This hearing is providing that direct consideration.

2. The Costs of Supplying Raw Class I and II Milk Must Be Recognized in the Calculation of their Prices, in the Interests of Orderly Marketing.

Producer, cooperative, and other suppliers of raw milk for Class I and II use face substantial costs, as has been discussed above. These costs are analogous to those faced by dairy manufacturers and have had increases analogous to increases faced by manufacturers.

Manufacturing costs are subtracted in Class III and IV price formulas. In just the same way, Class I and II supply costs are added in the Class I and II price formulas. In order to maintain the proper relationship between product prices and the Class I and II milk prices, both of these sets of costs must be considered and applied. Strict application of new Class III and IV make allowances to the Class I and Class II prices, without consideration of conditions specific to Class I and II milk, perverts the relationship among class prices.

Failure to address legitimate milk supply costs in establishing the Class I and II milk prices will undercut the ability of the pool to attract a stable supply of milk to these

[26] This is why the record in the make allowance proceeding provided no record and no justification for the direct application of new make allowances to Class I and II prices.

higher uses, and lead to increased de-pooling. De-pooling causes disorderly milk markets, due to the unpredictability of the producers' uniform price relative to the Class prices and the risk that pooling handlers bear as a result of other handlers' decisions to de-pool.

Since the beginning of 2003, the average producer price differential in the Upper Midwest market has been 3¢. Under the NMPF proposals, we estimate that it would have been 23¢, and at least two individual months of negative PPD's would have been prevented. Over the same period, the average producer price differential in the Pacific Northwest market was negative 9¢; under our proposals it would have averaged positive 15¢ and at least three months of negative PPD's would have been prevented. A table of PPD's for these two markets, and the projected PPD's under NMPF's proposals is attached to my statement.

Establishing these new Class I and II price formulas is clearly justified, and will as clearly further the objectives of the Act.

3. Class I and II Formula Provisions Should not Incorporate Class III and IV Price Formulas by Reference

While the elements of the Class III and IV milk price formulas may continue to be necessary bases for defining the Class I and II price formulas, their direct incorporation into the Class I and II price formulas can lead, and has led, to changes to Class I and II prices without due consideration for the independent conditions that pertain to Class I and II milk supplies. Establishing distinct and simplified Class I and II formulas will help ensure that future changes in the Class I and II prices are based upon direct consideration of cost and processing considerations for both fluid milk (Class I and II) and

manufacturing milk (Class III and IV). This would avoid unintended distortions in the relationships among Class prices that might lead to disorderly marketing conditions.

4. These Proposals Have the Support of Producers and their Cooperatives.

NMPF represents about 50,000 farmers through its 33 member cooperatives. As such, NMPF's serves as the voice of the majority of American milk producers. These proposals represent the policy of this collected membership. In addition, many of our members have written the Secretary directly, in support of this hearing.

There will be substantial producer and cooperative support for these proposals at this hearing and in its follow-up, just as there was substantial producer and cooperative support for NMPF's call for an alternative to the strict application of the Class III and IV make allowance changes to the Class I and II price formulas.

Conclusion

The tentative final decision [71 FR 67467, et seq.] arising from Docket No. AO-14-A74, et al., recognizes increased processing costs for cheese, dry whey, butter, and nonfat dry milk, and will reduce the price for all four classes of Federal order milk. The analogous Class I and II milk supply costs, which are incorporated into the current Class I and II price formulas, will not be updated by that decision, and offsetting increases in those Class prices that would have resulted will not be realized by farmers.

NMPF urges the Secretary to issue, on an expedited basis, an amended rule that would establish simplified and updated Class I and II price formulas, in order to maintain

the proper price relationship among the four classes and to the dairy product prices, and to avoid unnecessary losses of $100 million a year for America's dairy farmers.

NMPF's proposed Class I and II formulas remain linked to the Class III and IV prices through dairy product prices and through formulas based upon the same manufacturing costs and yields. However, placing the simplified Class I and II price formulas in distinct order provisions will help assure that Class I and Class II revenue will be affected by future changes in make allowances only when Class I and II supply costs are fully considered.

America's dairy producers will face substantial and unnecessary economic hardship if the tentative final decision on manufacturing cost allowances is not followed with a timely decision on Class I and II cost allowances. NMPF therefore urges immediate and expedited attention to the proper determination of Class I and Class II prices.

Just as the Department has moved forward in an expedited proceeding on make allowances, so should a speedy decision address substantial and analogous inadequacies in the Class I and II price calculations.

We thank the Secretary and the Department for hearing this proposal, and welcome any questions.

Order Language to Effect NMPF's Proposed Class I and II Price Formulas

§ 1000.50 Class prices, component prices, and advanced pricing factors.

Class prices per hundredweight of milk containing 3.5 percent butterfat, component prices, and advanced pricing factors shall be as follows. The prices and pricing factors described in paragraphs (a), (b), (c), (e), (f), and (q) of this section shall be based on a weighted average of the most recent 2 weekly prices announced by the National Agricultural Statistical Service (NASS) before the 24th day of the month. These prices shall be announced on or before the 23rd day of the month and shall apply to milk received during the following month. The prices described in paragraphs (g) through (p) of this section shall be based on a weighted average for the preceding month of weekly prices announced by NASS on or before the 5th day of the month and shall apply to milk received during the preceding month. The price described in paragraph (d) of this section shall be derived from the Class II skim milk price announced on or before the 23rd day of the month preceding the month to which it applies and the butterfat price announced on or before the 5th day of the month following the month to which it applies.

(a) Class I price. The Class I price per hundredweight, rounded to the nearest cent, shall be .965 times the Class I skim milk price plus 3.5 times the Class I butterfat price.

(b) Class I skim milk price. The Class I skim milk price per hundredweight shall be the adjusted Class I differential specified in § 1000.52 plus the higher of the advanced pricing factors computed in paragraph (q)(1) or (2) of this section.

(c) Class I butterfat price. The Class I butterfat price per pound shall be the adjusted Class I differential specified in §1000.52 divided by 100, plus the advanced butterfat price computed in paragraph (q)(3) of this section.

(d) The Class II price per hundredweight, rounded to the nearest cent, shall be .965 times the Class II skim milk price plus 3.5 times the Class II butterfat price.

(e) Class II skim milk price. The Class II skim milk price per hundredweight shall be the ~~advanced Class IV skim milk price computed in paragraph (q)(2) of this section plus 70 cents~~ **weighted average of the 2 most recent NASS U.S. average weekly survey nonfat dry milk prices announced before the 24th day of the month times 8.9, from which product is subtracted 54 cents**.

(f) Class II nonfat solids price. The Class II nonfat solids price per pound, rounded to the nearest one-hundredth cent, shall be the Class II skim milk price divided by 9.

(g) Class II butterfat price. The Class II butterfat price per pound, **rounded to the nearest one-hundredth cent, shall be the U.S. average NASS AA Butter survey price reported by the Department for the month, multiplied by 1.20, then subtracting from this product 12.094¢.** ~~shall be the butterfat price plus $.007.~~

(h) Class III price. The Class III price per hundred weight, rounded to the nearest cent, shall be .965 times the Class III skim milk price plus 3.5 times the butterfat price.

(i) Class III skim milk price. The Class III skim milk price per hundredweight, rounded to the nearest cent, shall be the protein price per pound times 3.1 plus the other solids price per pound times 5.9.

(j) Class IV price. The Class IV price per hundredweight, rounded to the nearest cent, shall be .965 times the Class IV skim milk price plus 3.5 times the butterfat price.

(k) Class IV skim milk price. The Class IV skim milk price per hundredweight, rounded to the nearest cent, shall be the nonfat solids price per pound times 9.

(l) Butterfat price. The butterfat price per pound, rounded to the nearest one-hundredth cent, shall be the U.S. average NASS AA Butter survey price reported by the Department for the month less 11.5 cents, with the result multiplied by 1.20.

(m) Nonfat solids price. The nonfat solids price per pound, rounded to the nearest one-hundredth cent, shall the U.S. average NASS nonfat dry milk survey price reported by the Department for the month less 14 cents and multiplying the result by .99.

(n) Protein price. The protein price per pound, rounded to the nearest one-hundredth cent, shall be computed as follows:

(1) Compute a weighted average of the amounts described in paragraphs (n)(1)(i) and (ii) of this section:

(i) The U.S. average NASS survey price for 40-lb. block cheese reported by the Department for the month; and

(ii) The U.S. average NASS survey price for 500-pound barrel cheddar cheese (38 percent moisture) reported by the Department for the month plus 3 cents;

(2) Subtract 16.5 cents from the price computed pursuant to paragraph (n)(1) of this section and multiply the result by 1.383;

(3) Add to the amount computed pursuant to paragraph (n)(2) of this section an amount computed as follows:

(i) Subtract 16.5 cents from the price computed pursuant to paragraph (n)(1) of this section and multiply the result by 1.572;

(ii) Subtract 0.9 times the butterfat price computed pursuant to paragraph (l) of this section from the amount computed pursuant to paragraph (n)(3)(i) of this section; and

(iii) Multiply the amount computed pursuant to paragraph (n)(3)(ii) of this section by 1.17.

(o) Other solids price. The other solids price per pound, rounded to the nearest one-hundredth cent, shall be the U.S. average NASS dry whey survey price reported by the Department for the month minus 15.9 cents, with the result multiplied by 1.03.

(p) Somatic cell adjustment. The somatic cell adjustment per hundredweight of milk shall be determined as follows:

(1) Multiply .0005 by the weighted average price computed pursuant to paragraph (n)(1) of this section and round to the 5th decimal place;

(2) Subtract the somatic cell count of the milk (reported in thousands) from 350; and

(3) Multiply the amount computed in paragraph (p)(1) of this section by the amount computed in paragraph (p)(2) of this section and round to the nearest full cent.

(q) Advanced pricing factors. For the purpose of computing the Class I skim milk price, the Class II skim milk price, the Class II nonfat solids price, and the Class I butterfat price for the following month, the following pricing factors shall be computed using the weighted average of the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month:

(1) An advanced ~~Class III~~ **cheese** skim milk price per hundredweight, rounded to the nearest cent, shall be computed as follows:

(i) Following the procedure set forth in paragraph~~s~~ (n)**(1)** ~~**and (o)**~~ of this section, but using the weighted average of the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month, **multiply the resulting cheese price times 10.0** ~~**compute a protein price and an other solids price**~~;

(ii) Multiply the **weighted average of the 2 most recent NASS U.S. average weekly survey dry whey prices announced before the 24th day of the month times 6.1** ~~**protein price computed in paragraph (q)(1)(i) of this section by 3.1**~~;

(iii) Multiply the **weighted average of the 2 most recent NASS U.S. average weekly survey butter prices announced before the 24th day of the month times 3.9** ~~**other solids price per pound computed in paragraph (q)(1)(i) of this section by 5.9**~~; and

(iv) Add the amounts computed in paragraphs (q)(1)**(i) and** (ii) ~~**and (iii), subtract the amount in paragraph (q)1(iii), and subtract $1.67**~~.

(2) An advanced ~~Class IV~~ **butter-powder** skim milk price per hundredweight, rounded to the nearest cent, shall be computed as follows:

(i) ~~**Following the procedure set forth in paragraph (m) of this section, but using**~~ **Multiply** the weighted average of the 2 most recent NASS U.S. average weekly survey prices **for nonfat dry milk** announced before the 24th day of the month **times 8.9**; and

(ii) **From the amount computed in paragraph (q)(2)(i) subtract 67¢.** ~~**Multiply the nonfat solids price computed in paragraph (q)(2)(i) of this section by 9.**~~

(3) An advanced butterfat price per pound, rounded to the nearest one-hundredth cent, shall be calculated by computing a weighted average of the 2 most recent U.S. average NASS AA Butter survey prices announced before the 24th day of the month, ~~**subtracting 11.5 cents from this average, and**~~ multiplying the result by 1.20**, then subtracting 13.694¢**.

Nation's Top Dairy Cooperatives, 2005
Indicating Members of the National Milk Producers Federation

Rank	Dairy Cooperative	Milk Volume (Billion lbs)	Members
1	**Dairy Farmers of America, Inc.***	**36.7**	**12,078**
2	**California Dairies, Inc.***	**16.1**	**659**
3	**Land O' Lakes, Inc.***	**12.3**	**3,296**
4	**Northwest Dairy Association***	**7.5**	**628**
5	**Dairylea Cooperative, Inc.***	**5.5**	**2,325**
6	Family Dairies USA	5.2	3,677
7	**Associated Milk Producers, Inc.***	**5.1**	**3,700**
8	**Foremost Farms USA***	**5.1**	**2,996**
9	**Manitowoc Milk Producers Coop.***	**4.2**	**2,858**
10	**Select Milk Producers***	**3.8**	**76**
11	**Michigan Milk Producers Association***	**3.4**	**1,630**
12	**Maryland & Virginia Milk Producers Assn.***	**3.0**	**1,458**
13	**Southeast Milk, Inc.***	**2.9**	**299**
14	**United Dairymen of Arizona***	**2.8**	**93**
15	**Agri-Mark***	**2.7**	**1,490**
16	**Lone Star Milk Producers***	**2.2**	**221**
17	Milwaukee Cooperative Milk Producers	1.8	740
18	Alto Dairy Cooperative	1.6	550
19	**Prairie Farms Dairy***	**1.5**	**793**
20	**Continental Dairy Products***	**1.3**	**20**
21	**Swiss Valley Farms Company***	**1.3**	**870**
22	**St. Albans Cooperative Creamery***	**1.3**	**524**
23	**First District Association***	**1.2**	**820**
24	Woodstock Progressive Milk Producers	1.1	450
25	Security Milk Producers Association	1.1	33
26	**Upstate Farmers Cooperative***	**1.0**	**275**
27	Bongards Creameries	1.0	460
28	Magic Valley Quality Milk Producers	1.0	35
29	Allied Federated Cooperatives	0.8	825
30	**Farmers Cooperative Creamery***	**0.7**	**74**
31	Lanco-Pennland Quality Milk Producers	0.7	824
32	**Zia Milk Producers***	**0.6**	**14**
33	**Tillamook County Creamery Association***	**0.6**	**140**
34	**Ellsworth Cooperative Creamery***	**0.5**	**488**
35	Mount Joy Famers Cooperative	0.5	273
36	**Niagara Milk Coop. (merged with Upstate)***	**0.5**	**171**
37	Plainview Milk Products Cooperative	0.5	299
38	Conesus Milk Producers Cooperative	0.4	101
39	**Cass Clay Creamery***	**0.4**	**230**
40	Cal-West Dairymen, Inc.	0.3	20
41	Burnett Dairy Cooperative	0.3	217
42	Lowville Producers Dairy Cooperative	0.3	187
43	**Humboldt Cooperative Creamery Association***	**0.2**	**55**
44	**Midwest Dairymen's Co.***	**0.2**	**141**
45	Sunrise Ag Cooperative	0.2	170
46	Country Classic Dairies	0.2	51
47	**Cooperative Milk Producers Association***	**0.2**	**85**
48	Southeastern Graded Milk Producers Assn.	0.2	204
49	Calhoun Cooperative Creamery Co.	0.2	90
50	Hastings Cooperative Creamery Association	0.2	116
	Arkansas Dairy Cooperative Association*		
	Dairymen's Marketing Cooperative, Inc.*		
	Just Jersey Cooperative, Inc.*		
	Scioto County Co-op Milk Producers' Assn.*		
	Est. sub-total	0.5	300
	Top 50 Coop's	**142.183**	**47,829**
	NMPF Coop's	**125.286**	**38,807**
	US Total Production	**176.989**	**64,555**

* = Current NMPF Members

Source: *Hoard's Dairyman.*

Change in Manufacturing Cost, 1998-2004

Dairy Product Plant Costs for 2004, USDA/RBS-CS, revised 01-13-06, $/lb.

	Butter $/lb.	Powder $/lb.	Butter-powder milk $/cwt.
Mil. Lbs.	*254.12*	*439.04*	
Total, wtd. avg., $/lb.	**0.1659**	**0.1682**	**2.1426**
Add CDFA ROI, $/lb.	0.0066	0.0079	0.0952
Add CDFA Adm., $/lb.	0.0151	0.0105	0.1536
Butter pkg. adj. (CDFA-RBCS), $	-0.0177		-0.0743
Adj. Wtd. Avg., $/lb.	**0.1699**	**0.1865**	**2.3171**

Dairy Product Plant Costs for 2004, CDFA, revised 01-13-06, $/lb.

	Butter	Powder*	Butter-powder milk
Mil. Lbs.	*382.93*	*706.55*	*93.27*
Total Wtd. Avg., $/lb.	**0.1368**	**0.1495**	**1.8600**

* Excludes high-cost nonfat dry milk makers in CDFA survey.

Dairy Product Plant Costs, CDFA & USDA/RBS-CS, Wtd. Avg., 2004, $/lb.

	Butter	Powder	Butter-powder milk
Mil. Lbs.	*637.05*	*1145.58*	*93.27*
Wtd. Avg.	**0.1500**	**0.1637**	**2.0373**
Add $.0015 Mktg.	0.0015	0.0015	0.0192
2004 Manufacturing Costs	**0.1515**	**0.1652**	**2.0565**
1998 Manufacturing Costs**	**0.1150**	**0.1400**	**1.6867**
Increase, 1998-2004	**32%**	**18%**	**22%**

** = current make allowances

Producer Price Differentials for FO's 30 & 124
Actual and Estimated based on NMPF Proposals

	FO 30 PPD	FO 30 PPD (NMPF I/II)	FO 124 PPD	FO 124 PPD (NMPF I/II)
Jan-03	$0.58	$0.72	$0.98	$1.20
Feb-03	$0.47	$0.61	$0.78	$0.99
Mar-03	$0.54	$0.67	$1.02	$1.22
Apr-03	$0.46	$0.59	$0.80	$1.00
May-03	$0.40	$0.53	$0.67	$0.87
Jun-03	$0.38	$0.49	$0.62	$0.81
Jul-03	*($0.41)*	*($0.05)*	*($0.85)*	*($0.54)*
Aug-03	*($1.58)*	*($1.21)*	*($2.14)*	*($1.84)*
Sep-03	*($1.07)*	*($0.68)*	*($1.76)*	*($1.42)*
Oct-03	*($0.88)*	*($0.48)*	*($1.34)*	*($0.98)*
Nov-03	**($0.07)**	**$0.19**	*($0.52)*	*($0.22)*
Dec-03	$0.54	$0.67	$0.60	$0.82
Jan-04	$0.37	$0.50	$0.46	$0.68
Feb-04	$0.47	$0.60	$0.78	$0.99
Mar-04	$0.21	$0.64	$0.06	$0.29
Apr-04	*($4.11)*	*($3.65)*	*($4.32)*	*($4.00)*
May-04	*($1.97)*	*($1.58)*	*($3.18)*	*($2.90)*
Jun-04	$0.30	$0.42	*($0.23)*	*($0.03)*
Jul-04	$0.72	$0.84	$0.89	$1.09
Aug-04	$0.22	$0.35	$0.11	$0.32
Sep-04	$0.13	$0.34	**($0.28)**	**$0.00**
Oct-04	$0.31	$0.45	$0.24	$0.46
Nov-04	$0.13	$0.43	**($0.14)**	**$0.16**
Dec-04	*($0.95)*	*($0.52)*	*($1.31)*	*($1.00)*
Jan-05	$0.39	$0.51	$0.59	$0.83
Feb-05	**($0.18)**	**$0.23**	*($0.66)*	*($0.36)*
Mar-05	$0.41	$0.54	$0.51	$0.75
Apr-05	$0.04	$0.43	*($0.49)*	*($0.21)*
May-05	$0.28	$0.40	$0.21	$0.42
Jun-05	$0.20	$0.33	**($0.11)**	**$0.09**
Jul-05	$0.34	$0.46	$0.03	$0.21
Aug-05	$0.55	$0.68	$0.78	$0.97
Sep-05	$0.29	$0.43	$0.20	$0.41
Oct-05	$0.24	$0.37	$0.11	$0.32
Nov-05	$0.44	$0.58	$0.56	$0.78
Dec-05	$0.24	$0.37	$0.07	$0.28
Jan-06	$0.27	$0.40	$0.05	$0.27
Feb-06	$0.48	$0.60	$0.40	$0.60
Mar-06	$0.56	$0.69	$0.75	$0.95
Apr-06	$0.36	$0.48	$0.42	$0.61
May-06	$0.38	$0.50	$0.47	$0.67
Jun-06	$0.23	$0.35	$0.01	$0.21
Jul-06	$0.38	$0.49	$0.37	$0.55
Average	**$0.03**	**$0.23**	**($0.09)**	**$0.15**

Note: NMPF I/II estimated from direct price changes and pool utilization.
Souce: USDA AMS Dairy public database

Derivations of Proposed Class I and II Price Formulas[27]

Class I (advanced):

Class I Price = (Class I skim milk price x 0.965) + (Class I butterfat price x 3.5).

Current Class I Skim Milk Price (advanced) = Higher of:

Class III skim milk pricing factors + applicable Class I differential =

OR Class IV skim milk pricing factors + applicable Class I differential.

= (Cheese price x 9.988944) + (Dry whey price x 6.077) – (Butter price x 3.91716) – 2.3979588 + applicable Class I diff.

OR ((Nonfat dry milk price x 8.91) – 1.39887 + applicable Class I diff.

(See simplification of Class III and IV skim prices below.)

Proposed Updated and Simplified Class I Skim Milk Price (advanced) = *Higher of:*

= (Cheese price x 9.988944) + (Dry whey price x 6.077) – (Butter price x 3.91716) – 1.6279588 + applicable Class I diff.

OR ((Nonfat dry milk price x 8.91) – 0.62887 + applicable Class I diff.

Class I Butterfat Price (advanced) = (Butter price – 0.1202) x 1.20 + (applicable Class I differential divided by 100)

= (Butter price X 1.2) – (0.1202 X 1.20) + (applicable Class I differential divided by 100).

= (Butter price X 1.2) – .14424 + (applicable Class I differential divided by 100).

Proposed Updated and Simplified Class I Butterfat Price (advanced)

= (Butter price X 1.2) – 0.14424 + 0.0077 + (applicable Class I differential divided by 100).

= (Butter price X 1.2) – 0.13654 + (applicable Class I differential divided by 100).

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[27] "Current" formulas are based upon USDA's proposed make allowances, per 71 FR 67467, et seq.

Current Class II Skim Milk Price (advanced) = ([(Nonfat dry milk price - 0.157) x 0.99] x 9) + $0.70

= ((Nonfat dry milk price x 8.91) – 1.39887 + 0.70 **= ((Nonfat dry milk price x 8.91) – 0.69887.**

Updated and simplified Class II Skim Milk Price (advanced) = ((Nonfat dry milk price x 8.91) – $0.535

= Powder value of skim milk – condensing costs + rehydration costs.

[Condensing costs – rehydration costs = ($0.07/lb. solids - $0.01/lb. solids) x 8.91 = $0.535

Current Class II Butterfat Price = (Butter price – 0.1202) x 1.20) + $0.007

= (Butter price x 1.2) – (0.1202 x 1.20) + $0.007 **= (Butter price x 1.2) – 0.13724.**

Updated and simplified Class II Butterfat Price = Minimum simplified Class I butterfat price

= (Butter price x 1.2) – (0.1202 x 1.20) + 0.0077 + 0.0160

= (Butter price x 1.2) – 0.12154.

Current Class III:

Class III Price = (Class III skim milk price x 0.965) + (Butterfat price x 3.5).

Class III Skim Milk Price = (Protein price x 3.1) + (Other solids price x 5.9).

Protein Price = ((Cheese price – 0.1682) x 1.383) + ((((Cheese price – 0.1682) x 1.572) - Butterfat price x 0.9) x 1.17).

= ((Cheese price – 0.1682) x 1.383) + ((((Cheese price – 0.1682) x 1.572) – [(Butter price – 0.1202) x 1.20] x 0.9) x 1.17)

= ((Cheese price x 1.383) – (0.1682 x 1.383) + ((((Cheese price – 0.1682) x 1.572) – [(Butter price x 1.2) – (0.1202 x 1.20)] x 0.9) x 1.17)

Other Solids Price = (Dry whey price – 0.1956) x 1.03.

Butterfat Price = (Butter price – 0.1202) x 1.20.

Simplified Class III Skim Milk Price Calculation:

Cl. III Skim Milk Price = (Cheese price x 1.383 x 3.1) – (0.1682 x 1.383 x 3.1) + (Cheese price x 1.572 x 1.17 x 3.1) - (0.1682 x 1.572 x 1.17 x 3.1)
– (Butter price x 1.20 x 0.9 x 1.17 x 3.1) + (0.1202 x 1.20 x 0.9 x 1.17 x 3.1) + (Dry whey price x 6.077) – (0.1956 x 6.077).

= (Cheese price x 4.2873) – (0.72112386) + (Cheese price x 5.701644) – (0.9590163) – (Butter price x 3.91716)
+ (0.470842632) + (Dry whey price x 6.077) – (1.1886612)

Class III Skim Milk Price = (Cheese price x 9.988944) – (Butter price x 3.91716) + (Dry whey price x 6.077) – 2.3979588

Current Class IV:

Class IV Skim Milk Price = {[(Nonfat dry milk price - 0.157) x 0.99] x 9}.

Nonfat Solids Price = [(Nonfat dry milk price - 0.157) x 0.99].

Butterfat Price = [(Butter price – 0.1202) x 1.20].

Class IV Price = ({[(Nonfat dry milk price - 0.157) x 0.99] x 9} x 0.965) + ([(Butter price – 0.1202) x 1.20] x 3.5)

= ((Nonfat dry milk price - 0.157) x 8.59815) + ((Butter price – 0.1202) x 4.2)

= (Nonfat dry milk price x 8.59815) + (Butter price x 4.2) - 1.34990955 - 0.50484

= (Nonfat dry milk price x 8.59815) + (Butter price x 4.2) - 1.85474955

Simplified Class IV Skim Milk Price = ([(Nonfat dry milk price - 0.157) x 0.99] x 9)

= ((Nonfat dry milk price - 0.157) x 8.91) = **((Nonfat dry milk price x 8.91) – 1.39887**