UNITED STATES DEPARTMENT OF AGRICULTURE

BEFORE THE SECRETARY OF AGRICULTURE

AGRICULTURAL MARKETING SERVICE

In re: Milk in the Northeast and Other Marketing Areas	7 CFR Parts 1000 *et seq.* Docket No. 23-J-0067; AMS-DA-23-0031

CARMEL, INDIANA
JANUARY 2024

TESTIMONY OF CRYSTAL CREAMERY, PART 3 REGARDING NATIONAL HEARING ON FEDERAL MILK MARKETING ORDER PROPOSALS

January 11, 2024

I. BACKGROUND

A. PERSONAL BACKGROUND

My name is Jacob Schuelke and my background in the dairy industry began growing up on a dairy farm in New York State. I then went on to receive a bachelor's degree in agricultural business from Cornell University and a master's degree in agricultural economics from the University of Wisconsin-Madison, where I was a research assistant under Ed Jesse on a variety of dairy marketing research projects. From there I worked in the extension service as a dairy business management educator. My career in the private sector started with Hilmar Cheese where I was their dairy economist. Then I moved on to California Dairies where I was the head of milk pooling and payment. Next, I went to work for a start-up called Valley Milk LLC where I helped incorporate and receive Capper-Volstead certification for their milk supply cooperative. Over the last three years I have been working for Crystal Creamery as their CFO and head of milk procurement.

B. COMPANY BACKGROUND

Crystal Creamery is an all-inclusive dairy operation with plants in Modesto and Fernbridge, California. Our headquarters is in Modesto California and we have fewer than 1,150 employees making us fall into the definition of a small business. We produce Class I fluid milk, Class II products (ice cream, cottage cheese, sour cream), we supply the Class III market with condensed milk, and both of our production facilities have a Class IV dryer to balance the milk supply. Our Modesto facility also has butter manufacturing capabilities.

We supply our plants through a diversified network of direct ship dairies, Class III/IV manufacturers supplying milk for pooling access, a number of local cooperatives with organic and conventional milk supplies, and up until a few months ago our own dairy farm.

II. POSITIONS ON OTHER PROPOSALS

A. Crystal Opposes NMPF's Proposal 19: Class I Differentials

NMPF's proposed Class I differentials are contrary to the market realities of California and would result in disorderly marketing. Specifically to California, NMPF's proposed differential updates do not line up with the justifications stated for other regions. From 2000 to 2020, the state of Florida went from producing 2.46 billion lbs. of milk per year to 2.29 billion lbs. of milk per year, which is a decrease of 7% or 172 million lbs. But during the same time period milk production in San Bernadino and Riverside Counties (the milk production center of Southern California) went from 7.83 Billion lbs. to 1.63 Billion lbs., which is a decrease of 79% or 6.2 billion lbs. The area has gone from a milk surplus region with a robust manufacturing base to a deficit region supplemented by imported milk from the central valley. Despite this and a stated tripling in the cost to move milk, the county location adjustment from Tulare to LA remains unchanged at $0.50 in the NMPF proposal.

Likewise, the California marketplace is being fully served under the current differentials. Over the last twenty years no other region in the country has seen more change in the difference between supply and demand than San Bernadino and Riverside Counties. Despite this, the stores and schools in LA have been fully stocked with milk the entire time. The reason is that markets work and over order premiums have proven effective at both moving milk and directly compensating the dairymen who supply the market. If NMPF sees no reason to update the differential between Tulare to LA then that is clear evidence that changes to county location adjustments are not necessary to move milk anywhere and no change is needed nationwide.

Another point of contention about county location adjustment is that the NMPF's model itself is fundamentally flawed in how it estimates milk movements in northern California because it (and the FMMO system itself) fail to accurately account for organic milk supplies. In both the NMPF proposal and the raw data from the University of Wisconsin model, they looked at the milk supply relative to population of Humboldt county and determined that county location adjustments

need to go down relative to where they were in relationship to other California coastal counties (Sonoma and Marin) 20 years ago. The assumption is that fluid milk is fluid milk and therefore the area is oversupplied so we need to put in place a differential structure that subsidizes its movement out of the county. The reality is far from that. In the past 20 years the Humboldt and Del Norte counties milkshed has transitioned from 100% conventional to 100% organic. Milk supply may have grown in Humboldt county, however, in no other region of the US has the average miles your milk traveled to get to the store changed more. As the lone operator of the only bottling plant in the area and the region's majority bottled milk seller I can fully attest that the milkshed is 100% organic and conventional milk is simply not available. The only locally produced and sold milk label is the Humboldt organic brand and its sales are at best 5% of all milk in the region. Over 95% of all milk sold in Humboldt county is bottled and sourced in plants over 300 miles away. Once again the model fails to account for another significant change in milk transportation that has taken place in the last 20 years but just as in the case of LA, over order premiums moved the milk and no one noticed. If significant changes aren't warranted in northern or southern California then why are they needed elsewhere?

The root cause of this is not the fault of the model, it is the fault of the FMMO system's (and, by extension, NMPF's) assumptions that we are all living by at this hearing. In 2024, milk is not milk, and as an industry we need to stop thinking about it and marketing it that way. According to the USDA, per capita fluid milk consumption has declined from 173 lb./person in 2011 to 134 lb./person in 2021, or -23%. However, in this same time period organic milk fluid sales have likely doubled their market share and whole milk sales have actually grown 7% per person. There are countless other wonderful stories to tell about the fluid market concerning ultra filtered milk, A2, and lactose free. It's really just skim milk sales that have dropped by 70% per person in this time period. The consumer has spoken and that's our sales problem.

However, mistaking a 70% loss in the sales volume of low-fat milk as a 23% entire category loss just highlights that you aren't listening to your customers or trying to sell them what

they want to buy. If we ran this model asking how do we get organic milk from its production centers to population centers we would get an entirely different set of results. If we ran this model asking how do we lactose free and ultra filtered milk efficiently from farms to consumers we would get an entirely different set of results. But the FMMO system does not and cannot, absent change proposed by MIG, account for this difference in markets. Organic milk markets are disconnected from the conventional market and yet organic milk pays into the FMMO pools without drawing any benefit (especially no ability to raise shipping percentages to get more organic milk).

The mismatch between the actual fluid milk marketplace and the FMMO system already leads to disorderly marketing – raising the regulatory burdens on Class I would only exacerbate that problem. For example, a recent change in the industry is the introduction of base programs by handlers, which have effectively closed nearly all milk marketing outlets to new entrants and independent dairy farmers over the last 5-10 years. While this certainly has its reasons for being put in place (for example, controlling the production of milk when it has no home), it has not been without its consequences as well. The primary being an inability to switch handlers. This works great for those who got grandfathered into a handler with the ability to depool and zero initial base costs, but it doesn't work so well for Class I direct ship dairy farmers and cooperatives who market heavily into Class I markets whether they be organic or conventional. Class I shippers are unable get paid fairly and they are also unable to find new homes for milk.

This disconnect between FMMOs and the marketplace is further evident when considering the impact of Proposal 19 on consumers. NMPF's Proposal 19 represents a $0.90 / cwt increase to the consumer for LA County. What does the consumer get in exchange for this increase? The same product they have been receiving. And the same incentive to service that consumer's market. Because the majority of any increase in Class I differentials would go into the pool, this increase would not compensate the producers supplying Class I and thus would not provide any different incentive than that is currently in place.

If we looked at marketing milk in this hearing the same way that consumers look at buying milk in the grocery store we might actually come up with policy decisions that service the customer and grow the market. Instead, we use our resources, lawyers, and government authority to fight over the slices of an increasingly shrinking pie. Let's try to make the pie bigger. We need a system that works for industry and serves the consumers diverse and everchanging dairy demands because milk is not simply milk!

B. Opposition to Proposals 1 and 2: Milk Composition

We oppose any change to the Class III and IV milk component factors without a vetted analysis of the total impacts to the total FMMO market, not just skim/fat orders. More specifically in California we have a fortification standard and directly pay for and pool those added milk solids on most of our fluid milk. Forcing fluid plants to buy the same milk to make the same product but for a higher price would put us at an even further competitive disadvantage to other market orders. Consider, the FDA has set a minimum SNF standard for US sales at 8.25%. To mandate a purchase standard of 9.41% but a production standard of 8.25% opens the potential for disorderly marketing. A farm producing traditional Holstein milk at 8.7% SNF would now have the opportunity to sell it for >9.0% in skim/fat orders but not multiple component orders?

Solids imbalances like this are already the case in California where the FMMO forces us to pay for and pool fortification solids but they do not offer any compensatory damages for plants that manufacture out of order and sell to the 8.25% standard in California. Further raising the costs of components will only make out of region cost differences more asymmetrical. They would also put us in the unfortunate situation where we are paying twice for the solids because we already receive below pool average solids milk. If we had to pay for 9.41% SNF but only received traditional 9.0% we would still have to pay again for the fortification solids to reach minimum levels, thus we would be double charged. This reinforces non-uniform prices which FMMOs are purportedly designed to avoid.

Furthermore on the finished product side, increases in components can actually cause manufacturing difficulties. We must keep in mind that as farm milk components increase the amount of fat in skim milk, 2%, and whole milk does not increase. This means that as milk component levels rise, more and more cream must be skimmed out in order to hit the same finished product targets. These higher component values cause losses to fluid plants in three manners. First, I pay for higher skim solids that the customer doesn't value. Second, if more cream has to be removed, you must first purchase more initial raw milk and incur additional premiums to get the same gallons of finished product. Third, cream is removed through the process of separation, which means more de-sludges and plant loss that is not compensated for.

Desludges are the primary loss of milk in a fluid plant and they occur when you run milk through a separator, which is a machine that splits raw milk into skim milk and cream components. Separators do not run consistently throughout the production run. After just five minutes in any separator you will start to notice efficiency losses in skim performance and you will eventually have to "desludge" in order to make product that is in specification. A desludge is when milk is stopped through the unit and it is flushed out with water to do a short term cleaning. Desludge frequencies are typically every 10-30 minutes depending on the load from components and separator condition. We can't comingle milk and water so every time this happens roughly 10 gallons of milk is lost to the drain. A typical unit running at 100 gallons per minute and doing a 10 minute desludge frequency would lose 10 gallons of milk every 1000 gallons of product or a full 1% of plant loss that is not compensated for. So, from a Class I perspective, I do not want to incentivize higher components. And if USDA raises the component pricing, that is sending to farmers the signal that we want and need more components in our milk. We do not.

It is my belief that the primary driver of the recent and significant increase in component levels at the farm are not the result of market signals but more the result of base plans that handlers have put in place. The technology to increase components has been in existence for a long time and 25 years ago I remember holding extension meetings teaching the economic benefits of doing

so to farmers. In California the early adopters (Hilmar Cheese shippers) were certainly successful but adoption was still slow. It wasn't until base programs limiting milk intake were in place that the increases in components really started to happen. If a farmer can't grow milk volume they can still grow their milk check with components under most base programs and that is what has happened. This also explains why the growth in component levels is so different regionally. There are no milk production caps in the southeast or Florida and component changes are relatively small. Conversely component changes are quite significant in other regions like the Northwest where almost all milk is marketed by one handler with a base plan in place. This increase in components is not a market driven phenomenon from the US fluid milk consumer, however they are going to be the ones paying for it in these proposals.

This proposal has been stated as necessary to address issues in the Skim/Fat orders, which is a very specific issue that the entire US consumer should not be forced to pay for. This is a regional matter that needs to be addressed locally, not federally, per original instructions by AMS.

C. Opposition to Proposal 5: Surveyed Commodity Products (Unsalted Butter)

The only product mentioned that we manufacture is unsalted butter. I can certify that bulk unsalted butter is primarily made for the export market at >82% butterfat, sometimes with added cost to culture, has additional testing requirements, and often has additional costs associated with export documentation. Furthermore, when we run it, we must slow down the churns in order to hit the higher fat targets. That leaves us with lower plant throughput and fewer pounds of finished product to spread labor and overhead costs over. Also, it also has a shorter shelf life than salted butter making it harder to market within code date.

Because of this it requires a higher cost to manufacture. Adding new products to the formulas without a thorough yield analysis and comment period would be detrimental to the order.

D. Opposition to Proposals 10, 11, and 12: Product Yields

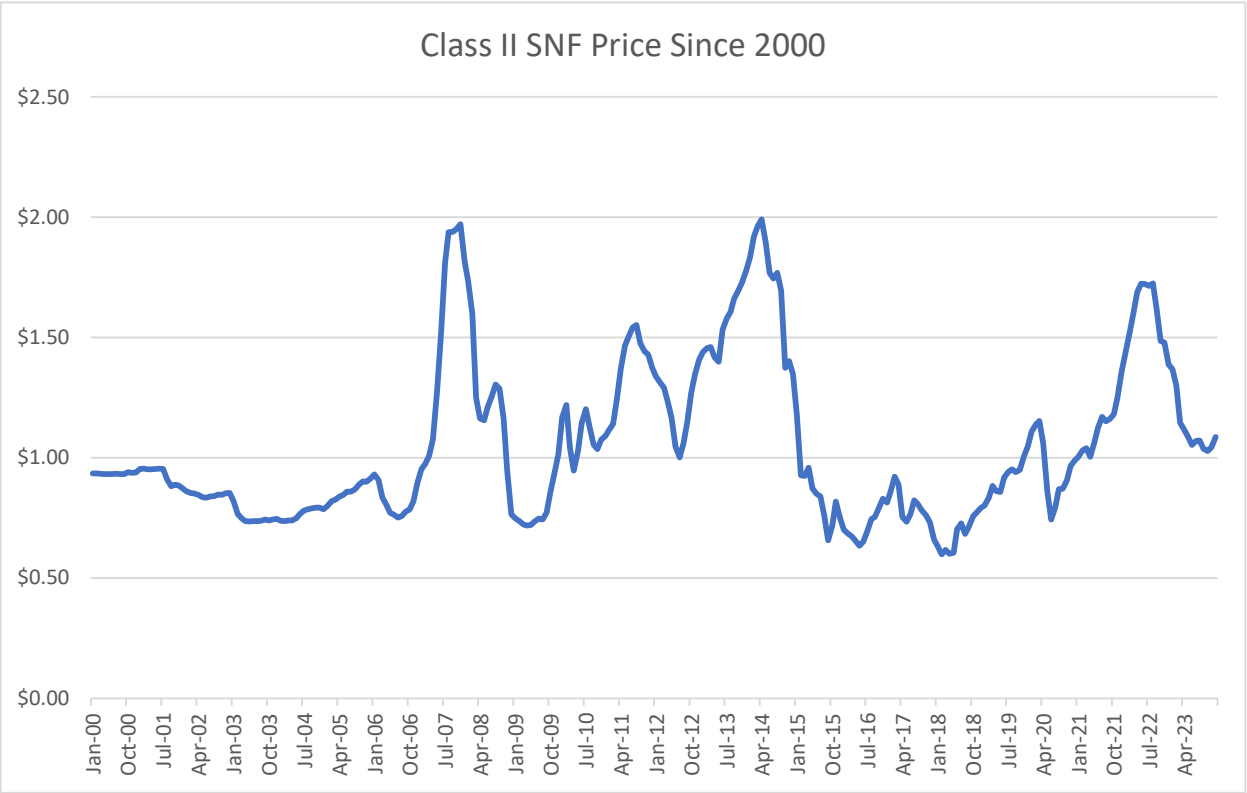
We need a much more comprehensive analysis of realistic plant yields before adjusting these formulas. Deviating to such a higher standard without data or referencing a widely adopted technology change since the last update is not called for. Furthermore, the comment has been made that modern technology allows for higher recovery levels. While that may be true, modern technology comes at a cost. The most recent plant built in Michigan was at a cost of three times to what a similar plant was built for in New Mexico just 17 years earlier by the same manufacturer. To ask for all of the yield gains without helping to pay for the necessary capital investment for existing plants to get there is not equitable.

E. Opposition to Proposal 21: Class II Differentials

While others can speak to the mechanics behind the logic presented in raising Class II differentials everyone at the hearing must agree that doing so will only increase the incentives to rewet powder and depool.

Re-wetting powder when perfectly good fresh milk is available is a practice that only takes place in America and only takes place because of this pricing differential which is being debated today and enforced by the government. The practice of re-wetting powder offers low returns to the dairyman for two reasons. First the milk used is purchased from the farmer at lower Class IV prices. Second there are a number of large stand-alone Class II plants that don't have Class I utilization, meaning they can freely depool. Raising the differential will lead to more depooling which will be to the further detriment of the remaining Class I farmers forced into the pool.

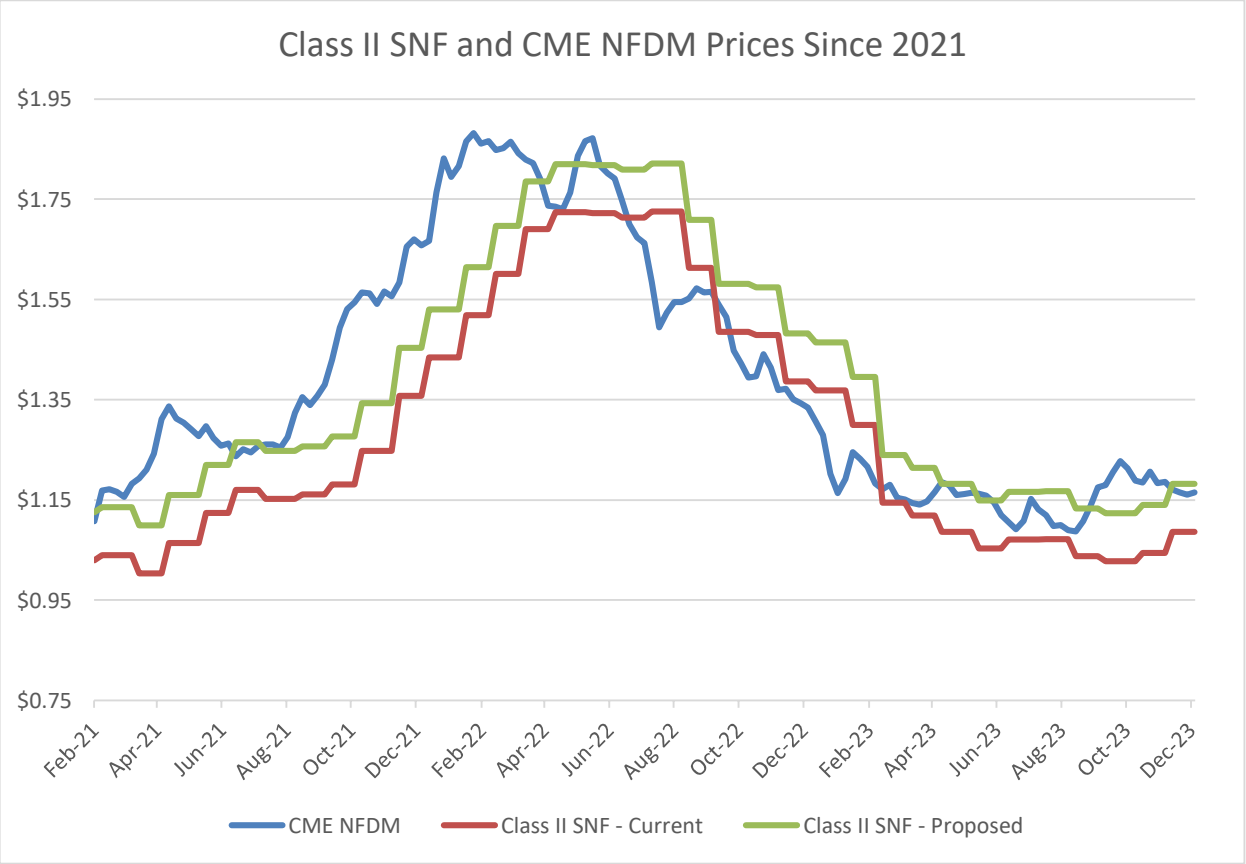
Below is a graph of Class II SNF prices since 2000 and what is most important to note is that when the current system was developed in 2000 the NFDM price was stable and supported by the government. Volatility did not exist so both depooling and SNF fortification was nonexistent with the formula set in place.



We produce our Class II products with skim milk and condensed milk. We also sell those products plus NFDM to other manufacturers who produce Class II products.

Given the ability to buy all three products at any time we do have customers that switch between fresh milk/condensed and NFDM because of prices but the price calculation to use is not the current months Class II price vs the current months advance NDPSR NFDM price. It's the current months Class II price vs your spot cost of NFDM, which is typically the current weeks CME average – a price that won't be reflected in the NDPSR survey until two weeks from now. Just like depooling for other classes, this timing mechanism worked well when we had price supports in place but has obvious flaws in our current globalized and volatile markets.

Below is a graph of the current weeks CME and the matching current months Class II SNF price plus the proposed Class II SNF price change with a $1.56 differential for the most recent up and down price cycle from 2021-2023.



In a rising market the spot price of NFDM from the CME is almost always going to be the most expensive source of milk solids but in a down market that isn't always the case. Under the current formula the CME weekly average was lower than the current months Class II SNF price 20.5% (32 out of 156 weeks) of the time, however under the proposed formula the CME NFDM price would have been lower than the Class II price 50.6% (79 out of 156 weeks) of the time. A policy change of this magnitude is going to be impactful to buying decisions.

Next what is the impact to the consumer of this policy change? While NFDM can be a fair substitute for condensed milk in products like Greek yogurt and it does have a place in some recipes regardless of price, it is not a perfect substitute for fresh milk. Don't we want to encourage

consumer access to products made from fresh milk? How can we justify to consumers that they will now have to pay more money for their sour cream, ice cream, and yogurt while at the same time it is of a lesser quality because regulations incentivize use of rehydrated ingredients instead of fresh milk? And then they would have to pay even more in order to buy the same products made with fresh milk. Why would we create a system that encourages inefficiencies (like rewetting) merely to accommodate regulatory anomalies? This is not how we should be marketing our products as an industry.

Lastly this is truly awful for the environment. Drying perfectly good milk only to re-wet it is a complete waste of natural gas, water, and milk because of plant loss. This is in no way in the public interest, and the government should not be encouraging it with the policies that they set forth today.

F. Support for Proposals 8 & 9: Class III and IV Formula Factors

Here we support the WCMA and IDFA proposals to update the formulas to actual cost. We feel that this formula is still a concession over actual cost of production because it could be as late as 2029 until the actual 2022 cost of production is implemented.

III. CONCLUSION

I acknowledge that the challenges facing our industry are difficult, but we must address them head on. In order for FMMOs to continue to work for the industry and consumers, they have to reflect the marketplace as it exists today. We cannot continue policies from 23 years ago when they are based on market realities that no longer exist. And we cannot acquiesce to a middle-of-the-road approach when the economics do not support it.

That said we remain optimistic for the future of the industry. While a tedious process, one thing that has come out of this hearing is a wealth of information about our supply chains and marketplace, and it is clear our industry has so much potential to tap. We also note the groundswell of support for the USDA's FMMO efforts to provide market information and a

desire for more in the terms of milk check transparency and cost of production audits. We look forward to growing the future together.

DATED this 11th day of January, 2024.

By */s/ Jacob Schuelke*
JACOB SCHUELKE