INTERNATIONAL DAIRY FOODS ASSOCIATION TESTIMONY IN OPPOSITION TO NATIONAL MILK PRODUCERS FEDERATION PROPOSAL 1: UPDATE THE MILK COMPONENT FACTORS IN THE SKIM MILK PRICE FORMULAS; AND IN OPPOSITION TO NATIONAL ALL JERSEY PROPOSAL 2: UPDATE ANNUALLY THE MILK COMPONENT FACTORS IN THE SKIM MILK PRICE FORMULAS

This testimony is submitted on behalf of the International Dairy Foods Association (IDFA) in opposition to National Milk Producers Federation Proposal 1 and National All Jersey Proposal 2.

IDFA represents the nation's dairy manufacturing and marketing industry, which supports more than 3.2 million jobs that generate $49 billion in direct wages and $794 billion in overall economic impact. IDFA's diverse membership ranges from multinational organizations to single-plant companies, from dairy companies and cooperatives to food retailers and suppliers, all on the cutting edge of innovation and sustainable business practices. Together, they represent manufacturers of cheese, milk proteins, ice cream, yogurt, cultured products, and dairy ingredients produced and marketed in the United States and sold throughout the world.

As buyers and processors of milk, the members of IDFA have a critical interest in these hearings. Most of the milk bought and handled by IDFA members is purchased under the Federal milk marketing orders promulgated pursuant to the Agricultural Marketing Agreement Act of 1937 (the "AMAA").

I am Mike Brown, Chief Economist for IDFA since January 2023. In that role, I lead economic and policy analysis and strategy development related to dairy policy and pricing. I have testified on many occasions in hearings held by USDA to consider amendments to federal milk marketing orders.

I am an expert on milk pricing policy and have worked for both farmer-owned cooperatives and proprietary businesses, all of which are current IDFA members. Before joining IDFA, I led from 2015 through early 2023 the milk and dairy procurement team for The Kroger Co., one of the country's largest supermarket operators by revenue, as Director of Dairy Supply Chain. In addition to being a retailer, Kroger operates approximately 14 Company-owned dairy plants, as well as 2 cheese packaging plants. As Director of Dairy Supply Chain, I was responsible for a four-member team buying all raw dairy materials for all 17 plants, as well as for buying Kroger-branded dairy products co-packed for Kroger by third parties. My team was also responsible for purchasing non-dairy plant-based fluid beverage products.

Prior to Kroger, I served as a dairy economist for well-known dairy brands and organizations including Glanbia, Darigold and National All-Jersey, Inc. Glanbia is a worldwide company whose operations include cheese, sports nutrition products, and dairy ingredients. As director of dairy economics and policy for Glanbia Cheese from 2007 through 2015, I was responsible for market and farm cost analysis, and supported Glanbia's producer risk management programs and company efforts on U.S. dairy and trade policy, along with other industry initiatives.

Prior to Glanbia, I was director of membership services for Darigold. Headquartered in Seattle, Washington, Darigold is owned by the Northwest Dairy Association, a farmer cooperative with approximately 350 dairy farm members located in Washington, Oregon, Idaho, and Montana. My responsibilities included managing and providing communications and information to Darigold's farmer members. This included supervising field personnel who provided members technical advice and assistance with respect to marketing insights and milk quality management.

From 1993-2004, I was general manager of National All-Jersey, Inc., a dairy producer trade association. In that position, I led efforts to expand multiple component pricing through private plant incentives and federal milk marketing order reform.

I was raised on a small dairy farm in Western, N.Y. and earned my bachelor's degree in dairy science from Virginia Tech.

I. Summary of IDFA's Objections.

IDFA opposes Proposals 1 and 2. In the guise of a supposedly simple "update" of the milk component factors in the Class III and Class IV skim milk price formulas to reflect what is claimed to be current average non-fat component levels, the proposals would require handlers to pay for components that (a) often do not actually exist in the milk they receive and (b) have no value even when they do exist. Specifically:

(a). The Impact of Proposals 1 and 2 on Class II, III and IV Milk. Proposals 1 and 2 would increase by between \$0.37/cwt and \$0.72/cwt the minimum milk prices that Class II, III and IV handlers must pay in the four federal orders that do not use Multiple Component Pricing (MCP). Proposals 1 and 2 would do that by: (a) calculating the national average federal order component levels; (b) assuming that nonfat solid, protein and other solids component levels in the four fat-skim orders are equal to those averages, and (c) requiring handlers to pay for their milk based upon those averages.

But milk in the four fat-skim orders in fact has significantly lower average nonfat component levels than the national averages. This is what one would expect, given that federal order formulas in the seven MCP orders provide hefty financial incentives to farmers to produce milk with higher skim component levels, while the formulas in the four fat-skim orders do not. By basing minimum prices on component levels that do not actually exist in the four fat-skim orders, Proposals 1 and 2 would overcharge Class II, III and IV handlers in the four fat-skim orders by tens of millions of dollars a year. And, that burden would not be spread among handlers nationwide, but would instead fall upon the handlers in the four fat skim orders. (As I will explain, Proposals 1 and 2 would have no effect, positive or negative, on Class III and IV pricing in the seven MCP orders.)[1]

I should emphasize that the question is not whether Proposals 1 and 2's calculations of average component level in all federal orders combined include or exclude the component levels in the fat skim orders. The question is whether one should charge handlers in the fat skim orders for milk used for Classes II, III and IV purposes as if the actual component levels in those four orders were equal to the average national component levels, when in fact they are not.

(b). The Impact of Proposals 1 and 2 on Class I Milk. Our analysis shows that had Proposals 1 and 2 been in place over the past five years, the minimum milk prices for Class I handlers in all eleven federal orders would have increased by roughly $0.52/cwt, based on the current Class I formula. Proposals 1 and 2 would again do that by changing federal order milk component assumptions based upon increases in the

[1] For purposes of completeness, I will note that Proposals 1 and 2 would have a very small -$0.0034 impact on Class II prices in the 7 MCP orders. This is because the proposed increase in the Class IV component assumption from 9.0 to 9.41 would carry through to the pricing of Class II milk. However, because the Class II differential of $0.70 would be divided by the new component assumption of 9.41 rather than 9.0, the actual impact is only the -$0.0034 referenced above. I explain this further in Attachment D.

average nonfat solids, protein and other solids component levels in farmer milk in the federal order system.

Higher nonfat solids, protein and other solids component levels are of value to Class II, III and IV handlers, because they increase the number of pounds of product that can be produced from a given amount of milk. But higher skim component levels are of no economic value whatsoever to Class I handlers or the consumers of Class I products:

-- Class I handlers cannot dilute or separate and sell any of the higher skim components because Federal standards of identity do not allow standardization of fluid milk to lower solids not fat levels than occur in any milk, regardless of level.

-- Nor can a higher minimum milk price for higher skim component be recovered in the marketplace. With the exception of a handful of specialty products, consumers do not ascribe a higher value to milk because it has somewhat higher nonfat solids levels.

This is a reality that USDA explicitly recognized when MCP orders were first instituted, at which time it considered, and rejected, the very theory upon which Proposals 1 and 2 are predicated. USDA concluded:

> There was no evidence, that protein content has any effect on the value of fluid milk products at all. On the contrary, there appears to be general agreement that consumers are not willing to pay more for fluid milk with a higher-than-average protein content than they are for low-protein milk. Handlers cannot easily remove protein from fluid milk products to add it to products in which it would have value, and it is illegal for them to add water to milk to reduce its protein content. Therefore, **handlers obtain no discernable difference in economic benefit from the various levels of protein contained in milk used in fluid milk products, and there is no justification for requiring them to pay for such milk according to its protein content.**

> Milk In the Great Basin and Lake Mead Marketing Areas; Decision on Proposed Amendments to Marketing Agreements and to Orders, 53 Fed. Reg. 686, *et seq*. at 702 (January 11, 1988).

The cost of Proposals 1 and 2 to handlers, in terms of higher regulated minimum prices, would likely exceed $270 million a year. Like the famous Dire Straits rock song, these payments would truly represent "Money for Nothing."

II. HOW PROPOSALS 1 AND 2 WOULD OPERATE.

Proposal 1 would amend the milk component factors in Class III and Class IV skim milk price formulas. Specifically, the proposal would increase the skim component factors in current pricing formulas to equal the 2022 weighted average nonfat solids, true protein, and other solids factors for milk pooled on Federal orders, with a 12-month implementation lag.

Based upon reported data, Proposal 1 proposes to increase the component factors as follows at the end of year one:

- Nonfat solids: Increase from 9.0 to 9.41 per hundredweight of Class IV skim milk;
- Protein: Increase from 3.1 to 3.39 per hundredweight of Class III skim milk; and
- Other solids: Increase from 5.9 to 6.02 per hundredweight of Class III skim milk.

Proposal 1 would subsequently update these factors no less than every three years, once the weighted average nonfat solids component for the prior three years changes by at least 0.07 percentage points. Proposal 2 differs from Proposal 1 only in that it would update these factors annually, and would not limit the update based on the magnitude of the change.

The vacuity of these proposals is revealed when one examines how the proposals would actually operate within the federal order system. We address separately the effect of the proposals on Classes II, III and IV, and then the effect on Class I.

III. THE EFFECT OF PROPOSALS 1 AND 2 ON CLASSES II, III AND IV.

I will address in turn the effect of Proposals 1 and 2 on Classes II, III and IV in the seven MCP orders, and then the effect of Proposals 1 and 2 in the four fat-skim orders.

A. Proposals 1 and 2's Effect on Prices for Class II, III and IV Milk in the Seven MCP Orders.

Seven federal orders (Northeast, Mideast, Upper Midwest, Central, Southwest, California and Pacific Northwest) have adopted multiple component pricing "to determine both the handler's and producer's value of milk."[2] In the seven MCP orders, the "producer's pay price is based on the butterfat, protein, and other solids components in their producer milk and a producer price differential for the cwt of milk pooled."[3]

In other words, in the seven MCP orders, a handler's payment obligations, and producer's receipts, are based upon the ***actual*** component levels in the producer milk used by the individual handler to make Class II products, Class III products, and/or Class IV products. See, e.g., 7 C.F.R. 10033.60(a) (Mideast Order) ("For the purpose of computing a handler's obligation for producer milk…the nonfat components of producer milk in each class shall be based upon the proportion of such components in producer skim milk.") **The assumed component levels that Proposals 1 and 2 would increase**

[2] See USDA, Milk in California; Recommended Decision and Opportunity To File Written Exceptions on Proposal To Establish a Federal Milk Marketing Order, 82 FR 10634, 10669 (Feb. 14, 2017).

[3] See USDA, Proposed Rule, Milk in California, Proposal To Establish a Federal Milk Marketing Order, 83 FR 14110, 14150 (Apr. 2, 2018).

play no role at all in determining handler obligations or producer receipts with respect to Classes III and IV in the MCP orders. Specifically:

Class II. Handlers in MCP orders pay for milk used to make Class II products based on the actual levels of nonfat solids pounds and butterfat pounds in the milk they have received, see, e.g., 7 C.F.R. 1033.60(b):

> **(b)** Class II value.
>
> **(1)** Multiply the pounds of nonfat solids in Class II skim milk by the Class II nonfat solids price; and
>
> **(2)** Add an amount obtained by multiplying the pounds of butterfat in Class II times the Class II butterfat price.

Class III. Handlers in MCP orders pay for milk used to make Class III products based on the actual levels of protein, other solids and butterfat in the milk they have received, see, e.g., 7 C.F.R. 1033.60(c):

> **(c)** Class III value.
>
> **(1)** Multiply the pounds of protein in Class III skim milk by the protein price;
>
> **(2)** Add an amount obtained by multiplying the pounds of other solids in Class III skim milk by the other solids price; and
>
> **(3)** Add an amount obtained by multiplying the pounds of butterfat in Class III by the butterfat price.

Class IV. Handlers in MCP orders pay for milk used in Class IV products based on actual levels nonfat solids pounds and butterfat in the milk they have received, e.g., 7 C.F.R. 1033.60(d):

> **(d)** Class IV value.
>
> **(1)** Multiply the pounds of nonfat solids in Class IV skim milk by the nonfat solids price; and
>
> **(2)** Add an amount obtained by multiplying the pounds of butterfat in Class IV by the butterfat price.

This approach to pricing Class II, III and IV milk makes sense, because the product yield and resulting milk value to handlers depends upon the levels of the specified components in the milk. As USDA has recognized, "[c]components of milk have values that are recognized by the marketplace and producers have expressed the desire for having their pay prices adjusted according to such values."[4] As the formulas quoted above make clear, the value of the components vary depending upon which class of product (II, III or IV) is being made.

Pricing in the MCP orders for Classes III and IV would not be affected, positively or negatively, by Proposals 1 or 2, given that, under the regulations quoted above, pricing for milk used to make Classes III and IV products in MCP orders is directly based upon the actual component levels in the milk received by the handler times the price of the component (i.e., the price of nonfat solids, the price of butterfat, the price of other solids, and the price of protein). Pricing for milk used for Class II in MCP orders is likewise directly based upon the actual component levels in the milk received by the handler times the price of the components used to price Class IV milk, see, e.g., 7 C.F.R. 1050(f), (e) (basing the Class II skim price on the Class IV skim price). **In other words, farmers in the seven MCP orders are already being paid in full for higher component levels in their milk when used for Class II, III, or IV products.** In short, the order language revisions proposed by Proposals 1 and 2 have no relevance to Class II, III and IV in the seven MCP orders.

[4] USDA, Milk in the New England and Other Marketing Areas; Decision on Proposed Amendments to Marketing Agreements and to Orders, 64 FR 16026, 16141(Apr. 2, 1999).

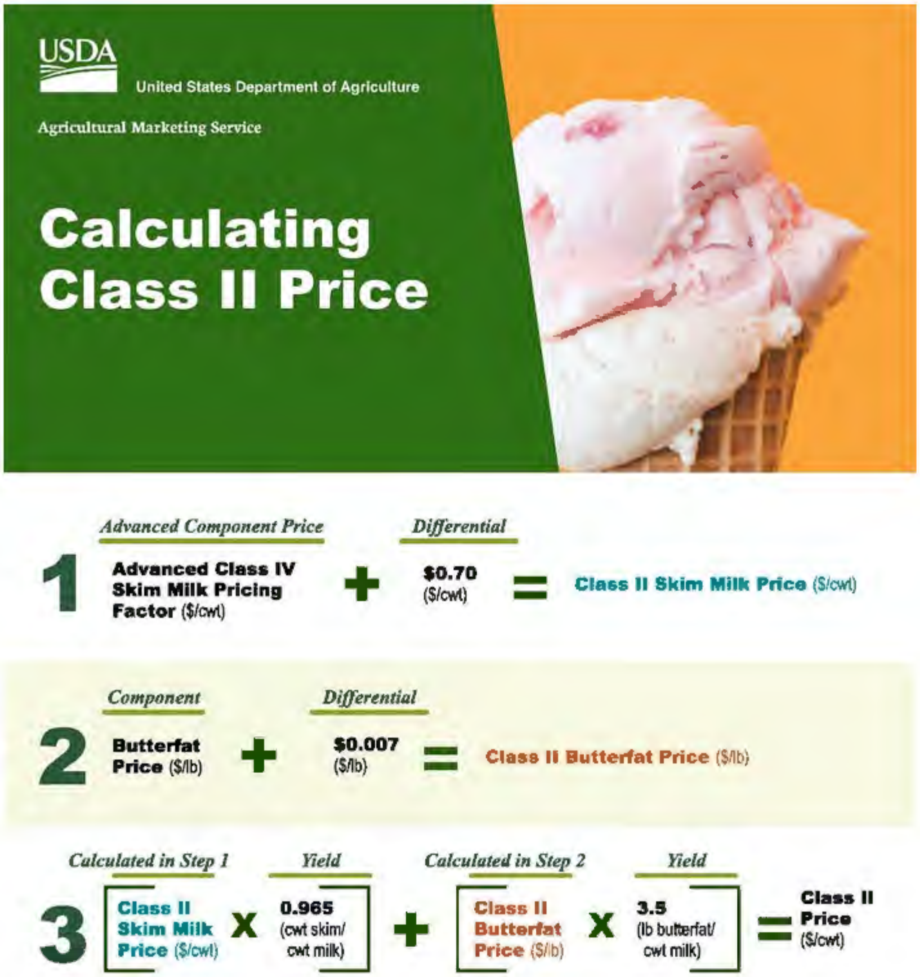
B. Proposals 1 and 2's Effect on Prices for Class II, III and IV Milk in Fat-skim Orders.

The story is different for the fat-skim orders. Unlike in the seven MCP orders, in the four fat-skim orders (Arizona, Appalachian, Southeast and Florida), dairy farmers are *not* paid for milk used to make Class II, III and IV products based on the actual levels of the various dairy components in their milk. Rather, farmers are paid based solely upon the butterfat pounds and skim milk pounds in the milk. See, e.g., 7 C.F.R. 1007.60 (Southeastern order) ("Multiply the pounds of skim milk and butterfat in producer milk that were classified in each class … by the applicable skim milk and butterfat prices.")

1. How Proposals 1 and 2 Would Operate on Classes II, III and IV in the Four Fat Skim Orders

Proposals 1 and 2 would adjust the formulas under which nonfat solids, other solids and protein are valued in pricing the skim milk component of Class II, III and IV milk. But this would ***not*** be based upon the actual levels of those components in the farmer milk received by handlers in these fat-skim orders, as is currently the case with Class II, III and IV handlers in the MCP orders. Rather, this would be based upon the purported average levels of the three components in the federal order system, and upon Proposals 1 and 2's increase of those component levels. Specifically:

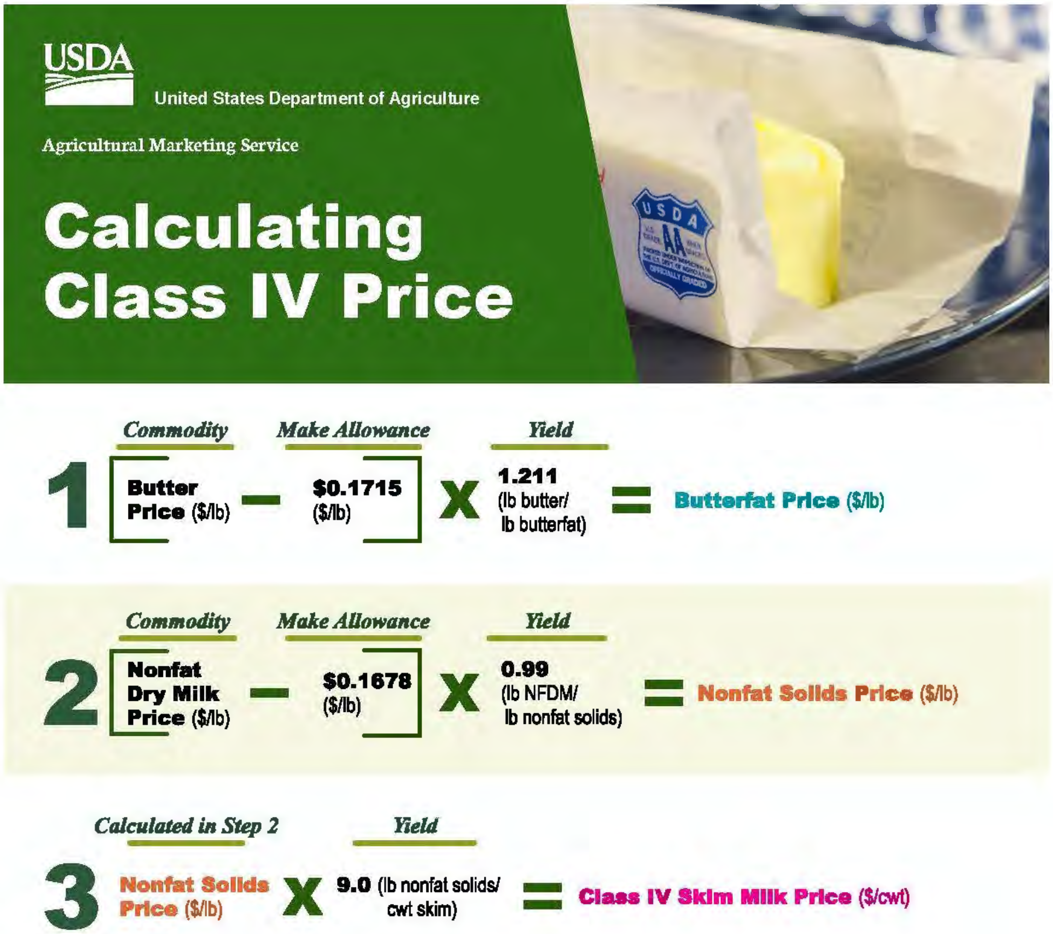
Class II. As noted, Class II obligations in fat-skim orders are determined by the pounds of skim milk and butterfat in the milk times the applicable Class II price for skim milk and butterfat. See, e.g., 7 C.F.R. 1007.60 (Southeastern order) ("Multiply the pounds of skim milk and butterfat in producer milk that were classified in each class … by the applicable skim milk and butterfat prices.") The "applicable skim milk price" for Class II is calculated as set forth in the USDA chart "Calculating Class II price," available at https://www.ams.usda.gov/sites/default/files/media/ClassIIworksheetfinal.pdf as follows:



For present purposes, the key is step 1, which bases the Class II Skim Milk Price on the Advanced Class IV Skim Milk Pricing Factor plus $0.70. USDA has indicated that "both the Class III and IV Advanced Skim Milk Pricing Factors …are identical to those used to compute the Class III and IV Skim Milk Prices announced on or before the 5th of the following month, except for the time series of data used." https://www.ams.usda.gov/sites/default/files/media/ClassIworksheetfinal.pdf. Thus, the

Class II Skim Milk Price is based on the formula for determining the Class IV Skim Milk price, plus $0.70.

The formula for determining the Class IV Skim Milk Price is as follows:

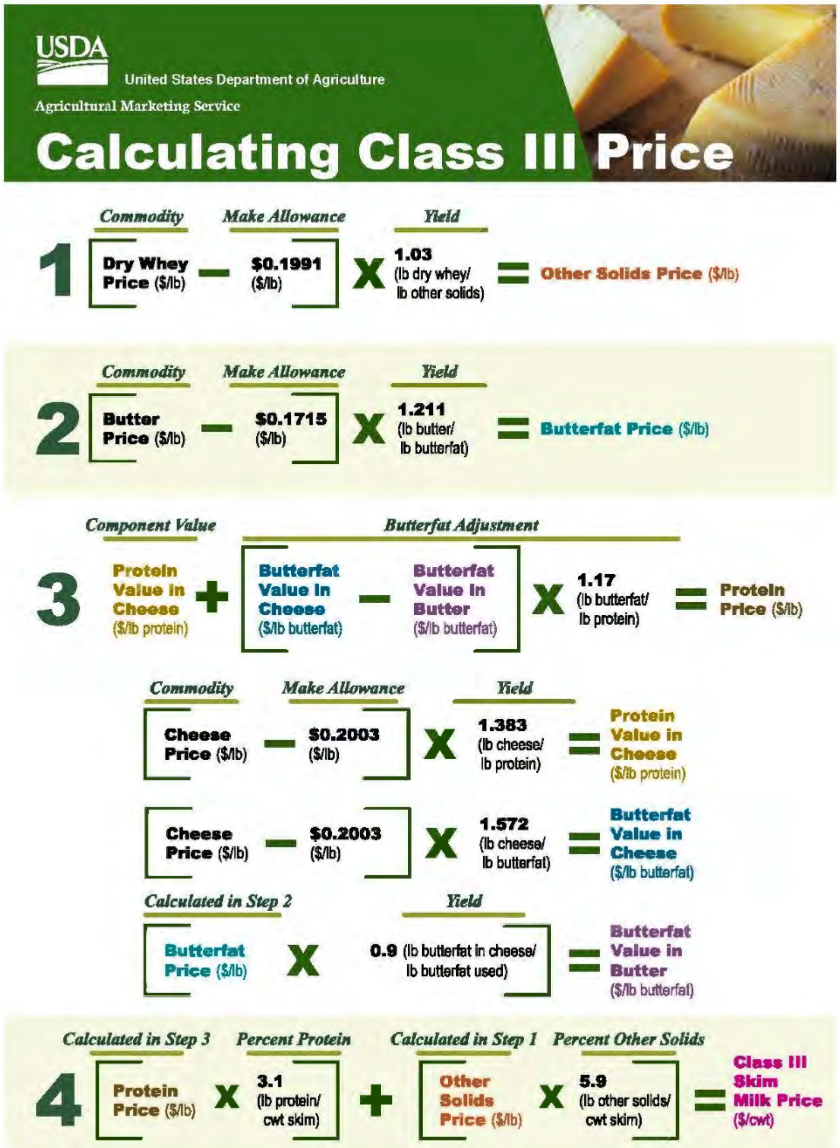


For present purposes, the key is step 3. Under Proposals 1 and 2, the nonfat solids assumption for Class IV skim milk would be increased from 9.0 pounds/cwt skim milk to 9.41 pounds/cwt skim milk. See Proposal 1, Proposed New Section 1000.51. This increase would inevitably increase the Class IV Advanced Skim Milk Price, and thus the Class II Skim Milk Price, given that, as we have shown using the USDA Chart for Class II pricing on p. 10 above, the Class II Skim Milk Price is the Class IV Advanced Skim Milk Price plus $0.70/cwt. And, as noted, the increase in the nonfat solids assumption for

Class IV skim milk from 9.0 pounds/cwt skim milk to 9.41 pounds/cwt skim milk is based upon the increase in the reported average nonfat solids level in the seven MCP orders, not upon the nonfat solids level in Class IV milk in the fat-skim orders.

Class III. As noted, Class III obligations in fat-skim orders are determined by the pounds of skim milk and butterfat in the milk times the applicable Class III price for skim milk and butterfat. See, e.g., 7 C.F.R. 1007.60 (Southeastern order) ("Multiply the pounds of skim milk and butterfat in producer milk that were classified in each class … by the applicable skim milk and butterfat prices.") The "applicable skim milk price" for Class III is calculated as set forth in the relevant portions of the USDA chart "Calculating Class III price," available at:

https://www.ams.usda.gov/sites/default/files/media/ClassIIIworksheetfinal.pdf:



For present purposes, the key is step 4. Under Proposals 1 and 2, the "Percent Protein" assumption for Class III skim milk would be increased from 3.1 pounds/cwt skim milk to 3.39 pounds/cwt skim milk, and the "Percent Other Solids" would be increased from 5.9 pounds/cwt skim milk to 6.02 pounds/cwt skim milk. See Proposal 1, Proposed New Section 1000.51. Both of these increases would significantly increase the Class III Skim Milk Price, and thus the Class III Price. And, as noted, the increase in the "Percent Protein" assumption for Class III skim milk from 3.1 pounds/cwt skim milk to 3.39

pounds/cwt skim milk, and the increase in the "Percent Other Solids" assumption for Class III skim milk from 5.9 pounds/cwt skim milk to 6.02 pounds/cwt skim milk, is based upon the increase in the reported average protein and other solids levels in the seven MCP orders, not upon the protein and other solids levels in Class III milk in the fat-skim orders.

Class IV. As noted, Class IV obligations in fat-skim orders are determined by the pounds of skim milk and butterfat in the milk times the applicable Class IV price for skim milk and butterfat. See, e.g., 7 C.F.R. 1007.60 (Southeastern order) ("Multiply the pounds of skim milk and butterfat in producer milk that were classified in each class … by the applicable skim milk and butterfat prices.") The "applicable skim milk price" for Class IV is calculated as set forth in the USDA chart "Calculating Class IV Price." available at https://www.ams.usda.gov/sites/default/files/media/CalculatingClassIVPrice.pdf, which I have already set forth on p. 11 above. The part of that formula relevant here is:

Under Proposals 1 and 2, the nonfat solids assumption for Class IV skim milk would be increased from 9.0 pounds/cwt skim milk to 9.41 pounds/cwt skim milk. See Proposal 1, Proposed New Section 1000.51. This increase would increase the Class IV Skim Milk Price and thus the Class IV Price. And, as noted, the increase in the nonfat solids assumption for Class IV skim milk from 9.0 pounds/cwt skim milk to 9.41

pounds/cwt skim milk is based upon the increase in reported average nonfat solid, not upon the nonfat solids level in Class IV milk in the Four Fat Skim orders.

2. The Dollar Impact of Proposals 1 and 2 on Class II, III and IV in the Four Fat Skim Orders.

The impact of Proposals 1 and 2 on Class II, III and IV minimum regulated prices in the Four Fat Skim Orders is reflected in Table 1 below:

TABLE 1

NMPF Skim Proposal Adjustments Per Cwt. SKIM Milk & Class II SNF

Year	Advance Class III	Advance Class IV	Current 50:50	Higher Of	Class II	Class III	Class IV	Class II SNF
2013	$1.00	$0.61	$0.80	$0.69	$0.61	$1.01	$0.62	-$0.0035
2014	$1.17	$0.68	$0.92	$0.98	$0.68	$1.16	$0.65	-$0.0034
2015	$0.71	$0.32	$0.52	$0.69	$0.32	$0.67	$0.30	-$0.0035
2016	$0.58	$0.26	$0.42	$0.56	$0.26	$0.62	$0.27	-$0.0034
2017	$0.58	$0.29	$0.44	$0.57	$0.29	$0.57	$0.28	-$0.0034
2018	$0.52	$0.25	$0.38	$0.50	$0.25	$0.50	$0.25	-$0.0035
2019	$0.64	$0.35	$0.49	$0.59	$0.35	$0.71	$0.35	-$0.0032
2020	$1.14	$0.36	$0.75	$1.14	$0.36	$1.11	$0.35	-$0.0035
2021	$0.85	$0.43	$0.64	$0.83	$0.43	$0.85	$0.45	-$0.0034
2022	$0.84	$0.62	$0.73	$0.66	$0.62	$0.84	$0.61	-$0.0034
5-Year	$0.80	$0.40	$0.60	$0.74	$0.40	$0.80	$0.40	-$0.0034
10 Year	$0.80	$0.42	$0.61	$0.72	$0.42	$0.80	$0.41	-$0.0034

The calculations for Table 1 appear in Attachment A.

In sum, Proposals 1 and 2 would, using the most recent 5-year average, increase minimum skim milk prices in the four fat-skim orders by $0.40/cwt for Class II milk, $0.80/cwt for Advanced Class III milk, and $0.40/hundredweight for Advanced Class IV milk. Given that 2.255 billion pounds of skim milk were pooled in Class II in 2022 in the four fat-skim orders,[5] 1.977 billion pounds of skim milk were pooled in Class III in 2022 in

[5] USDA, Utilization of Producer Milk in Class II, available at:

those four orders;[6] 2.038 billion pounds of skim milk were pooled in Class IV in 2022 in those four orders,[7] **Proposals 1 and 2's would increase minimum milk price costs for Class II, III and IV milk in the four fat-skim orders by $33 million per year**.[8] This impact is also shown in greater detail in Table 2 on the next page.

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https://www.ams.usda.gov/sites/default/files/media/ClassIIUtilization2022.xlsx

[6] USDA, Utilization of Producer Milk in Class III, available at: https://www.ams.usda.gov/sites/default/files/media/ClassIIIUtilization2022.xlsx

[7] USDA, Utilization of Producer Milk in Class IV, available at: https://www.ams.usda.gov/sites/default/files/media/ClassIVUtilization2022.xlsx

[8] The math is as follows: 2,492,000,000 pounds pooled in Class II in the four order divided by 100 pounds per hundredweight times $0.35 increase in Class II price times 0.965 equals $8,722,326; 2,096,000,000 pounds pooled in Class III in the four order divided by 100 pounds per hundredweight times $0.73 increase in Class III price times 0.965 equals $15,300,800; and 2,094,000,000 pounds pooled in Class IV in the four order divided by 100 pounds per hundredweight times $0.30 increase in Class IV price times 0.965 equals $6,282,000; and $8,722,326 plus $15,300,800 plus $6,282,000 equals $32,745,452.

TABLE 2

Impact of NMPF Proposal 1 on Skim Milk Costs, by Federal Order

	Class I Skim Difference	Class II Skim Difference	Class II SNF Difference	Class III Skim Difference	Class IV Skim Difference	Total II,III,IV Difference	Total Skim Price Difference
	Million $$	Million $$	Million $$	Million $$	Million $$	Million $$	Million $$
Northeast	$46.6	--	-$1.3	--	--	-$1.3	$45.4
Upper Midwest	$12.9	--	-$0.1	--	--	-$0.1	$12.8
Central	$25.6	--	-$0.2	--	--	-$0.2	$25.4
Mideast	$36.5	--	-$0.3	--	--	-$0.3	$36.2
California	$27.7	--	-$0.2	--	--	-$0.2	$27.5
Pacific Northwest	$9.5	--	-$0.1	--	--	-$0.1	$9.4
Southwest	$22.6	--	-$0.1	--	--	-$0.1	$22.5
MCP Orders	$181.5	--	-$2.3	--	--	-$2.3	$179.2
Appalachian	$22.4	$2.6	--	$3.3	$1.7	$7.6	$29.9
Florida	$12.1	$1.2	--	$0.3	$0.1	$1.7	$13.8
Southeast	$16.6	$2.7	--	$1.5	$0.6	$4.7	$21.3
Arizona	$7.8	$2.6	--	$10.8	$5.8	$19.1	$26.9
Fat-Skim Orders	$58.9	$9.0	--	$15.8	$8.2	$33.0	$91.8
All Orders Combined	$240.3	$9.0	--	$15.8	$8.2	$33.0	$271.0

Sources: Hearing Exhibit 44, *MilkComponentsbyClassandOrder20082023YTD.xlsx*
Hearing Exhibit 16, *AnnouncementofClassandComponentPrices2000_2023YTD.xlsx*
Hearing Exhibit 15, *AnnouncementofAdvancedPricingandPricingFactors* _2000_2023YTD.xlsx

The calculations underlying this table are set forth in Attachment C.

This higher cost for skim milk in the fat-skim orders would fall mostly on local Class II manufacturers producing ice cream products, Greek Yogurt, and cottage cheese in the Southeast, along with milk leaving the area, mostly seasonally, for balancing purposes

Proposals 1 and 2 are entirely predicated on the notion that it is appropriate to require Class II, III and IV handlers in the fat-skim orders to pay a minimum price based upon the assumption that the components in the milk being supplied for Class II, III and IV in the four fat-skim orders are equal to the reported national average component levels in milk pooled on all federal orders. So the $33 million question is: does this assumption make sense?

Even as a matter of pure logic, this assumption of equivalent component levels is exceedingly unlikely to be correct. The farmers in the seven MCP orders, which represent 89% of all milk pooled in the federal order system, have for many years been financially motivated by MCP pricing (which as noted increases the price paid to the farmer as the level of components in his or her milk increases) to engage in feeding, breeding, breed selection, and other efforts to increase nonfat solids, protein and other solids component levels. That is good for both farmers, because they are paid more for their milk, and for Class II, III and IV processors in the MCP orders, which obtain higher levels of the components that help make their products.

As one prominent observer from the dairy farmer side of the industry, Calvin Covington, the former CEO of dairy cooperative Southeast Dairy, Inc., has commented:

> One of the objectives of MCP is to give dairy farmers the economic incentive to increase the component content of their milk production, especially protein. It is the solids in milk (butterfat, protein, other solids) that determine the yield of most manufactured products.
>
> In manufacturing cheese, which utilizes more than half of the nation's milk production, protein is the most important factor in determining yield. In other words, the more protein in milk, the more cheese manufactured from that milk. Dairy farmers have responded positively to MCP, especially in increasing protein content. What have dairy farmers done to increase the components in their milk production, especially protein? It is a combination of several factors. MCP allows dairy farmers to easily and directly see the contribution of the different components to their milk check, which encourages improvement. Thus, through their breeding and nutrition programs, dairy farmers focus more on improving protein content. Most A.I. companies emphasize the protein transmitting ability of their sires. Plus, the increased use of Jersey genetics has aided the improvement of milk component levels as well.

"14 years of multiple component pricing: What has changed?" (Apr. 15, 2015) (Hearing Exhibit 65).

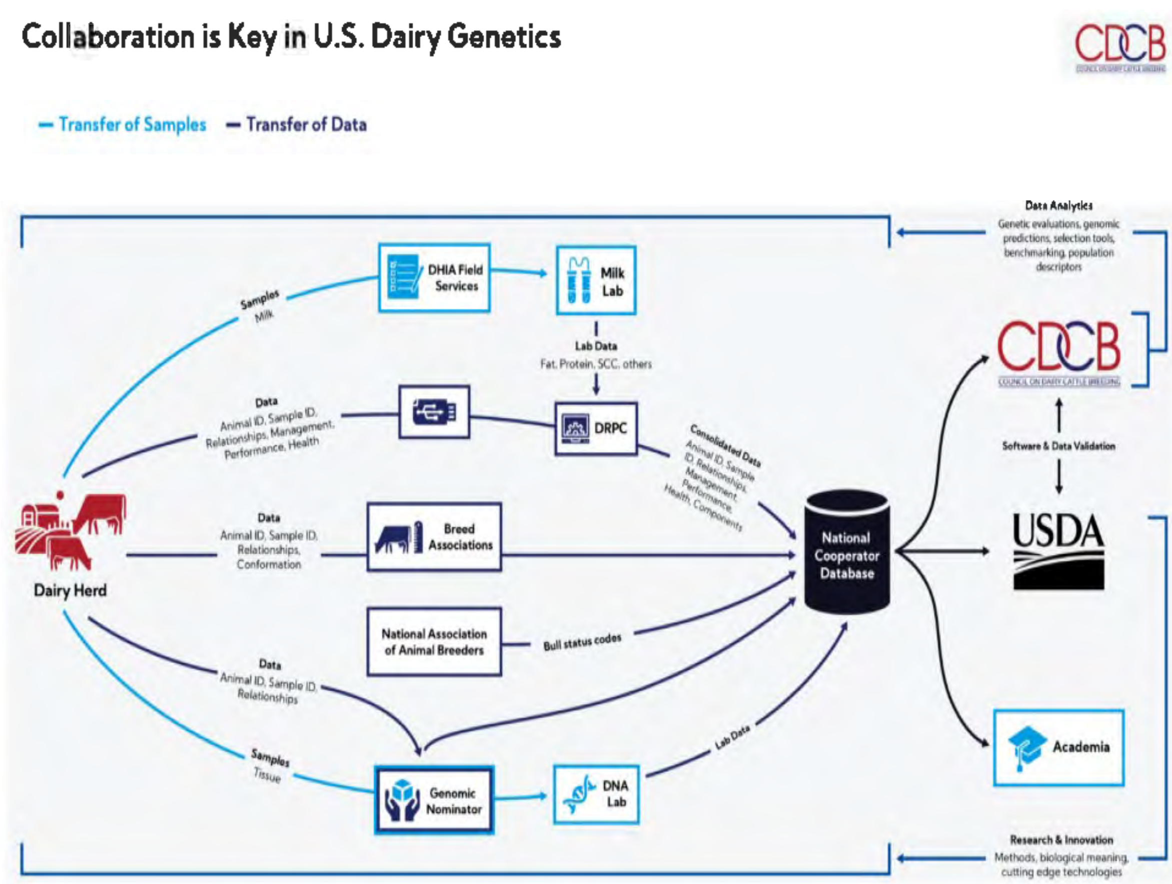
Those efforts to increase component levels in MCP orders are necessarily reflected in the average federal order component levels upon which Proposals 1 and 2 rely. Indeed, given that MCP orders represent 89% of all milk pooled, the increased component levels in MCP orders dominate any calculation of average federal order component levels.

By contrast, farmers in the four fat-skim orders have not been given this financial motivation to increase component levels, because actual component levels (other than butterfat) play no role whatsoever in how much they are paid for their milk. **It would defy logic that their milk would contain protein, nonfat solids and other solids concentrations at the levels achieved in MCP orders, when they (unlike MCP order farmers) have not been paid more to achieve those results.**

To the contrary, given that farmers in the seven MCP orders have been incentivized to increase component levels while farmers in the fat-skim orders have not, component levels in the fat-skim orders would as a matter of logic be below the average set by the MCP orders.

As expected, actual data supports this logical conclusion that components levels are lower in fat-skim orders than in the MCP orders upon which Proposals 1 and 2 are based. The one consistent information source of certain components levels in farmer milk is available through the efforts of the Dairy Herd Improvement Association (DHIA) and the Council on Dairy Cattle Breeding (CDCB). These organizations assist dairy farmers to improve dairy cattle milk health, productivity and quality. They work through a multi-tier operation, in which Dairy Records Providers (DRPs) are state or regional organizations that gather on-farm data in an accurate, credible and uniform manner, for herd management, research and genetic evaluations; Dairy Records Processing Centers (DRPCs) develop computerized software to normalize data coming from farms and transfer to the CDCB cooperator database for research and genetic evaluations; and the CDCB maintains the national cooperator database – the world's largest animal database – that integrates genomic information and more than 80 years of recorded U.S. dairy animal performance. Genotypic and pedigree data from genotyping labs and genomic nominators – like breed associations and genetic companies – combines with phenotypic (performance) data from the Dairy Herd Improvement (DHI) system, breed associations, international partners and research institutions. USDA originally established the database, which was transferred to CDCB in 2013. USDA remains a key partner through world-renowned research at the Animal Genomics and Improvement Laboratory (AGIL). See DHIA – National Dairy Herd Information Services, available at https://dhia.org/; CDCB - About CDCB, available at uscdcb.com.

The flowchart on the following page from the CDCB Website shows the relevant information flow.



The result is a publicly available, searchable database that allows one to determine certain milk component levels by, by state.

The URL source for DHI Information: The Council of Dairy Cattle Breeding (uscdcb.com)

SETTINGS for QUERY:

TYPE	Year Range	
YEAR	2000-2022	(Arrow back to Year 2000. Hold Shift Key and arrow to 2022 to get the range)
METRIC	Herd Averages	

STATISTICS DHI Plan Tag

STATE

PLAN All Items

BREED All Items

I personally accessed this CDCB database, and in Table 3 below calculated the following estimates regarding protein levels in skim milk in each of the eleven federal orders from 2000 through 2022:

TABLE 3 **DHI Skim Milk Protein Content By Federal Order Regions**

	Federal Orders[1]											Combined Orders[2]	
YEAR	6	7	5	131	1	30	32	33	51	124	126	F/S	MCP
2001	3.12	3.19	3.16	3.15	3.13	3.17	3.20	3.16	3.30	3.20	3.24	3.15	3.19
2002	3.13	3.18	3.17	3.13	3.13	3.18	3.19	3.17	3.29	3.22	3.22	3.15	3.19
2003	3.12	3.20	3.16	3.10	3.15	3.17	3.19	3.17	3.29	3.23	3.24	3.14	3.20
2004	3.14	3.19	3.17	3.13	3.16	3.19	3.21	3.18	3.30	3.25	3.23	3.16	3.21
2005	3.07	3.20	3.17	3.12	3.16	3.16	3.19	3.14	3.29	3.24	3.22	3.14	3.19
2006	3.05	3.21	3.17	3.16	3.16	3.17	3.21	3.14	3.31	3.25	3.24	3.15	3.20
2007	3.00	3.23	3.19	3.20	3.18	3.17	3.21	3.16	3.30	3.28	3.26	3.15	3.21
2008	2.98	3.23	3.18	3.19	3.20	3.18	3.22	3.18	3.22	3.28	3.27	3.14	3.21
2009	3.00	3.21	3.16	3.18	3.19	3.16	3.20	3.18	3.29	3.28	3.28	3.13	3.21
2010	3.05	3.20	3.16	3.20	3.18	3.16	3.20	3.17	3.30	3.30	3.31	3.15	3.22
2011	3.10	3.24	3.18	3.23	3.18	3.18	3.23	3.18	3.30	3.30	3.34	3.18	3.23
2012	3.12	3.23	3.19	3.22	3.18	3.20	3.23	3.19	3.31	3.32	3.40	3.19	3.25
2013	3.08	3.21	3.19	3.26	3.18	3.23	3.25	3.21	3.33	3.33	3.41	3.19	3.26
2014	3.10	3.24	3.17	3.23	3.18	3.24	3.26	3.22	3.35	3.34	3.40	3.18	3.27
2015	3.06	3.21	3.16	3.23	3.19	3.22	3.23	3.20	3.34	3.36	3.41	3.16	3.26
2016	3.13	3.23	3.17	3.15	3.19	3.22	3.25	3.19	3.36	3.38	3.48	3.16	3.27
2017	3.07	3.29	3.22	3.21	3.21	3.24	3.28	3.22	3.40	3.41	3.49	3.19	3.30
2018	3.08	3.28	3.23	3.29	3.21	3.25	3.28	3.23	3.40	3.40	3.50	3.22	3.30
2019	3.01	3.33	3.23	3.24	3.24	3.26	3.29	3.25	3.41	3.43	3.52	3.20	3.32
2020	2.99	3.32	3.22	3.30	3.23	3.28	3.32	3.25	3.43	3.39	3.54	3.20	3.33
2021	3.23	3.32	3.23	3.36	3.28	3.32	3.32	3.29	3.46	3.44	3.57	3.28	3.36
2022	3.24	3.26	3.26	3.37	3.28	3.35	3.37	3.33	3.48	3.51	3.59	3.29	3.39
AVG 2019-22	3.15	3.30	3.24	3.34	3.26	3.32	3.34	3.29	3.46	3.45	3.57	3.26	3.36

[1] Individual Order estimates include the states marketing the greatest share of their mlk into that individual order.

[2] The combined F/S and MCP Order composition is weighted by total milk pooled in each individual order.

The DHI Database is extensive. The 2020-22 Data represents over 62 percent of the milk volume pooled in the Federal Orders during the same three years.

FMMO and DHI Milk Volumes, 2020-2022

Markets	FMMO Totals	DHI Totals	DHI % FMMO
MCP ORDERS	125,246,081,912	81,176,784,662	64.8%
Fat-Skim Orders	11,655,265,003	4,698,344,549	40.3%
All 11 Orders	136,901,346,915	85,875,129,211	62.7%

The 2022 CDCB/DHI protein average for the seven MCP orders is essentially identical to the 3.39% that Proposal 1 reports as the 2022 average protein levels for the seven MCP orders. This essentially identical number demonstrates that the CDCB component numbers are accurate and are not skewed by participation in DHI being voluntary. (For the reasons previously discussed, this similarity is relevant here only for purposes of verifying the accuracy of the CDCB database, given that in the seven MCP orders, farmers are paid based upon actual component levels in each load of milk delivered, based on the component tests performed on each load.)

For purposes of assessing the propriety of Proposals 1 and 2, the key takeaway is that **none of the four fat-skim orders have 2022 protein levels at the 3.39% level that Proposals 1 and 2 would adopt for purposes of setting minimum milk prices in the four fat-skim orders.** Recall, the current formula is at 3.1% protein. The Florida order is only a smidgeon higher, at 3.15% protein (over the 2020-22 period). The Appalachian order is at 3.24%, is closer to the current formula's 3.1% protein than to Proposal 1's 3.39% protein. The Southeast and Arizona orders are also both below the 3.39% protein proposed in Proposal 1.

Furthermore, while the CDCB database only tracks protein levels, as a practical matter, a 97% correlation between protein levels and nonfat solids levels would indicate it is also tracking nonfat solids levels to a great degree. In other words, given that protein levels are lower in the four fat-skim orders than in the seven MCP orders upon which the Proposal 1 increase are predicated, nonfat solids levels are also lower in the four fat-skim orders.[9]

I conducted a regression analysis of the monthly component levels for all 7 MCP federal orders for all months using the data in USDA Table 1 (Hearing Exhibit 44); that regression analysis appears in Attachment B to this testimony. Table 4 shows how the bulk of variance in nonfat solids can indeed be accurately predicted from protein tests, like those surveyed by DHI.

TABLE 4

Milk Component Statistics Standard Deviations				
All MCP Monthly Data, 2000-2023	**Butterfat**	**Protein**	**Other Solids**	**Nonfat Solids**
Average	3.78	3.11	5.73	8.85
Standard Deviation	0.18	0.11	0.04	0.13

Correlations Between Milk Component Levels ALL MCP Milk DATA				
All MCP Monthly Data, 2000-2023	**Butterfat**	**Protein**	**Other Solids**	**Nonfat Solids**
Butterfat	1.00	0.90	0.43	0.90
Protein	0.90	1.00	0.37	0.97
Other Solids	0.43	0.37	1.00	0.60
Nonfat Solids	0.90	0.97	0.60	1.00

Source: Hearing Exhibit 17 ***ComponentTestsinProducerMilkbyOrder_2000_2023YTD.xlsx***

9 We lack accurate information from USDA to assess whether the third component that Proposals 1 and 2 would increase, other solids, are at a lower level in the four fat-skim orders than the seven MCP orders. In the 7 MCP orders, correlations between other solids and either protein or nonfat solids are 50-75% less than the correlation between protein and nonfat solids.

The reason that the relationship between protein and nonfat solids tests are so strong is because other solids component levels are far more stable than fat, protein or nonfat solids levels. Using this same date set, the standard deviation for fat composition per cwt. is 0.19 pounds, protein is 0.11 pounds, nonfat solids is 0.12 pounds, but other solids is only 0.3 pounds per cwt.

In short, Proposals 1 and 2 would require dairy farmers in the four fat-skim orders to be paid for their milk as if the component levels in their milk were equal to the levels in the MCP orders, even though they are in fact well below that average, at least for protein and solids not fat. Under Proposals 1 and 2, Class II, III and IV handlers in the four fat-skim orders would be required to overpay for their milk supply by tens of millions of dollars a year, based upon the assumed presence of non-existent component levels.

I note that USDA provided USDA Table 1, “Milk Components by Class and Order 2008-2023 YTD” (Hearing Exhibit 44) in response to a request for information. But in the footnotes to USDA Table 1 (Hearing Exhibit 44), USDA indicates that it did not have protein, solids not fat or other solids test data for the fat-skim Arizona order, but instead assumed those levels were identical to the Pacific Northwest order. Yet USDA Table 1 (Hearing Exhibit 44) shows that fat levels in the Pacific Northwest (4.16%) are far higher than in the Arizona order (3.78%) (indeed, the highest in any order in the federal order system). As I have already discussed, higher fat levels are strongly associated with higher non-fat skim component levels (as noted above, there is a 90% correlation between fat levels and non-fat skim component levels, and an 89% correlation between fat levels and protein levels).

Likewise, USDA indicates in USDA Table 1 (Hearing Exhibit 44) that in the three southeast fat-skim orders (Florida, Southeast and Appalachia), it relied upon partial data supplied by certain handlers and there is no indication as to whether the test labs were certified or the results verified. I believe the DHI data I have cited is the best available data source. In any event, in each of these three orders, the average for each of the three component levels (protein, nonfat solids and other solids) as reported in USDA Table 1 (Hearing Exhibit 44) were below the levels that Proposals 1 and 2 would establish.[10]

To make matters even worse, the component levels assumed in Proposals 1 and 2 ignore the significant amount of seasonal variability in component levels. Table 5 on the next page is taken from USDA's data in Table 1 (Hearing Exhibit 44). Table 5 shows that given the seasonal variation in component levels, Proposals 1 and 2 would overvalue skim milk going to Classes II, III and IV in half the months of the year by overestimating yields during those months.

Specifically, for cheese, USDA assumes that each pound of milk protein contributes 1.382 pounds cheese yield but that each pound protein allows 1.17 pounds of milk fat to be used in cheese. USDA uses a factor of 1.03 to determine whey yield from other solids, and 0.99 to determine Nonfat dry milk yield from nonfat solids. Based on these USDA yield assumptions, and actual monthly MCP component levels from the past three years, calculated milk yields per cwt. vary significantly as components rise and fall during the year. Cheese yield varies by 0.80 pounds from high to low month, and

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[10] USDA Table 1 (Hearing Exhibit 44) Itself sets forth monthly data but does not calculate averages. I did so, using the 2020-22 data in USDA Table 1(Hearing Exhibit 44).

Given that Mr. Metzger's Exhibit NAJ 3 (Hearing Exhibit 68) relied upon USDA's estimates for fat skim orders, his numbers are also dubious.

Nonfat Dry Milk yield varies by 0.28 pounds. Component pricing recognizes these seasonal variations because payment obligations are based upon actual component levels, but fat-skim does not and would not under Proposals 1 and 2. While USDA uses Cheddar cheese, butter, dry whey and nonfat dry milk to set minimum prices, yields from all products, outside of fluid milk and creams, are similarly impacted in the same way as those four products.

TABLE 5

Comparison of Monthly Component Tests & FMMO Product Formula Yields

Monthly 3-Year Simple Averages, 2020-2022

ALL MCP Orders - 1,30,32,33,51, 124,126	Market Average Component Tests per CWT MILK				Component Tests per CWT SKIM			FMMO Formula Product Yields per CWT[1]			
	Butterfat Test	Nonfat Solids Test[2]	Protein Test[2]	Other Solids Test[2]	Nonfat Solids Test[2]	Protein Test[2]	Other Solids Test[2]	FMMO Cheese Yield	FMMO Fat in Whey	FMMO SNF Yield	FMMO Whey Yield
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)				
January	3.50	9.06	2.99	5.77	9.45	3.43	6.02	10.60	0.41	9.36	6.20
February	4.11	9.06	3.27	5.78	9.45	3.41	6.03	10.55	0.41	9.35	6.21
March	4.06	9.03	3.25	5.78	9.41	3.38	6.02	10.46	0.41	9.31	6.20
April	4.01	9.00	3.22	5.78	9.38	3.36	6.02	10.38	0.40	9.29	6.20
May	3.94	8.97	3.18	5.79	9.34	3.31	6.02	10.26	0.39	9.24	6.20
June	3.88	8.92	3.13	5.79	9.29	3.26	6.02	10.10	0.39	9.19	6.21
July	3.85	8.88	3.11	5.78	9.24	3.23	6.01	10.01	0.39	9.15	6.19
August	3.87	8.89	3.13	5.77	9.25	3.25	6.00	10.07	0.39	9.16	6.18
September	3.96	8.97	3.20	5.77	9.34	3.34	6.00	10.32	0.40	9.25	6.18
October	4.07	9.06	3.29	5.77	9.44	3.43	6.02	10.60	0.41	9.35	6.20
November	4.17	9.12	3.35	5.77	9.52	3.50	6.02	10.80	0.42	9.42	6.20
December	4.22	9.12	3.36	5.77	9.52	3.50	6.02	10.81	0.42	9.43	6.20
Average	3.97	9.01	3.21	5.78	9.38	3.37	6.02	10.41	0.40	9.29	6.20
High Month	4.22	9.12	3.36	5.79	9.52	3.50	6.03	10.81	0.42	9.43	6.21
Low Month	3.50	8.88	2.99	5.77	9.24	3.23	6.00	10.01	0.39	9.15	6.18
Range	0.72	0.24	0.37	0.03	0.28	0.27	0.03	0.80	0.04	0.28	0.03

[1]**The Formulas used in Federal Order Component Price Calculations are used to determine Yield**

*Cheese: (Milk True Protein*1.383) + (Milk True Protein*1.17*1.572) Fat in Whey Cream: Butterfat*10% NFDM: SNF*0.99 Dry Whey: Other Solids*1.03*

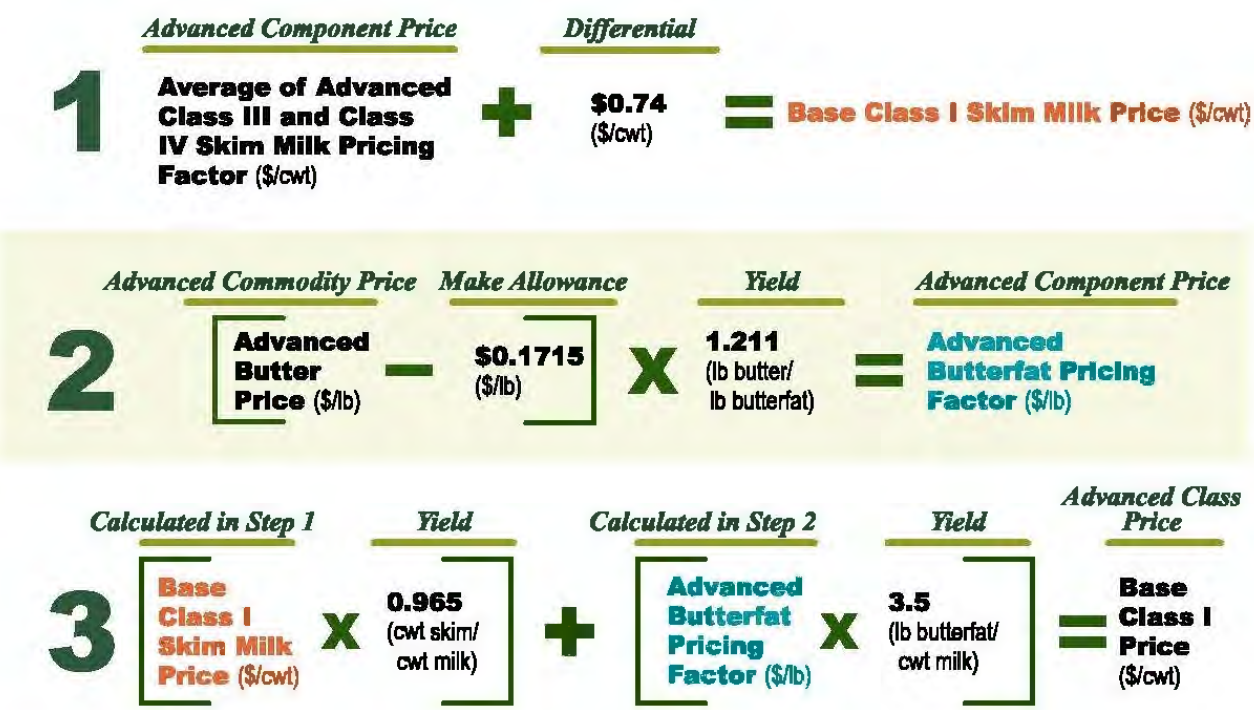
Thus the proposed increases in the skim milk composition assumptions are not only unwarranted on their face, but would unfairly put Class II, III and IV handlers in the fat-skim orders at a competitive disadvantage to Class II, III and IV handlers in the MCP orders, because fat-skim order handlers would be paying a higher price for milk that has lower levels of the components necessary to make their products. This would be particularly true in the summer months when milk component levels are at their lowest point, and the proposed skim prices would not reflect close to the actual value.

And a critical flaw to Proposals 1 and 2 is that this disadvantage will only get worse over time. Even after their adoption, these Proposals will not result in the fat-skim orders receiving components at the levels proposed. Instead, the milk shipped to those orders will benefit from a false assumption of the components being at a certain (higher) level. Thus, producers and their cooperatives will be more incentivized to redirect high-component milk to MCP orders (where they are paid on actual components) and send lower-component milk to fat-skim orders (where they get the benefit of an assumed higher level of components despite the actual lower milk component levels).

The proponents' notion that Southeast Dairy farmers purportedly have been underpaid for their components is not well taken. If the notion is that their component levels are (slightly) higher than the component levels in the Class II, III and IV formulas, then the solution is to have them be paid based on their actual component levels, i.e., to become Multiple Component Pricing orders. By adopting MCP, the same as the other seven orders, their federal order would reward them for actual component levels and encourage the same feeding, genetic, and breed selection efforts necessary to increase component levels. But it is completely unwarranted to require handlers to pay fat-skim order farmers based upon Proposal 1 and 2 component levels that both logic, and comprehensive actual test results, demonstrate that their milk in the four fat-skim orders does not remotely approach.

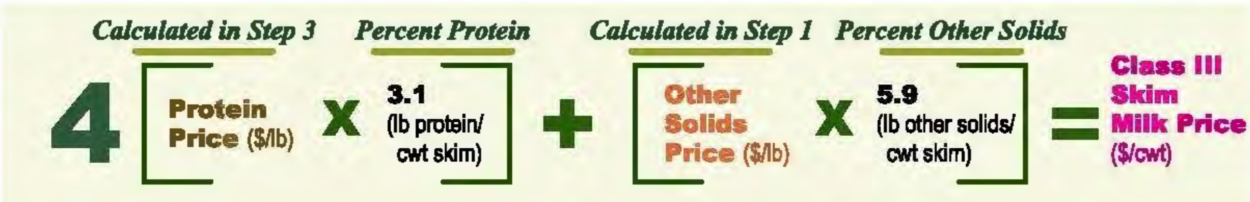
IV. PROPOSAL 1 AND 2'S EFFECT ON PRICES FOR CLASS I MILK.

Proposals 1's and 2's effect on Class I pricing is even more pernicious. Per the relevant portions of the USDA's chart "Calculating Class I Price," available at https://www.ams.usda.gov/sites/default/files/media/ClassIworksheetfinal.pdf, the Base Class I Price in the MCP pricing orders is set by the following formula:



For present purposes, the key is Step 1 in this Class I pricing formula, which looks to the Advanced Class III and Class IV Skim Milk Pricing Factors to establish the Base Class I Skim Milk Price. The second page of the USDA chart states, "To calculate the Base Class I Skim Milk Price, both the Class III and IV Advanced Skim Milk Pricing Factors must be calculated. These calculations are identical to those used to compute the Class III and IV Skim Milk Prices announced on or before the 5th of the following month, except for the time series of data used."

https://www.ams.usda.gov/sites/default/files/media/ClassIworksheetfinal.pdf. So we now turn to the first formula, for the Class III Skim Milk Price, https://www.ams.usda.gov/sites/default/files/media/ClassIIIworksheetfinal.pdf, which I have already set forth on p. 14 above. The relevant part of that formula is:



Under Proposals 1 and 2, the "Percent Protein" assumption for Class III skim milk would increase from 3.1 pounds/cwt skim milk to 3.39 pounds/cwt skim milk, and the "Percent Other Solids" would increase from 5.9 pounds/cwt skim milk to 6.02 pounds/cwt skim milk. See Proposal 1, Proposed New Section 1000.51. Both of these increases would increase the Class III Skim Milk Price, and thus the Class I Price, given that, as we have shown using the USDA Chart for Class I pricing on p. 30 above, step 1 of setting the Bass Class I Price is to calculate the Base Class I Skim Price, and the Class III Skim Milk Price is one of the two factors that go into that calculation.

So let's now turn to the other factor that goes into calculating the Class I Skim Milk Price formula, the Class IV Skim Milk Price. I have already set forth that formula on p. 12 above, and I will reproduce again here for ease of reference the relevant step of that formula, which provides:

Under Proposals 1 and 2, the nonfat solids assumption for Class IV skim milk would increase from 9.0 pounds/cwt skim milk to 9.41 pounds/cwt skim milk. See Proposal 1, Proposed New Section 1000.51. This increase would perforce increase the Class IV skim milk price, and thus the Class I price, given that, as we have shown using the USDA Chart for Class I pricing on p. 30 above, step 1 of setting the Class I price is to calculate the Base Class I Skim Price, and the Class IV Skim Milk Price is one of the two factors that go into that calculation. How much would the price go up? Reproducing Table 1 set forth on p. 16, using the current Class I formula, the Class I skim milk price would have been $0.60/cwt higher over the last 5 years, and $0.61/cwt over the last 10 years, had Proposals 1 and 2 been in effect.

TABLE 1

NMPF Skim Proposal Adjustments Per Cwt. SKIM Milk & Class II SNF

Year	Advance Class III	Advance Class IV	Current 50:50	Higher Of	Class II	Class III	Class IV	Class II SNF
2013	$1.00	$0.61	$0.80	$0.69	$0.61	$1.01	$0.62	-$0.0035
2014	$1.17	$0.68	$0.92	$0.98	$0.68	$1.16	$0.65	-$0.0034
2015	$0.71	$0.32	$0.52	$0.69	$0.32	$0.67	$0.30	-$0.0035
2016	$0.58	$0.26	$0.42	$0.56	$0.26	$0.62	$0.27	-$0.0034
2017	$0.58	$0.29	$0.44	$0.57	$0.29	$0.57	$0.28	-$0.0034
2018	$0.52	$0.25	$0.38	$0.50	$0.25	$0.50	$0.25	-$0.0035
2019	$0.64	$0.35	$0.49	$0.59	$0.35	$0.71	$0.35	-$0.0032
2020	$1.14	$0.36	$0.75	$1.14	$0.36	$1.11	$0.35	-$0.0035
2021	$0.85	$0.43	$0.64	$0.83	$0.43	$0.85	$0.45	-$0.0034
2022	$0.84	$0.62	$0.73	$0.66	$0.62	$0.84	$0.61	-$0.0034
5-Year	$0.80	$0.40	$0.60	$0.74	$0.40	$0.80	$0.40	-$0.0034
10 Year	$0.80	$0.42	$0.61	$0.72	$0.42	$0.80	$0.41	-$0.0034

Reproducing Table 2 set forth on p. 18 outlines the estimated dollar impacts of Proposals 1 and 2:

TABLE 2

Impact of NMPF Proposal 1 on Skim Milk Costs, by Federal Order

	Class I Skim Difference	Class II Skim Difference	Class II SNF Difference	Class III Skim Difference	Class IV Skim Difference	Total II,III,IV Difference	Total Skim Price Difference
	Million $$	Million $$	Million $$	Million $$	Million $$	Million $$	Million $$
Northeast	$46.6	--	-$1.3	--	--	-$1.3	$45.4
Upper Midwest	$12.9	--	-$0.1	--	--	-$0.1	$12.8
Central	$25.6	--	-$0.2	--	--	-$0.2	$25.4
Mideast	$36.5	--	-$0.3	--	--	-$0.3	$36.2
California	$27.7	--	-$0.2	--	--	-$0.2	$27.5
Pacific Northwest	$9.5	--	-$0.1	--	--	-$0.1	$9.4
Southwest	$22.6	--	-$0.1	--	--	-$0.1	$22.5
MCP Orders	$181.5	--	-$2.3	--	--	-$2.3	$179.2
Appalachian	$22.4	$2.6	--	$3.3	$1.7	$7.6	$29.9
Florida	$12.1	$1.2	--	$0.3	$0.1	$1.7	$13.8
Southeast	$16.6	$2.7	--	$1.5	$0.6	$4.7	$21.3
Arizona	$7.8	$2.6	--	$10.8	$5.8	$19.1	$26.9
Fat-Skim Orders	$58.9	$9.0	--	$15.8	$8.2	$33.0	$91.8
All Orders Combined	$240.3	$9.0	--	$15.8	$8.2	$33.0	$271.0

Sources: Hearing Exhibit 44, *MilkComponentsbyClassandOrder20082023YTD.xlsx*
Hearing Exhibit 16, *AnnouncementofClassandComponentPrices2000_2023YTD.xlsx*
Hearing Exhibit 15, *AnnouncementofAdvancedPricingandPricingFactors* _2000_2023YTD.xlsx

Given that 40.055 billion pounds of skim milk were pooled in Class I in 2022,[11] **Proposals 1 and 2's $0.60 per cwt increase in the Class I skim price would increase total Class I minimum milk price payments by over $240 million per year.**[12] So the $240 million (per year) question is: should Class I handlers be required to pay $240 million more for milk per year because the reported average levels of nonfat solid, protein

[11] USDA Market Summary and Utilization 2022 Annual Report (Feb. 14, 2023).

[12] The math is as follows: 40,986,300,000 pounds pooled in Class I divided by 100 pounds per hundredweight times $0.52 increase in Class I price times 0.965 equals $205,669,253. The 0.965 reflects that milk in the federal order system is standardized to 96.5% skim and 3.5% fat.

or other solids in federal orders are higher than the levels set forth in the current formulas used to set Class I prices?

The answer is simple, and emphatically “No.” And there are several reasons for that.

A. Higher Nonfat Component Levels Are of Little to No Value to Class I Milk Products.

Even assuming that there really are increased nonfat solid, protein or other solids levels in milk used for Class I purposes, those increased levels have ***no*** increased value whatsoever to the Class I handler buying the milk or the consumer buying the Class I handlers’ products. This is in direct contradistinction to, for example, an increased level of protein or other solids in Class III milk, which is of direct benefit to a Class III handler because that increased level increases how much cheese and whey the handler can produce from 100 pounds of milk. The same holds true for increased nonfat solid and butterfat levels in Class II and increased nonfat solid and butterfat levels in Class IV; and that is why the MCP formulas set forth on page 8 above increase the price of milk going into those classes based upon the specified component levels in those products.

But a Class I handler cannot get value from higher solids levels in their finished product for the following reasons. My experiences at Kroger found that consumers make purchase decisions based upon their desired fat level (whole, 2%, 1% or skim), perceived “freshness’ as indicated by the sell-by date, and the price for the same product, within the store or across other retailers. Anyone living in the real world knows that milk consumed in fluid form is not worth more to the average consumers, or to the Class I handlers that serve consumer needs, based upon nonfat milk composition. The FDA standard of identify for milk requires only that milk contains at least 8.25% milk solids not fat. 21 C.F.R. 131.110(a).

The bottom line is simple: even if the proponents of Proposals 1 and 2 were correct that skim milk on national average does now have 9.41% nonfat solids, or 6.02% other solids, or 3.39% protein, those increases carry no financial benefit at all to Class I handlers, because they do not increase either the quantity or price of the fluid milk that handlers can sell.

Although reference has been made to Fairlife milk, and this is indeed a wonderful higher protein milk lower sugar (it is lactose free) milk product, it requires special ultrafiltration and packaging and remains a specialty product, as do other high protein milks.

There is accordingly no basis for Class I handlers to pay more for their milk as a result of average component increases. Simply stated, Proposals 1 and 2 would require Class I handlers to pay a higher price for farmer milk based upon higher solids and protein levels that do not provide any higher value whatsoever.

But wait a minute, you might say. Surely those higher nonfat solids, other solids, or protein levels have *some* value, because the Class I handler can separate out and sell to handlers making other classes of products the portion of the components present in the milk in excess of the milk standard of identify requirements.

For better or worse, that is a non-starter. The standard of identity for milk sold to consumers as milk forbids removing any component from the milk other than milkfat, see 21 C.F.R. 131.110(a) ("Milk may have been adjusted by separating part of the milkfat therefrom, or by adding thereto cream, concentrated milk, dry whole milk, skim milk, concentrated skim milk, or nonfat dry milk."). In short, as USDA recognized in 1988 when MCP was first introduced in the Great Basin Order (see the discussion on pp. 37-39 below), it is not permissible to standardize fluid milk composition, other than for milkfat. So the "excess" nonfat solids, other solids, or protein levels just stay in the milk, and cannot be separated out and monetized.[13]

B. Component Levels in Class I Milk Are Not As High as Proposals 1 and 2 Assume.

The proposed change in the formula is based upon the proposition that component levels in all federal order milk has increased, and that Class I handlers should pay more as a result. For the reason just explained, that is wrong because increased component levels are of monetary value whatsoever to Class I handlers. While skim milk solids levels impact yields on almost all Class II, III and IV products, that is not the case with fluid milk, which downward adjustments to reflect minimum solids are not allowed by law.

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[13] For purposes of completeness, I should explain that, as I have just noted, the standard of identity for milk does allow a Class I handler to separate out some of the milkfat, and this is routinely done. The standard of identify for milk only requires 3.25% milkfat, see 21 C.F.R. 131.110(a), which is itself below average farmer milk milkfat levels; and reduced fat, low fat and fat free milk are allowed to contain even less milkfat, see 21 C.F.R. 101.62.

Because a Class I handler can sell or use this separate milkfat in non-Class I products, that milkfat does have real value to Class I handlers. For that reason, Class I handlers already are required to pay farmers based upon the actual milkfat levels in the farmer milk they receive. See, e.g., 7 C.F.R. 1033.60 ("For the purpose of computing a handler's obligation for producer milk … (a) Class I value: (1) Multiply the pounds of skim milk in Class I by the Class I skim milk price; and (2) Add an amount obtained by multiplying the pounds of butterfat in Class I by the Class I butterfat price.") Proposals 1 and 2 do not address milkfat or these milkfat related order requirements, nor does IDFA suggest any need to change them.

I understand that MIG witnesses will be addressing whether average annual component levels in Class I milk are actually as high as Proposals 1 and 2 claim. I will therefore limit my comments on this subject to two other problems:

First, as discussed already on pp. 18-28 above, component levels in the four fat-skim orders are lower than in the seven MCP orders, yet Proposals 1 and 2 would price milk in all orders based upon component levels in the seven MCP orders. This would mean that Class I handlers in the four fat-skim orders would be paying more for milk based upon non-existent components.

Second, the significant seasonal variance in milk composition means that the skim milk value is not consistent across the year. For example, in the case of protein impacts on cheese yield, the average yield varies by 0.8 pounds from high to low months, based on USDA's own yield calculations (see my calculations in Table 5 on p. 28). MCP recognizes these seasonal differences in component values. Skim pricing, which is what Proposals 1 and 2 address, do not reflect that seasonal variability simply cannot.

In sum: Proposals 1 and 2 would require Class I handlers in all orders to pay over $225 million more per year in minimum regulated prices, based upon component levels that: (a) have no value whatsoever to Class I handers or their customers, and (b) are often not even present in much of the milk supplied to Class I handlers.

C. USDA Has From the Beginning of MCP Orders Rejected the Pricing Theory that Proposals 1 and 2 Advance.

The federal order system has never embraced NMPF's and NAJ's position that Class I prices should reflect increases in nonfat milk components. Had the order system done so, the regulations would have provided that Class I prices would automatically increase with increased nonfat milk component levels.

That is what automatically does happen in MCP orders for Classes II, III and IV, and that is how it has worked for decades since MCP pricing came into existence. But Class I has for those same decades pointedly been exempted from this process. The federal order system has never adopted proponents' notion that Class I prices should reflect increases in nonfat milk components.

And for good reason. As I have explained, higher nonfat solid component levels are of little to no value to Class I handlers. It would make no sense to increase Class I prices based on them.

USDA explicitly recognized this when the very first MCP order was put in place in the Great Basin Order. The USDA decision adopting MCP pricing concluded:

> While protein content was seen to be critical in establishing the value of milk used in cheese, **there was no evidence that protein content has any effect on the value of fluid milk products at all.** On the contrary, **there appears to be general agreement that consumers are not willing to pay more for fluid milk with a higher-than-average protein content than they are for low-protein milk.** Handlers cannot easily remove protein from fluid milk products to add it to products in which it would have value, and it is illegal for them to add water to milk to reduce its protein content. Therefore, handlers obtain no discernable difference in economic benefit from the various levels of protein contained in milk used in fluid milk products, and **there is no justification for requiring them to pay for such milk according to its protein content.**

Milk In the Great Basin and Lake Mead Marketing Areas; Decision on Proposed Amendments to Marketing Agreements and to Orders, 53 Fed. Reg. 686, 702 (Jan. 11, 1988).

This federal order system of pricing Class I versus Classes II, III, and IV milk does not create disorderly marketing. To the contrary, what would be disorderly would be to saddle Class I handlers with higher prices based upon nonfat milk components that carry no value to Class I.

D. The Narrowing of Pricing Between Class I and the Other Classes Simply Reflects Relative Milk Values and Is a Good Thing.

To be clear, we are not suggesting that the price of Class I milk should be decoupled from the price of Class III and IV milk. To the contrary, when demand for Class III and IV products or other factors increase the price at which those products are sold, regulated minimum Class III and IV prices automatically increase, and those increases are automatically reflected in higher Class I minimum prices, via the base Class I skim milk and butterfat prices.

That is a fundamental basis upon which the federal order system operates. But the federal order system does not, and should not, increase Class I prices when the increase in Class II, III and IV payment obligations instead reflect higher nonfat component levels that are of value to the production of Class II, III and IV products but not Class I products.

The narrowing of the difference between the effective price of milk going to Class II, III and IV uses in MCP orders and the price of milk going to Class I use simply reflects that the higher solids levels that have been encouraged and achieved in the MCP orders have value to Classes II, III, and IV but not Class I, because higher components increase manufactured product yields but not fluid milk output. **This represents alignment, not misalignment. It is a good thing, not a bad thing.**

E. There Is No Need to Increase Class I Prices to Attract an Adequate Supply of Milk for Class I Purposes.

Finally, the notion that Class I prices should be increased in order to enable Class I facilities to attract milk from Class III or IV facilities is not based in reality. Current Class I utilization is only 27% of total federal order marketing, the lowest in history. The federal order system is awash with milk from a "fluid needs" (Class I) perspective. Per Hearing Exhibit 39, the orders have not since at least 2010 been asked to increase shipping requirements to require manufacturing plants to provide additional milk to Class I plants. To the contrary, Hearing Exhibit 39 shows that the orders have routinely lowered those shipping requirements, at the behest of the very cooperatives who are now claiming in this hearing that the orders should be changed to reflect an alleged (non-existent) supply deficit for Class I milk.

For all these reasons, Proposals 1 and 2 have no justifiable role for pricing Class I milk.

Conclusion. For all these reasons, IDFA strongly opposes the adoption of Proposals 1 or 2.

Attachment A

Table 1. NMPF Skim Proposal Adjustments Per Cwt. SKIM Milk & Class II SNF

Data Sources:

FMMO_USDA_Exhibit16AnnouncementofClassandComponentPrices_2000-2023YTD

The Current Advanced and Skim values for Classes III, IV

FMMO_USDA_Exhibit15AnnouncementofAdvancedPricesandPricingFactors_2000-2023YTD

The Current Advanced and Skim values for Classes I, II

Calculations for NMPF proposed skim prices used the announced class prices for Class III and IV components for Class III and IV, multiplied by the proposed factors of 3.39 for protein, 6.02 for Other Solids and 9.41 for Nonfat Solids.

Calculations for NMPF proposed skim prices used the Advanced prices for Class III and IV skim components, multiplied by the proposed factors of 3.39 for protein, 6.02 for Other Solids and 9.41 for Nonfat Solids: $0.70 differential was added to the Class II skim price.

Calculations for the NMPF Class II Nonfat Solids price equaled the NMPF Class II Skim price divided by 9.41.

Year	Class II Current	Class II NMPF	Class II NMPF vs. Current	II SNF Current	II SNF NMPF	II SNF NMPF vs. Current	Class III Current	Class III NMPF	Class III NMPF vs. Current	Class IV Current	Class IV NMPF	Class IV NMPF vs. Current
2013	$14.07	$14.68	$0.61	$1.5631	$1.5595	-$0.0035	$12.57	$13.57	$1.00	$13.37	$13.98	$0.61
2014	$15.53	$16.21	$0.68	$1.7257	$1.7223	-$0.0034	$14.64	$15.81	$1.17	$14.83	$15.51	$0.68
2015	$7.69	$8.01	$0.32	$0.8543	$0.8508	-$0.0035	$8.69	$9.41	$0.71	$6.99	$7.31	$0.32
2016	$6.47	$6.74	$0.26	$0.7193	$0.7160	-$0.0034	$6.57	$7.16	$0.58	$5.77	$6.04	$0.26
2017	$7.12	$7.41	$0.29	$0.7906	$0.7872	-$0.0034	$7.46	$8.05	$0.58	$6.42	$6.71	$0.29
2018	$6.15	$6.40	$0.25	$0.6838	$0.6803	-$0.0035	$6.18	$6.70	$0.52	$5.45	$5.70	$0.25
2019	$8.24	$8.59	$0.35	$0.9157	$0.9125	-$0.0032	$7.78	$8.42	$0.64	$7.54	$7.89	$0.35
2020	$8.60	$8.95	$0.36	$0.9550	$0.9515	-$0.0035	$12.89	$14.02	$1.14	$7.90	$8.25	$0.36
2021	$10.15	$10.58	$0.43	$1.1280	$1.1246	-$0.0034	$10.73	$11.58	$0.85	$9.45	$9.88	$0.43
2022	$14.32	$14.94	$0.62	$1.5912	$1.5878	-$0.0034	$10.95	$11.79	$0.84	$13.62	$14.24	$0.62

	Class III Announced	Class IV Announced	Class III NMPF vs. Current	Class IV NMPF vs. Current
2009	$7.86	$7.03	$0.65	$0.31
2010	$8.90	$9.32	$0.69	$0.41
2011	$12.12	$12.46	$0.90	$0.54
2012	$12.76	$10.81	$0.93	$0.47
2013	$13.62	$14.34	$1.01	$0.62
2014	$15.68	$14.91	$1.16	$0.65
2015	$8.71	$6.84	$0.67	$0.30
2016	$7.65	$6.16	$0.62	$0.27
2017	$7.85	$6.51	$0.57	$0.28
2018	$6.48	$5.84	$0.50	$0.25
2019	$9.19	$8.14	$0.71	$0.35
2020	$13.74	$8.14	$1.11	$0.35
2021	$11.69	$10.26	$0.85	$0.45
2022	$11.76	$14.13	$0.84	$0.61
5-Year	$10.57	$9.30	$0.80	$0.40
10-Year	$10.64	$9.53	$0.80	$0.41

Data Source: FMMO_USDA_Exhibit17ComponentTestsinProducerMilkbyOrder_2000_2023YTD.xlsx

Calculated from ALL monthly MCP component data from Exhibit 17

Milk Component Statistics Standard Deviations				
All MCP Monthly	Butterfat	Protein	Other Solids	Nonfat Solids
Average	3.78	3.11	5.73	8.85
Standard Deviation	0.18	0.11	0.04	0.13

Simple Average (AVERAGE) of all Monthly Data
Excel Standard Deviations (STDEV) of all monthly Data

Correlations Between Milk Component Levels ALL MCP Milk DATA				
All MCP Monthly	Butterfat	Protein	Other Solids	Nonfat Solids
Butterfat	1.00	0.90	0.43	0.90
Protein	0.90	1.00	0.37	0.97
Other Solids	0.43	0.37	1.00	0.60
Nonfat Solids	0.90	0.97	0.60	1.00

Source: Hearing Exhibit 17 *ComponentTestsinProducerMilkbyOrder_2000_2023YTD.xlsx*

Note: Results from the Excel Correlation Function (CORREL) between the four components, using all monthly component data in Exhibit 17

Excel Linear Regression Results

Regressions were performed using the Excel Linear Regression Tool

SUMMARY OUTPUT **Predicted Ŷ: Nonfat Solids** **X Variable: Protein**

Regression Statistics	
Multiple R	0.966101528
R Square	0.933352162
Adjusted R Square	0.933314928
Standard Error	0.033689255
Observations	1792

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	28.4508543	28.4508543	25067.58522	0
Residual	1790	2.031588952	0.001134966		
Total	1791	30.48244325			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	5.36589383	0.02199039	244.0108495	0	5.322764294	5.409023366	5.322764294	5.409023366
X Variable 1	1.117958308	0.007061051	158.327462	0	1.104109538	1.131807078	1.104109538	1.131807078

SUMMARY OUTPUT **Predicted Ŷ: Protein** **X Variable: Butterfat**

Regression Statistics	
Multiple R	0.898403502
R Square	0.807128853
Adjusted R Square	0.807021103
Standard Error	0.049525534
Observations	1792

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	18.37329163	18.37329163	7490.807549	0
Residual	1790	4.390473496	0.002452778		
Total	1791	22.76376512			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1.020192911	0.024200482	42.15589243	2.545E-270	0.972728744	1.067657078	0.972728744	1.067657078
X Variable 1	0.552921632	0.006388505	86.54945147	0	0.540391919	0.565451345	0.540391919	0.565451345

SUMMARY OUTPUT **Predicted Ŷ: Other Solids** **X Variable: Butterfat**

Regression Statistics	
Multiple R	0.43002487
R Square	0.184921389
Adjusted R Square	0.184466038
Standard Error	0.03226692
Observations	1792

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.422820187	0.422820187	406.107193	1.46032E-81
Residual	1790	1.863665918	0.001041154		
Total	1791	2.286486105			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	5.415783814	0.01576712	343.4859321	0	5.384859917	5.446707711	5.384859917	5.446707711
X Variable 1	0.083877978	0.004162245	20.15210145	1.46032E-81	0.075714609	0.092041348	0.075714609	0.092041348

SUMMARY OUTPUT **Predicted Ŷ: Nonfat Solids** **X Variable: Butterfat**

Regression Statistics	
Multiple R	0.895170954
R Square	0.801331037
Adjusted R Square	0.801220049
Standard Error	0.058165221
Observations	1792

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	24.42652787	24.42652787	7219.962983	0
Residual	1790	6.055915381	0.003383193		
Total	1791	30.48244325			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	6.433071752	0.028422235	226.3394011	0	6.377327501	6.488816002	6.377327501	6.488816002
X Variable 1	0.637530499	0.007502975	84.97036532	0	0.622814989	0.65224601	0.622814989	0.65224601

Attachment C

Table 2. NMPF Skim Proposal Adjustments Per Cwt. SKIM Milk & Class II SNF
Data Sources:
Prices: See Attachment A
2022 Class Skim Volumes
FMMO_USDA_Exhibit44MilkComponentsbyClassandOrder_2008_2023.xlsx

The cost difference between current and the proposed skim prices, along with Class II NFS, were multiplied by the 2022 total skim pounds for all four milk classes, along with Class II NFS in MCP Orders.

Skim Milk and Class II NFS Volumes follow below:

	Class I Skim Milk Pounds	Class II Skim Milk Pounds	Class III Skim Milk Pounds	Class IV Skim Milk Pounds	Total Skim Milk Pounds	Class II SNF Pounds
Northeast	**7,774,866,438**	**6,018,614,447**	**7,447,566,622**	**4,557,332,936**	**25,798,380,443**	**362,168,699**
Upper Midwest	**2,149,730,957**	**306,131,165**	**27,831,625,519**	**236,972,732**	**30,524,460,373**	**18,354,970**
Central	**4,266,784,360**	**960,077,301**	**7,902,797,580**	**1,873,884,181**	**15,003,543,422**	**57,756,859**
Mideast	**6,076,231,191**	**1,344,759,494**	**7,892,127,734**	**808,344,919**	**16,121,463,338**	**80,949,266**
California	**4,617,237,027**	**1,029,068,213**	**14,141,798,683**	**1,742,220,949**	**21,530,324,872**	**61,575,704**
Pacific Northwest	**1,586,287,911**	**366,448,277**	**3,401,550,251**	**1,902,548,764**	**7,256,835,203**	**22,110,885**
Southwest	**3,773,723,884**	**688,346,499**	**7,927,361,363**	**757,607,306**	**13,147,039,052**	**41,515,120**
MCP Orders	**30,244,861,768**	**10,713,445,396**	**76,544,827,752**	**11,878,911,787**	**129,382,046,703**	**644,431,503**
Appalachian	**3,730,086,824**	**637,965,893**	**409,477,633**	**430,933,852**	**5,208,464,202**	**N/A**
Florida	**2,012,886,429**	**310,030,347**	**40,264,308**	**27,956,880**	**2,391,137,964**	**N/A**
Southeast	**2,765,721,656**	**668,394,262**	**182,610,598**	**141,126,697**	**3,757,853,213**	**N/A**
Arizona	**1,301,886,308**	**638,650,283**	**1,344,147,953**	**1,437,847,919**	**4,722,532,463**	**N/A**
Fat-Skim Orders	**9,810,581,217**	**2,255,040,785**	**1,976,500,492**	**2,037,865,348**	**16,079,987,842**	**N/A**
All Orders Combined	**40,055,442,985**	**12,968,486,181**	**78,521,328,244**	**13,916,777,135**	**145,462,034,545**	**N/A**

Attachment D

The Class II skim formula proposed by NMPF Proposal 1 slightly lowers the Class II nonfat solids price because of the impact of the higher composition factor (9.41 vs. 9.0) has on the 70 cent Class II differential. Dividing the 70-cent Class II differential per cwt. by the NMPF-proposed 9.41 factor, instead of the current factor of 9.0 lowers the differential by $0.0034 per pound nonfat solids. The Advanced Class IV contribution to the Class II nonfat solids price remains the same under either calculation, as the Advanced Class II skim factor is used both for determining Class II skim price before differential, and then returning the Class II Skim price back into the Class II nonfat solids price.

For example, if the Advanced Class IV NFS price is $1.0000

Class II Skim Price:

Current: Class II Skim Price = Class IV Advanced NFS Price x 9.00 + $0.70

= $1.000 x 9 + $0.70 = $9.70

NMPF: Class II Skim Price = Class IV Advanced NFS Price x 9.41 + $0.70

= $1.000 x 9.41 + $0.70 = $10.11

Class II NFS Price:

Current: Class II Nonfat Solids Price = Class II Skim Price / 9.00

= $9.70 / 9.00 = $1.0778

NMPF: Class II Nonfat Solids Price = Class II Skim Price / 9.41

=$10.11 / 9.41 = $1.0744

Class II Nonfat Solids Price – NMPF vs Current:

Difference= $1.0744 - $1.0778 = -$.0034