



National Milk Producers Federation

2107 Wilson Blvd., Suite 600, Arlington, VA 22201 | (703) 243-6111 | www.nmpf.org

Exhibit NMPF - 1

United States Department of Agriculture Before The Secretary of Agriculture

In re: [Docket No. 23-J-0067; AMS-DA-23-0031]

Milk in the Northeast and Other Marketing Areas

Hearing beginning August 23, 2023

Testimony Presented By:

Peter Vitaliano, Ph.D.

Representing

National Milk Producers Federation

2107 Wilson Boulevard, Suite 600

Arlington, Virginia 22201

I am Peter Vitaliano, Vice President, Economic Policy and Market Research for the National Milk Producers Federation (NMPF). This testimony is presented in support of Proposal 1, one of five proposals submitted by NMPF. NMPF is the national trade association that represents dairy farmers and the cooperative marketing associations they own and operate throughout the United States. I have been employed by NMPF for almost 38 years as essentially its Chief Economist, in which capacity I have been responsible for all economic and market analysis that supports the programs of NMPF.

NMPF is the voice of America's dairy farmers. Through its 25 dairy marketing cooperative members, NMPF represents two-thirds of the approximately 28,000 commercial dairy farmers in the United States. NMPF's member cooperatives reflect both the geographic and the product mix diversity of the dairy producer and cooperative sectors in the United States. NMPF's member cooperatives process a majority of the Class I milk pooled under Federal Orders and distributed on routes within the 11 Federal Order marketing areas and include one of the largest fluid dairy ESL manufacturers in the United States. NMPF members have significant Class II, Class III and Class IV manufacturing operations and manufacture a majority of U.S.-produced butter and nonfat dried milk products.

Given the diversity and breadth of its membership, NMPF is the dairy industry organization best able to undertake a comprehensive review of the Federal Order system and to weigh its impacts on both dairy farmers as well as processors and manufacturers. NMPF's five proposals presented at this hearing represent a balanced and integrated program of needed and long overdue updates that are in the best interests of the entire U.S. dairy industry and which appropriately balance the economic interests of dairy farmers and dairy plant operators. NMPF strongly supports the Federal Milk Marketing Order program but also believes that the program requires several regulatory and

technical updates to continue to operate in the best interests of dairy farmers, processors and manufacturers of dairy products and the dairy product consuming public.

The current system of Federal Order minimum class prices, which has been in effect since January 1, 2000, is the hybrid product of Federal Order Reform rulemaking and Congressional action. The dairy product price formulas for determining Federal Order Class III and IV prices implemented in January 2000 replaced the Basic Formula Price (BFP), which used a survey of milk prices, as did the preceding Minnesota-Wisconsin (M-W) price series, as the basic means of price discovery for establishing milk prices to operate the Federal Order program. Discontinuing the BFP represented a major change because it replaced this previous system of direct, survey-based, price discovery with a system that indirectly discovered raw milk prices entirely by calculation from market prices of the products manufactured from that milk. The intricate product price formulas and their constituent coefficients that resulted took on the important function of accurately simulating the market realities of the complex transfer of price discovery from the markets for dairy products to the markets for unprocessed milk used to produce them.

At the same time, the Class I prices that were established by Congress updated the pre-existing Class I differentials by adopting an optional USDA-suggested price surface, which had been generated on the basis of 1990s milk market conditions and extended it coast-to-coast. All of the prices and price formulas of Federal Order Reform were premised upon the costs and realities of milk production and dairy product manufacturing which prevailed at that time.

Those market realities have subsequently changed as the U.S. dairy industry has undergone dynamic structural change since 2000, while the critical Federal Order dairy product price formulas and Class I differentials have, for the most part, remained static. For example, the location of U.S. milk production has shifted westward, manufacturing and transportation costs have increased significantly, and the southeastern states have become progressively more milk deficit. Also, the industry has seen the successful deployment of very large manufacturing plants, and yet many smaller-sized manufacturing plants remain critically important to satisfying the domestic and export demands for the U.S. milk supply. Additionally, the United States currently sells about 18 percent of its milk production as manufactured products in export markets, compared to about 5 percent in 2000.

These realities and others necessitate a pricing formula review that incorporates the Class I mover, Class I differentials, manufacturing cost (make) allowances, and other factors in the Class price formulas. The constituent parts of those formulas, including the products used, the make allowances, and the yield factors in the component formulas, the assumed composition of producer milk, as well as the Class I differentials, have become increasingly outdated, even those few previously updated, to the extent that the effective administration of the Federal Order program has become increasingly difficult.

NMPF has engaged in an almost two year-long comprehensive study of needed updates to the Federal Order pricing formula provisions. NMPF has undertaken this important activity with the essential and dedicated assistance of dozens of marketing experts from the staffs of its member cooperative marketing associations. In a series of over 200 mostly virtual meetings, this team

examined every detail of each of the current pricing formulas of the Federal Order uniform pricing regulations in 7 C.F.R § 1000.50-52. The goal was to develop a comprehensive, integrated, and balanced program of updates to these formulas, to realign them more fully with the structural realities of the current dairy industry and to address the disorderly marketing conditions which the growing misalignment has allowed to develop. This effort included consideration of mechanisms for making further updates in the future as the industry continues to evolve. The comprehensive package which resulted includes seeking additional legislative authority for USDA to conduct mandatory studies of manufacturing costs and product yield factors, seeking a change via ordinary rule-making to the regulations implementing the Dairy Product Mandatory Reporting Program (DPMRP), and five recommendations for amendments to the uniform pricing regulations for all Federal Orders.

The NMPF Board of Directors unanimously approved this package of recommendations, including the five recommendations for proposed amendments to all Federal Orders, which NMPF has submitted as the following proposals:

- 1. Update the milk component factors for protein, other solids, and nonfat solids in the Class III and Class IV skim milk price formulas**
- 3. Discontinue use of barrel cheese in the protein component price formula**
- 7. Increase the make allowances in the component price formulas to the following:**

Butter	\$0.21 per pound
Nonfat dry milk	\$0.21 per pound
Cheese	\$0.24 per pound
Dry Whey	\$0.23 per pound

- 13. Return to the “higher-of” Class I skim milk price mover**

- 19. Update the Class I differentials throughout the United States**

Implementation of all five components of NMPF’s comprehensive proposal will require amendment of certain provisions of the Federal Order uniform pricing regulations in 7 C.F.R § 1000.50-52, applicable to all Federal milk marketing orders, and 7 C.F.R. §1005.51(b), §1006.51(b), and §1007.51(b). This testimony is in support of Proposal 1, concerning Milk Composition.

Proposal 1: Update the milk component factors in the skim milk price formulas

NMPF requests that the Secretary amend 7 C.F.R. § 1000.50(f), (i), (k), and (q), as well as 7 C.F.R. § 1000.51, applicable to all Federal Orders, as specified at the conclusion of this testimony, which would increase the milk component factors in the Class III and Class IV skim

milk price formulas and provide a method for updating them periodically to reflect anticipated continued increases in the average milk component composition in the future.

The milk component composition factors in the skim milk price formulas

The Federal Order skim milk price formulas were constructed in Federal Order Reform to be reflective of the content of the skim portion of producer milk. Over the course of 23 years, the milk component content has increased through improved genetics, better feeds and feeding practices and better cow comfort management, among other factors. USDA's National Agricultural Statistics Service (NASS) reports the average butterfat content of producer milk in the United States was 3.68 percent in calendar year 2000 and 4.08 percent in CY 2022, an increase of 10.9 percent. Over the same period, USDA's Economic Research Service (ERS) reported the average nonfat, or skim solids content of producer milk in the United States rose from 8.72 percent in 2000 to 9.03 percent in 2022, an increase of 3.5 percent. Based on this data, the average nonfat solids content of producer skim milk in the United States rose from 9.05 percent in 2000 to 9.41 percent in 2022, also an increase of 4.0 percent. Note that the component content of producer skim milk increases just from higher butterfat tests as well as from higher skim solids tests because there are fewer pounds of skim, containing the same pounds of nonfat solids, in a given unit of higher butterfat-testing producer milk.

For manufacturing class prices in Federal Orders with multiple component pricing (MCP), these increases in milk component levels are reflected in Classes II, III and IV prices and pool values because Federal Orders with MCP price every pound of skim components, not skim milk. However, the recognition of these higher component tests has not occurred in determining Class I skim milk prices in all orders and in determining Class II, III and IV prices in the Southeast, Appalachian, Florida, and Arizona Orders.

With Federal Order Reform, the component averages used to calculate the Class III skim milk price and the Advanced Class III skim milk pricing factor were set at 3.1 percent protein and 5.9 percent other solids. Adding the protein and other solids value resulted in the 9.0 percent nonfat solids factor used in the Class IV and Class II skim milk prices and the Advanced Class IV skim milk pricing factor. These original, and still current, component factors in the Federal Order skim milk class price formulas were based on the standard practice of using 3.5 percent butterfat composition for milk to quote class prices for producer milk, not the actual composition of producer skim milk at the time of Federal Order Reform.

Disorderly marketing caused by the current milk component factors in the skim milk price formulas

Seven of the eleven Federal Orders, representing almost 90% of Federal Order producer milk, use MCP. Dairy farmers have responded to MCP's economic signals by significantly increasing not just the butterfat, but also the protein and other solids levels in the skim portion of the milk they produce. Based on AMS data for the MCP orders for 2022, the protein and other solids contents in Federal Order producer skim milk have averaged 3.39 percent and 6.02 percent, respectively, a significant increase over the past 22 years. The nonfat solids content of Federal

Order producer skim milk has therefore averaged 9.41 percent in 2022, thus matching the value derived from the previously cited NASS and ERS data for the United States.

Two major functions of Federal Orders are:

- 1) to ensure consumers have an adequate supply of milk for fluid consumption, and
- 2) to promote orderly marketing of milk

In the seven Federal Orders with MCP, increased protein and other solids component levels have decreased the price difference between the Class I skim milk price and skim milk prices for Classes II, III, and IV and have also caused skim milk prices to increase relative to the other four Federal Orders without MCP. In the four orders without MCP, producers have been increasingly underpaid for the true value of all their skim milk. In all orders, the increase in component levels has resulted in producers being increasingly underpaid for the true value of their skim milk used in Class I. This structural change in the U.S. dairy industry has made it increasingly difficult for Federal Orders to meet the two major functions, for the following reasons:

1. In MCP orders, the producers' share of the generally higher Class I pool value is provided through the Producer Price Differential (PPD). As previously stated, higher component levels increase manufacturing skim values. By construct, and because of fixed formulaic factors for protein, other solids, and nonfat solids in the Class I formula, milk containing higher protein and other solids levels does not increase the Class I skim value. This, in turn, allows manufacturing milk prices to rise relative to the Class I price. As pooled components increased and revenue from Class I skim values remained static, more dollars have been paid out on all pooled milk components, which has diluted the dollars left to pay the PPD. Consequently, the potential to depool milk has increased, which has created disorderly marketing conditions.
2. Three of the non-MCP orders, Appalachian, Florida and Southeast do not have an adequate supply of producer milk within their marketing areas to meet consumer fluid milk demand. Supplemental milk must be transported into these markets to meet this demand. The supplemental milk is typically supplied from federal orders using MCP. The higher relative value of skim milk in MCP versus non-MCP markets increases the cost of supplemental milk for the non-MCP, deficit fluid milk markets and thereby decreases the incentive to move milk from reserve supply areas to deficit fluid milk markets, making it more costly and difficult to ensure consumers have access to an adequate supply of fluid milk.

The Proposed Solution: update the current milk component factors in the skim milk price formulas to reflect current actual composition of producer milk and to provide for further periodic updates, as needed

NMPF proposes that the skim component factors in the skim milk price formula be increased to equal the weighted average nonfat solids, true protein and other solids factors for milk pooled on Federal Orders. The data to be used are USDA's average component tests of producer milk in all

Federal Orders during calendar year 2022. For producer skim milk, these average component factors are protein 3.39, other solids 6.02, and nonfat solids 9.41. Implementation of the new skim milk factors would occur 12 months after adoption of the Order updating the skim factors. Due to the significant use of risk management programs by dairy producers and handlers, and the intricate nature of the transactions tied to the skim milk formulas, the new factors should not be implemented for a period of 12 months to allow the hedge transactions established prior to the change in the formulas to roll off.

To ensure this progressive misalignment in skim component factors does not recur, NMPF also proposes that the pricing factors be updated regularly, no less than every three years. However, no change shall occur until the weighted average of the nonfat solids component in the skim portion of milk pooled on Federal Orders for the prior three years changes by at least 0.07 percentage points. The updated component values would be calculated, and, if a change is warranted, it would be formally announced in February of such year, and the changes would be implemented 12 months later, with March being the first month of implementation. If this threshold condition is not met by the third year following the last update of the skim milk component factors, the calculation would be repeated in the fourth year, and subsequent years, until the 0.07 percentage point nonfat solids composition condition is met and the factors consequently updated, whereupon the calculation would not be repeated until another three years have passed. The proposed 0.07 percentage point threshold level is slightly less than the observed change in the average nonfat solids composition of Federal Order producer skim milk for three consecutive years compared with the prior three consecutive years, as calculated for the years ending in 2018 through 2022.

Calculated just arithmetically, the initial update from the current skim milk component factors to those based on 2022 data would increase the Class III skim milk price by \$0.80 per hundredweight and the Class IV skim milk price by \$0.41 per hundredweight, using 10-year average product prices for 2013-2022. Subsequent adjustments under Proposal 1 would be much smaller. An increase from the 2022-based skim milk component factors by the proposed 0.07 percentage point threshold level, parsed between protein and other solids based on analysis of the data, would increase the Class III price by \$0.14 per hundredweight and the Class IV price by \$0.07 per hundredweight, based on the same 10-year average product price data.

This testimony provides an overview of our justification for adoption of Proposal 1. More detailed testimony will follow that supports all, or key portions of, Proposal 1, including testimony provided by Calvin Covington, representing NMPF member cooperative Southeast Milk, Inc., other members of the NMPF task force that developed our Federal Order modernization proposals, several expert witnesses from other organizations, and several producers who are members of NMPF member dairy cooperatives.

Economic and Market Impacts of NMPF's Proposed Changes

Dr. Scott Brown of the University of Missouri will testify later at this hearing on his analysis of the economic impact of adopting NMPF's five proposals previously described. His analysis will show that these proposals will have a modestly positive impact on the average price of milk received by dairy farmers, which will dissipate fairly rapidly. The resulting average prices are expected to converge within a few years to their "baseline" levels, i.e., levels expected to prevail in the absence of any order changes.

The changes proposed by NMPF will not affect the cost of producing milk nor constrain the supply of milk freely produced by the nation's dairy farmers in response to market price signals. Without either of these effects, the price of milk will continue to reflect the longer-term costs of producing it, which are not directly affected by the Federal Order regulatory changes proposed by NMPF. Any and all changes to the prices of individual dairy products, or to the Federal Order regulated cost of milk for processing individual dairy products generated by these proposals, will be limited to those necessary to reflect changes in the costs of manufacturing those products, changes in the costs of supplying milk to processors of those products, changes in the value of the milk supplied by producers to those processors, or other changes necessary to more closely align the regulated minimum value of milk with the market value of the products into which it is produced, as translated by the federal order product price formulas. Such realignment is critical to the effective functioning of the Federal Order program to ensure orderly marketing, given the fixed parametric nature of the product price formulas, coupled with the rapid evolution of the basic structural features of the U.S. dairy industry that those parameters are intended accurately to reflect.

Figure 1 below provides a perspective on the key issue of the impact on consumers of the Federal Order program, and potential changes to the regulatory provisions of that program. It charts the monthly Consumer Price Indices (CPIs) reported by the U.S. Bureau of Labor Statistics (BLS) over the past decade and a half for all items, which is the general measure of overall consumer price inflation, also referred to as the overall cost of living, together with the aggregate CPIs for all food and beverages, for all dairy products, and for all fluid milk products, the principal regulatory focus of the Federal Order program. These CPIs reflect actual retail prices paid in all U.S. cities, but they are expressed in the form of indices, with their respective U.S. average retail prices during the 36-month period of 1982-84 each set to the value 100, to facilitate comparisons.

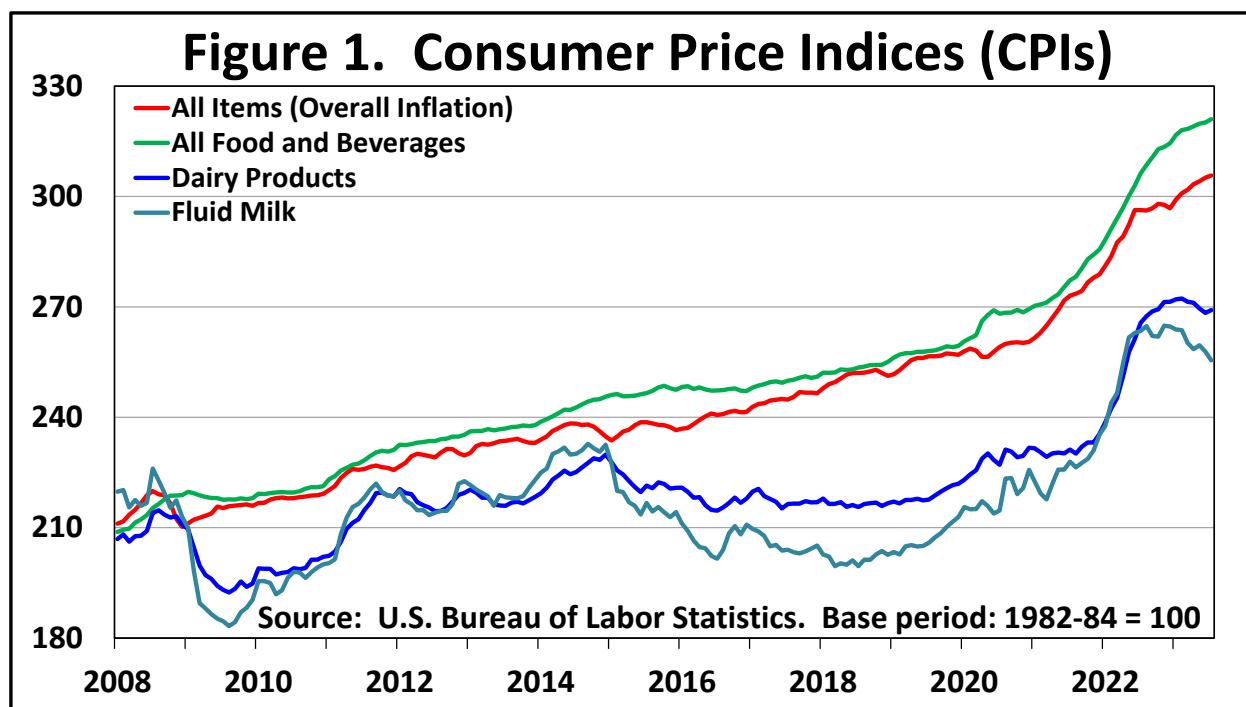


Figure 1 shows that the retail prices represented by all four of these measures had increased as of 2008 by about the same amount, slightly more than doubling during the quarter-century since the index base period. From 2008, the overall cost of living and the cost of all food and beverages have both continued to increase at a relatively steady pace, which accelerated during the recent bout of inflation, with food and beverage prices slightly outpacing the overall inflation rate, particularly in recent months.

The less aggregated dairy and fluid milk CPIs have shown a greater sensitivity to the price of producer milk, including the 2009 price plunge, the price spikes of 2014 and 2022, and the stagnation of prices between these two peaks. This closer connection between farm and retail prices for dairy stems from the fact that the cost of raw milk has averaged about 31 percent of the retail value of dairy products since 2002, while the farm value of most food and beverage products represents a much smaller share of the total retail value the finished products, which accordingly reflect more closely the main drivers of overall retail price inflation, including such factors as energy, labor and transportation. However, these factors have also caused retail price inflation for dairy products to outpace general and food and beverage price inflation during the recent bout of general price inflation, but also to recover more quickly from it, with dairy product retail prices actually dropping this year while the two more general CPIs continued to increase.

But, of particular significance for the current purpose, the overall cost to consumers of dairy products, and fluid milk products in particular, has declined during the illustrated period relative to both overall inflation as well as general food and beverage price inflation. One noteworthy datum is that the simple difference by which the monthly CPI for all fluid milk has fallen below the monthly CPI for all food and beverages reached its highest level ever in July 2023.

Agricultural production enjoys built-in productivity advantages due to its biological basis, which can generate increases in production per animal or increases in production per planted unit as a result of genetic improvements and other productivity enhancements unique to biological production processes. These advances generate unit cost reductions which the competitive nature of farming passes on up the various agricultural and food marketing channels, eventually to consumers. This consumer cost reduction aspect of agriculture varies in direct relation to the proportion which the basic agricultural commodity represents of the total retail value of the resulting food products, which, as mentioned, is relatively high for dairy products. This aspect of agricultural production, coupled with the great productivity of U.S. agriculture, has resulted in the general cost of food representing one of the smallest proportions of total consumer income in the United States, compared to that in all other countries.

It is therefore very difficult to consider the facts presented in Figure 1, which reflect the relative influence of all economic factors at play in producing general, food and beverage, overall dairy product, and fluid milk product price inflation over the past decade and a half, a period that includes the continuous operation of the Federal Order program, and conclude that Federal Orders have had a deleterious effect on consumer welfare via the retail price of fluid milk and retail prices of dairy products in general. And, given the results of Dr. Brown's analysis, this will continue to be the case under the Federal Order modernization changes proposed by NMPF.

Another key issue is the impact of the Federal Order program, and potential changes to the regulatory provisions of that program, on small businesses. As stated in the notice for this hearing, most parties subject to a FMMO are considered a small business. A large majority of those are dairy farm businesses, which, for the purpose of the Regulatory Flexibility Act (5 U.S.C. 601-612) (RFA), are defined as a "small business" if they have an annual gross revenue of \$3.75 million or less.

Table 1 provides simple estimates of the average herd size and average milk sales per herd of the producers pooled on the individual Federal Orders in 2022. These estimates are weighted averages by herd sizes in the individual states that lie wholly or partially in the respective Federal Order marketing areas. These estimates would indicate that most of the producers pooled in Federal Orders in 2022 would qualify as small businesses for the purpose of the RFA.

Table 1. Estimated Dairy Herd Statistics in Federal Milk Marketing Order Areas, 2022

Order #	Licensed Dairy Herds	Average Herd Size	Average Sales per Herd
		<i>Head</i>	<i>Mil. \$/Yr</i>
1	3,668	171	\$1.0
5	769	231	\$1.3
6	56	1,617	\$9.1
7	620	394	\$2.0
30	8,338	352	\$1.4
32	2,125	772	\$3.2
33	4,107	211	\$1.4
51	1,115	1,544	\$8.7
124	508	777	\$4.6
126	435	2,085	\$12.5
131	80	2,463	\$14.4

Estimates by National Milk Producers Federation

As mentioned previously, Dr. Brown's analysis and testimony will show that the Federal Order modernization changes proposed by NMPF will have a modest, positive impact on the average price of milk received by the mostly small businesses that are dairy farmers in the United States. Also as previously mentioned, any and all changes to the prices of individual dairy products, and to the Federal Order component and class prices resulting from these proposals, and therefore to the uniform prices received by dairy farmers in individual orders and regions, will be limited to those necessary to reflect changes in the costs of manufacturing those products, changes in the costs of supplying milk to processors of those products, changes in the value of the milk supplied by producers to those processors, or other changes necessary to more closely align the regulated minimum value of milk with the market value of the products from which it is produced, as translated by the Federal Order product price formulas. This will also apply to any processors and manufacturers of dairy products which are also small businesses.

Concluding comment and proposed regulatory changes

NMPF sincerely wishes to thank Secretary Vilsack and the Department for holding this important hearing and for thoughtfully considering adoption of its proposed amendments to the Federal milk marketing order regulations. NMPF has devoted considerable time and resources to thoughtfully considering and recommending the important changes it considers necessary to correct the growing misalignment between the dynamic changes in the U.S. dairy industry since Federal Order Reform and the largely unchanged factors in the critical federal order component and class price formulas originally adopted at that time. Together, NMPF is requesting the Secretary to amend certain provisions of 7 C.F.R. § 1000.50-52, applicable to all Federal milk

marketing orders, and 7 C.F.R. §1005.51(b), §1006.51(b), and §1007.51(b). The changes to these regulations that Proposal 1 would entail are as follows:

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

* * * * *

(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~~ **the applicable nonfat solids component factor described in § 1000.51.**

* * * * *

(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 ~~3.4~~ **the applicable protein component factor described in § 1000.51** plus the other solids price per pound times ~~5.9~~ **the applicable other solids component factor described in § 1000.51.**

* * * * *

(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~~ **the applicable nonfat solids component factor described in § 1000.51.**

(q) *Advanced pricing factors.* ...

(1) ...

(i) ...

(ii) Multiply the protein price computed in paragraph (q)(1)(i) of this section by ~~3.4~~ **the applicable protein component factor described in § 1000.51;**

(iii) Multiply the other solids price per pound computed in paragraph (q)(1)(i) of this section by ~~5.9~~ **the applicable other solids component factor described in § 1000.51;** and

(iv) ...

(2) ...

(i) ...

(ii) Multiply the nonfat solids price computed in paragraph (q)(2)(i) of this section by ~~9~~ **the applicable nonfat solids component factor described in § 1000.51.**

* * * * *

§ 1000.51 ~~{Reserved}~~ Milk Component Factors

- (1) Upon the implementation of this Order, the component factor for protein, other solids and nonfat solids shall be the following:**
 - (i) Protein 3.1;**
 - (ii) Other solids 5.9; and**
 - (iii) Nonfat solids 9.0.**

- (2) Beginning the first day of the 12th month after implementation of this Order, the component factors for protein, other solids and nonfat solids shall be the following:**
 - (i) Protein 3.39;**
 - (ii) Other solids 6.02; and**
 - (iii) Nonfat solids 9.41.**

- (3) By February 28th of the third year following the announcement of any change in the protein, other solids and nonfat solids component factors of producer skim milk under this section, those component factors shall each be updated to the simple averages of their respective three most recent calendar year weighted-average component tests of producer skim milk in all Orders, rounded to two decimal places, as calculated by AMS, if the resulting nonfat solids factor differs by at least 0.07 percentage points from that currently in effect.**
 - (i) Implementation of the updated component factors under this paragraph shall be announced no later than 5 days after the calculation that triggers a change and shall become effective the first day of March of the following year.**
 - (ii) If a change in the component factors is not indicated by the calculation described in this paragraph, then the calculation shall be repeated the following year, and any change in the existing skim milk component factors shall be announced and implemented as described in this paragraph.**