Mr. Bruce Summers
Administrator
Agricultural Marketing Service
United States Department of Agriculture
1400 Independence Avenue, SW
Washington, D.C. 20250

Re: Request for Proposals for Consideration in a Rulemaking Proceeding to Amend all Federal Milk Marketing Orders

Dear Administrator Summers:

Edge Dairy Farmer Cooperative is the third-largest dairy cooperative by milk volume in the United States, representing over 850 farms of various sizes across nine states with 34 different processors. Unlike most cooperatives or processors, the milk produced by our members is used in a broad spectrum of products across a range of processors in a predominantly strong cheese-making region of the country.

As we expressed in our letter to Secretary Vilsack on June 1, our farmers contend that any national milk pricing reform hearing must be comprehensive in its scope and provide each order with renewed relevance. While recent attempts to achieve more all-inclusive reform have been submitted, we believe enabling legislation should be pursued first to give each order more options.

There is no imminent crisis that would present a compelling reason to initiate the hearing before the next farm bill is enacted and a mandatory cost of processing survey is executed.

From our perspective, here are highlights of the current state of the dairy market:

- The primary objective of the Federal Milk Marketing Orders (FMMOs) is to secure an abundant supply of milk for beverage milk products. As of June 2023, markets are down, and plants nationwide are operating at capacity. There are abundant fluid milk supplies on store shelves in all regions, with no credible forecasts about shortages of beverage milk in the next few years.

- Despite all the talk about downward biased make allowances, the next round of an investment cycle in cheese manufacturing is in full swing, with 4-6 new cheese plants expected to be commissioned by mid-2025, increasing daily milk intake by approximately 30 million pounds (11 billion pounds of milk per year).

- FMMO class prices will likely be what producers get paid in the future, as structural changes in farm size make it less likely that over-order premiums will recover after the FMMO reform. Enacting higher make allowances in 2025, just as a new wave of dairy plants come online, may provoke an exodus of family dairy farms.

- Due to the current review and reauthorization of the farm bill, Edge is concerned that holding a comprehensive federal milk marketing order reform hearing is premature and a waste of current U.S. Department of Agriculture (USDA) resources. Because the farm bill negotiations and reauthorization may adjust USDA's Section 608c authority over milk marketing orders and require a subsequent federal order hearing, we believe that the cost and time associated with holding a federal order hearing would be a waste of limited agency resources if the farm bill requires subsequent changes and mandates related to the areas raised by the current order reform petitions submitted to the Department.

The farm bill could finish in months with the debt ceiling discussion behind us. It seems to us that it would be prudent to hold the hearing after the true cost of manufacturing yields and efficiency parameters are surveyed based on the anticipated new legislative mandates. To reiterate, a comprehensive hearing is warranted, but the optimal timing is not today, but after a farm bill is enacted, anticipating that some of the provisions that cannot be addressed within a hearing today would be altered.

That said, *if* USDA were to decide that a hearing is warranted in 2023, we believe at least four proposals should be considered to help achieve the objective set by the Agriculture Secretary of industry consensus and creating more orderly marketing:

1. **Transparency in Producer Milk Checks**
2. **Reduce Incentives to Depool by Using Announced Prices in the Calculation of Class I Mover**
3. **Alignment of Make Allowance Updates with Dairy Risk Management Tools**
4. **Full Review of Manufacturing Yields and Efficiency Parameters in Class Pricing Formulas**

Proposal 1: Transparency in Producer Milk Checks

If the Agriculture Secretary decides to call a hearing pursuant to 7 C.F.R. 900.1, et seq., Edge requests that the following amendment to order formulation language:

Amend 7 C.F.R. § 1030.73(f) and equivalent provisions in other marketing orders to provide:

§1030.73 Payments to producers and to cooperative associations.

[…]

(f) In making payments to producers pursuant to this section, each handler shall furnish each producer, ~~except a producer whose milk was received from a cooperative association handler described in § 1000.9(a) or (c)~~, a supporting statement in a form that may be retained by the recipient which shall show:

(1) The name, address, Grade A identifier assigned by a duly constituted regulatory agency, and payroll number of the producer;

(2) The daily and total pounds, and the month and dates such milk was received from that producer;
(3) The total pounds of butterfat, protein, and other solids contained in the producer's milk;
(4) The somatic cell count of the producer's milk;
(5) The minimum rate or rates at which payment to the producer is required pursuant to the order in this part including:

i) in multi-component pricing orders, the USDA announced butterfat price, protein price, other solids price, and producer price differential
ii) in skim-fat orders, the uniform butterfat and skim milk price adjusted for location; and
iii) in all orders, the total milk pounds pooled on the order, and statistical uniform price at producer component tests and adjusted for location.

(6) The rate used in making payment if the rate is other than the applicable minimum rate;
(7) The amount, or rate per hundredweight, or rate per pound of component, and the nature of each deduction claimed by the handler; and
(8) The net amount of payment to the producer or cooperative association.

Amend 7 C.F.R. § 1030.13(f) and equivalent provisions in other marketing orders to provide:

(5) To qualify producer milk not pooled in the previous period under this paragraph, the handler must demonstrate that during the period while the milk was not pooled, and no longer than the previous twelve calendar months, producer milk checks have reported total milk pounds pooled on the order were zero.

Answers to §900.22 Questions

(a) Explain the proposal. What is the disorderly marketing condition that the proposal is intended to address?

Since the negative producer price differentials (PPDs) of 2019, many dairy producers have come to question the FMMO rules regarding depooling, and their impact on fair distribution of dairy products value between dairy producers and dairy processors. In the spring of 2020, USDA Farmers to Families Food Box program increased Class III prices rapidly, inducing a negative PPD. Consequently, in most marketing orders, Class III handlers depooled upwards of 80% of their milk. With few exceptions, dairy producers have no idea whether their farm is pooled or depooled. This made it easy for some handlers to still report the full negative PPD on milk checks, despite not having to pay that amount to the pool. Negative PPDs, combined with lack of transparency regarding the farm's pooling status, and misuse of the PPD line item on the milk check, corroded dairy producers' trust in the FMMO system. In our opinion, this constitutes disorderly marketing conditions. To address this issue, Edge requests that for all pooled producers, the handlers must report on their milk check the following information:

a) Name of the Federal Milk Order on which the producer's milk is pooled
b) Announced Protein Price

c) Announced Butterfat Price
d) Announced Other Solids Price
e) Producer Price Differential, where applicable
f) Statistical Uniform Price at Producer Component Tests and adjusted for location
g) Producer milk pounds pooled on the order during the reporting period

In orders where producers are not paid based on protein and other solids tests, the requirements (b), (d) and (f) would be waived.

Further, we request that handers for re-pooling milk that was not pooled in a defined prior period be required to include on the milk check information making clear that the milk was not pooled on the order.

(b) What is the purpose of the proposal?

The purpose of the proposal is to address and avoid the disorderly marketing conditions described above. If implemented, these rules would require all pooled handlers to clearly present elements of the FMMO minimum regulated payment, and producers would be able to identify if their farm is pooled or not, and – if not pooled – whether they are still being assessed negative producer price differential, as if their farm is still pooled. This greater transparency regarding pooling of milk will also allow producers to better understand how their product is used and determine whether there is an unfair deduction to their milk check.

(c) Describe the current Federal order requirements or industry practices relative to the proposal.

The current FMMO requirements are provided in § 1000.73(f). Industry practices vary from handler to handler. While some handlers have taken commendable steps in recent years to promote understandability of their milk checks, many dairy producers still feel they cannot properly understand their milk check.

(d) Describe the expected impact on the industry, including on producers and handlers, and on consumers. Explain/Quantify.

If this proposal is accepted, producers would be better able to understand their milk checks. Processors would have a one-time cost to modify accounting systems to report the information required by modified 1000.73(f). We do not anticipate this change would either decrease or reduce the milk price paid to producers. This proposal does not impact consumers.

(e) What are the expected effects on small businesses as defined by the Regulatory Flexibility Act (5 U.S.C. 601–612)? Explain/Quantify.

Handlers which qualify as small businesses would need to update their accounting systems to report required information.

(f) How would adoption of the proposal increase or decrease costs to producers, handlers, others in the marketing chain, consumers, the Market Administrator offices and/or the Secretary? Explain/Quantify.

We do not anticipate significant change in costs to any of the listed groups. There will be some nominal costs to handlers to update their accounting systems to ensure the required information is included on producer milk checks.

(g) Would a pre-hearing information session be helpful to explain the proposal?

This proposal is submitted in response to the request for additional proposals, and ahead of the already scheduled pre-hearing information session.

Proposal 2: Reduce Incentives to Depool by Using Announced Prices in the Calculation of Class I Mover

Edge also requests that should the Agriculture Secretary decide to call a hearing pursuant to 7 C.F.R. § 900.1., that Class I skim milk price be amended with either of the following two variants presented below:

Option 1: Class III+

Amend 7 C.F.R. § 1000.50:

(b) ***Class I skim milk price.*** The Class I skim milk price per hundredweight shall be the adjusted Class I differential specified in § 1000.52, plus the adjustment to Class I prices specified in § 1005.51(b), 1006.51(b) and 1007.51(b) of this chapter, plus the ~~simple average of the advanced pricing factors~~ **Class III skim milk price** computed in paragraph ~~(q)(1)~~ **(i)** ~~and (2)~~ of this section rounded to the nearest cent, plus ~~$0.74 per hundredweight~~ **the adjustment to Class I skim milk price computed in paragraph (q)(3) of this section**.

(c) ***Class I butterfat price.*** The Class I butterfat price per pound shall be the adjusted Class I differential specified in § 1000.52 divided by 100, plus the adjustments to Class I prices specified in § 1005.51(b), 1006.51(b) and 1007.51(b) divided by 100, plus the ~~advanced~~ butterfat price computed in paragraph ~~(q)(3)~~ **(l)** of this section.

(e) ***Class II skim milk price.*** The Class II skim milk price per hundredweight shall be the ~~advanced~~ Class IV skim milk price computed in paragraph ~~(q)(2)~~ **(k)** of this section plus 70 cents.

(q) ***Advanced pricing factors.*** For the purpose of computing the Class I skim milk price~~, the Class II skim milk price, the Class II nonfat solids price, and the Class I butterfat price for the following month~~, the following pricing factors shall be computed **by:**

(1) **using the weighted average of the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month,** an advanced Class III skim milk price per hundredweight, rounded to the nearest cent, shall be computed as follows: (i) Following

the procedure set forth in paragraphs (n) and (o) of this section, but using the weighted average of the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month, compute a protein price and an other solids price; (ii) Multiply the protein price computed in paragraph (q)(1)(i) of this section by 3.1; (iii) Multiply the other solids price per pound computed in paragraph (q)(1)(i) of this section by 5.9; and (iv) Add the amounts computed in paragraphs (q)(1)(ii) and (iii) of this section.

(2) **using the weighted average of the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month,** an advanced Class IV skim milk price per hundredweight, rounded to the nearest cent, shall be computed as follows: (i) Following the procedure set forth in paragraph (m) of this section, but using the weighted average of the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month, compute a nonfat solids price; and **(3)** ~~An advanced butterfat price per pound rounded to the nearest one-hundredth cent, shall be calculated by computing a weighted average of the 2 most recent U.S. average NASS AA Butter survey prices announced before the 24th day of the month, subtracting 17.15 cents from this average, and multiplying the result by 1.211.~~

(3) **Class I skim milk for the forthcoming calendar year will be adjusted by an amount equal to the 36-month average of the monthly differences between the higher-of advanced Class III skim milk price and advanced Class IV skim milk price as computed in paragraphs q(1) and (2) of this section, and the Class III skim milk price as computed in paragraph (i) of this section.**

Option 2: Higher-of using announced skim milk prices

Amend 7 C.F.R. § 1000.50:

(b) ***Class I skim milk price.*** The Class I skim milk price per hundredweight shall be the adjusted Class I differential specified in § 1000.52, plus the adjustment to Class I prices specified in §§ 1005.51(b), 1006.51(b) and 1007.51(b) of this chapter, plus the ~~simple average~~ **higher**-of the ~~advanced pricing factors~~ **Class III skim milk price and Class IV skim milk price** computed in paragraph**s** ~~(q)(1)~~ **(i)** and **(k)** ~~(2)~~ of this section rounded to the nearest cent~~, plus $0.74 per hundredweight~~.

(c) ***Class I butterfat price.*** The Class I butterfat price per pound shall be the adjusted Class I differential specified in § 1000.52 divided by 100, plus the adjustments to Class I prices specified in § 1005.51(b), 1006.51(b) and 1007.51(b) divided by 100, plus the ~~advanced~~ butterfat price computed in paragraph ~~(q)(3)~~ **(l)** of this section.

(e) ***Class II skim milk price.*** The Class II skim milk price per hundredweight shall be the ~~advanced~~ Class IV skim milk price computed in paragraph ~~(q)(2)~~ **(k)** of this section plus 70 cents.

~~**(q)** ***Advanced pricing factors.*** For the purpose of computing the Class I skim milk price, the Class II skim milk price, the Class II nonfat solids price, and the Class I butterfat price for the following month, the following pricing factors shall be computed using the weighted average of~~

~~the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month:~~

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

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

~~**(ii)** Multiply the protein price computed in paragraph (q)(1)(i) of this section by 3.1;~~

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

~~**(iv)** Add the amounts computed in paragraphs (q)(1)(ii) and (iii) of this section.~~

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

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

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

~~**(3)** An advanced butterfat price per pound rounded to the nearest one-hundredth cent, shall be calculated by computing a weighted average of the 2 most recent U.S. average NASS AA Butter survey prices announced before the 24th day of the month, subtracting 17.15 cents from this average, and multiplying the result by 1.211.~~

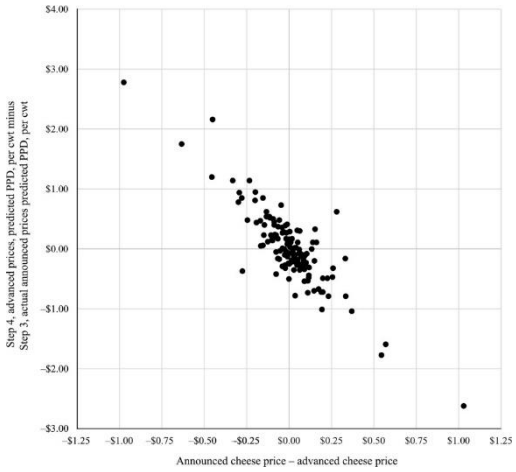
Answers to §900.22 Questions

(a) Explain the proposal. What is the disorderly marketing condition that the proposal is intended to address?

CME futures markets have grown considerably since the last FMMO reform. In the year 2001, average open interest in Class III futures markets was roughly 12,000 contracts. By 2022, that figure increased 2.5-fold to 30,000 contracts. Average daily volume in the year 2022 was 1,313 contracts, over four times bigger than the average daily volume in the year 2001 with 324 contracts.

A justification for the use of advanced prices is that beverage milk product manufacturers must provide pricing to retail customers before the start of the month. This practice is not substantially different than the need for dairy product manufacturers to provide forward prices to overseas buyers of cheese, skim milk powder or whey protein concentrates.

Bozic and Wolf (2022) analyzed the impact of the market rallies after the advanced prices are released on PPDs. Figure 2 from their paper, reprinted below, illustrates the impact on the Southwest FMMO.



When announced (final) prices exceed advanced prices, PPDs are reduced and may become negative. Upper Midwest FO experienced 33 months of negative PPDs from January 2000 through May 2019. In 29 of those months with negative PPDs, maximum higher-of announced prices were greater than the maximum higher-of advanced prices. Negative PPDs induce depooling. Therefore, the use of advanced prices creates disorderly marketing conditions.

To eliminate this source of depooling and disorderly marketing conditions, Edge requests that final (announced) prices be used for determining Class I handlers' obligations to the pool.

(b) What is the purpose of the proposal?

The purpose of the proposal is to address disorderly marketing conditions described above, *i.e.*, depooling induced by market rallies after advanced prices have been published.

(c) Describe the current Federal order requirements or industry practices relative to the proposal.

The current FMMO requirements are provided in 7 CFR § 1000.50. The use of advanced prices is reducing competition among beverage milk product manufacturers and retailers by providing transparency and certainty regarding the input price (*i.e.*, raw milk) costs.

(d) Describe the expected impact on the industry, including on producers and handlers, and on consumers. Explain/Quantify.

Option 1 – "Class III Plus" bases the Class I mover solely on Class III skim milk price, plus an adjuster that would keep the mover revenue-neutral vs. the traditional higher-of approach. The benefits of this option are severalfold:

a) Historically, Class III skim price is likely to be higher than Class IV skim milk price. Since 2000, Class III skim milk price was higher than Class IV skim milk price in 166 out of 281 months (59%).

b) Butter/powder facilities are typically used for market balancing, and cheese plants typically operate at full capacity year-round. As such, positive demand shock is likely to increase Class III prices more dramatically than Class IV prices. The highest historical spread between Class III and Class IV skim prices is $11.17, and the historical minimum spread is -$4.98.
c) Class III futures markets are the most liquid dairy futures markets, and no further innovation on CME would be necessary to facilitate effective risk management by Class I handlers. In 2022, average open interest and volume was 30,000 and 1,313 respectively for Class III futures, and 13,200 and 112 respectively for Class IV futures.
d) The mechanism for resetting the adjuster annually would guarantee revenue-neutrality vs. the higher-of approach. The adjuster would, by definition, always be non-negative. Since Class IV prices tend to be higher than Class III prices when the overall dairy market is tight and prices are high, this approach would also smooth Class I prices over time, providing the dairy consumer with some respite in periods of above-average market prices.

Option 2 – "Higher-of using announced skim milk prices" is very similar to the traditional higher-of approach. The only change is that instead of advanced pricing factors, final butterfat and skim milk prices are used. Since the Base Class I price would always be equal to either Class III or Class IV milk price, Class I handlers would be able to effectively manage risk exposure either using Class III and IV milk futures or using over the counter (OTC) risk management offers. We anticipate that CME Group would consider creating a Class I milk contract which would settle on the higher-of Class III and Class IV futures contracts. If advanced pricing is abandoned, then the introduction of a new Class I futures contract would be much easier than under the previous higher-of regime. Arbitrage relationship between Class I futures and Class III and IV futures would ensure that liquidity is not splintered.

(e) What are the expected effects on small businesses as defined by the Regulatory Flexibility Act (5 U.S.C. 601–612)? Explain/Quantify.

Small processors of beverage milk markets would have to set up risk management programs, if processors have not already created them, to avoid the negative impacts of the price acceleration effect, *i.e.*, the rallies during the reporting month.

(f) How would adoption of the proposal increase or decrease costs to producers, handlers, others in the marketing chain, consumers, the Market Administrator offices and/or the Secretary? Explain/Quantify.

Handlers would have one less reason to depool milk. Producers would benefit from less depooling. The removal of the smoothing effect provided by advanced prices would be compensated for through higher payments by the Dairy Margin Coverage (DMC) program. The changes are designed to be revenue neutral so producers, handlers and consumers should not see a long-term increase or reduction in revenue or cost.

(g) Would a pre-hearing information session be helpful to explain the proposal?

This proposal is submitted in response to the request for additional proposals, and ahead of the already scheduled pre-hearing information session.

Proposal 3: Alignment of Make Allowance Updates with Dairy Risk Management Tools

Edge requests that any changes to make allowances, standard component tests or any other parameter that affects the calculation of component values or Class III or Class IV milk prices be announced no later than Sep. 15 for the second forthcoming calendar year. For example, USDA would announce no later than Sep. 15, 2024, the FMMO pricing formulas in effect for calendar year 2026[1]. If USDA would wish to initiate the pricing parameter change for a date that is not Jan. 1, we propose that the announcement be made no later than the 15th of the month preceding the implementation date by more than 15 months (5 calendar quarters).

Answers to §900.22 Questions

(a) Explain the proposal. What is the disorderly marketing condition that the proposal is intended to address?

Submitted proposals by the National Milk Producers Federation (NMPF) and International Dairy Foods Association (IDFA) request that the make allowance increases be enacted as soon as possible. IDFA requests much higher make allowances and proposes that half of the difference be implemented as soon as feasible, and the remainder over several years.

Edge requests that any change to make allowances be conditioned and preceded by a mandatory survey of dairy processing costs including manufacturing yields and efficiency parameters.. However, *if* USDA decides to proceed with the hearing and establishing new make allowances, it is of paramount importance to preserve the viability of risk management tools used by dairy producers.

CME Group lists monthly dairy futures contracts for 24 consecutive months. The number of outstanding contracts is called the open interest. Open interest on June 1, 2023, was 30,045 contracts, with positive open interest as far out as December 2024. Market participants on futures markets include hedgers, speculators and arbitragers. Dairy producers tend to hedge by selling Class III and Class IV milk futures or buying put options in those contracts. Buyers of dairy products tend to hedge by buying Cheese, Dry Whey, Butter or Nonfat Dry Milk futures or call options. Every futures contract requires two parties: a buyer and a seller. For a dairy producer to be able to sell a futures contract, some other party must agree to buy it at the same price. For a dairy product buyer to be able to buy a cheese futures contract, some other party must agree to sell it.

Class III price is a linear combination of Butter, Cheese and Dry Whey prices. This allows arbitragers to provide a bridge between markets typically used by dairy producers (Class III and IV futures) and markets typically used by dairy product buyers. This bridge provides much needed buy-side liquidity to milk futures and sell-side liquidity to dairy commodity product futures. However, this arbitrage is only possible if the relationship between Class III and the three products

[1] DRP sales for Jan-Mar, 2026 open on September 16th 2024.

is known with certainty. Regulatory reform imposes uncertainty in this relationship. If make allowances are likely to increase, and if it is not known with certainty what the new make allowance levels will be, then no entity can engage in risk-free arbitrage between milk and commodity futures markets. A deleterious consequence is likely to sap liquidity in dairy futures markets, increasing cost of hedging to dairy producers.

Furthermore, since 2018, the Dairy Revenue Protection (DRP) program has provided protection against downside risk to milk prices. Between 25 and 35 percent of all U.S. milk production is covered through DRP. As explained below, regulatory reform may lead to severe restrictions in access to DRP.

DRP is regulated under the Federal Crop Insurance Act[2]. 7 C.F.R. § 1508(a) states:

To qualify for coverage under a plan of insurance, the losses of the insured commodity must be due to drought, flood, or other natural disaster (as determined by the Secretary).

To be in alignment with the enabling legislation, Dairy Revenue Protection policy, Section 4, stipulates[3]:

This policy provides insurance only for the difference between the final revenue guarantee and actual milk revenue, times your actual share and protection factor, caused by natural occurrences in market prices and yields in your pooled production region. This policy does not insure against the death or other loss or destruction of your dairy cattle, or against any other loss or damage of any kind whatsoever.

DRP expected prices are based on CME futures prices. If futures prices may drop due to unexpected regulatory shock, i.e., actual make allowances being higher than expected make allowances, then DRP could inadvertently provide coverage against policy risk. Consequently, the legality of DRP may be challenged as policy risk is not a natural occurrence in market prices. Ultimately, the program may need to be suspended, at least for the Class Pricing Option[4]. In addition, Livestock Gross Margin for Dairy Cattle (LGM-Dairy) may also need to be suspended.

The reduction in liquidity on CME dairy markets, and potential reduction in DRP offers due to FMMO regulatory changes, constitute disorderly marketing conditions.

Fortunately, it is straightforward to implement regulatory changes in a way that avoids negative spillovers to CME markets and Risk Management Agency (RMA) programs. As stated in the proposal, Edge requests that any changes to make allowances, standard component tests, or any other parameter that affects the calculation of component values or Class III or Class IV milk prices be announced no later than Sep. 15th for the second forthcoming calendar year. For example, USDA would announce no later than Sep. 15, 2024, the FMMO pricing formulas in effect for calendar year 2026[5]. As a generalization of this rule, if USDA would wish to initiate the pricing parameter

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[2] https://www.law.cornell.edu/uscode/text/7/chapter-36/subchapter-I

[3] https://www.rma.usda.gov/-/media/RMA/Policies/Dairy-Revenue-Protection/2023/Dairy-Revenue-Protection-Policy-23-DRP.ashx?la=en

[4] Actual prices under the Commodity Pricing Option are based on make allowances in effect on the date when DRP endorsements are purchased. Only 15-25% of all DRP sales are based on Commodity Pricing Option.

[5] DRP sales for Jan-Mar, 2026 open on September 16th 2024.

change for a date that is not Jan. 1st, we propose that the announcement be made no later than the 15th of the month preceding the implementation date by more than 15 months (5 calendar quarters). Frequent updates to pricing parameters are not problematic if sufficient advanced notice is provided.

(b) What is the purpose of the proposal?

The purpose of the proposal is to address disorderly marketing conditions described above, *i.e.*, the reduction in liquidity on CME dairy markets, and potential reduction in DRP offers due to FMMO regulatory changes.

(c) Describe the current Federal order requirements or industry practices relative to the proposal.

USDA is not required by law to provide advanced notice of changes to FMMO pricing formulas. However, the increase in utilization of CME markets and RMA programs since the last national FMMO hearing compel us to request that such advanced notice be implemented as standard practice going forward.

(d) Describe the expected impact on the industry, including on producers and handlers, and on consumers. Explain/Quantify.

If make allowances are implemented without sufficient advanced notice, CME liquidity may dramatically fall, and RMA may need to suspend LGM-Dairy and Class Pricing Option (Type 831) of the DRP. In recent years, 25-35% of U.S. milk was protected under the RMA programs, and CME markets likely cover another 5% of U.S. milk production. Without robust safety net, U.S. dairy producers may be less resilient and the dairy farm exit rate may increase. This proposal does not impact handlers or consumers.

(e) What are the expected effects on small businesses as defined by the Regulatory Flexibility Act (5 U.S.C. 601–612)? Explain/Quantify.

Not providing sufficient advanced notice regarding make allowances would primarily affect dairy producers, in the manner described above.

(f) How would adoption of the proposal increase or decrease costs to producers, handlers, others in the marketing chain, consumers, the Market Administrator offices and/or the Secretary? Explain/Quantify.

Adoption of the proposal would delay make allowance updates by one year, leading to higher revenue to dairy producers and higher costs to dairy processors during the one-year delay.

(g) Would a pre-hearing information session be helpful to explain the proposal?

This proposal is submitted in response to the request for additional proposals, and ahead of the already scheduled pre-hearing information session.

Proposal 4: Full Review of Manufacturing Yields and Efficiency Parameters in FMMO Pricing Formulas

Submitted proposals by the NMPF and IDFA request modifications to make allowances used to determine the value of milk components. Both petitions fail to address manufacturing yields and efficiency changes that have transpired since the FMMO formulas were last modified. Edge requests that any change to make allowances be conditioned and preceded by a mandatory survey of dairy processing costs, manufacturing yields, and efficiency parameters.

Answers to §900.22 Questions

(a) Explain the proposal. What is the disorderly marketing condition that the proposal is intended to address?

As a primer on the protein formula, we reprint the Technical Appendix: Van Slyke Cheese Yield Formula from Bozic and Mykrantz (2022)[6], modified as appropriate for this purpose.

Under the current FMMO pricing system, the Class III protein price is obtained by summing the protein value in cheese and the butterfat adjustment, which captures the difference between the butterfat value in cheese versus the opportunity cost of using that butterfat in butter as shown in equation (1).

$$P_{Pro}^{III} = \underbrace{(P_{Ch} - 0.2003) \times 1.383}_{\text{Protein Value in Cheese}} + \underbrace{\left[\underbrace{(P_{Ch} - 0.2003) \times 1.572}_{\text{Butterfat Value in Cheese}} - \underbrace{P_{BF} \times 0.9}_{\text{Butterfat Value in Butter}}\right] \times \underbrace{1.17}_{\text{Butterfat to Protein Ratio (3.5 / 2.9915)}}}_{\text{Butterfat Adjustment}} \quad (1)$$

Where, P_{Pro}^{III} is the Class III protein price, P_{Ch} is the cheese price, 0.2003 is the make allowance of cheese, 1.383 is the cheese yield per unit of protein, P_{BF} is the FMMO price of butterfat, 0.9 is the butterfat retention factor, and 1.17 is the butterfat to protein ratio in standard milk. The formula above makes strong assumptions regarding the butterfat retention rate (0.9), and butterfat to protein ratio (Butterfat test = 3.5, Protein Test = 2.9915, Butterfat/Protein = 3.5 / 2.9915 = 1.17. In addition, the yield factors 1.383 and 1.572 are the result of Van Slyke formula which is parameterized based on further assumptions examined below.

The Van Slyke cheese yield formula currently used by FMMOs is:

$$C_Y = \left[\left((f_r \times (F_t - F_L) + c_{\%} \times P_t - c_l) \times y\right)/(1 - m_{\%})\right] \times (1 - L) \quad (2)$$

[6] https://www.cambridge.org/core/journals/journal-of-agricultural-and-applied-economics/article/opportunity-cost-an-economic-concept-that-may-improve-the-functioning-of-federal-milk-marketing-orders-and-the-us-dairy-industry/46F61ED5965700DB02AEE00A289E1FE0#supplementary-materials

where C_Y is cheese yield per hundredweight of milk, F_t is a farmgate milkfat test per hundredweight of milk, in lb/cwt, P_t is a farmgate true protein test per hundredweight of milk, in lb/cwt; $m_{\%}$ is a moisture percentage, L denotes farm-to-plant milk losses, and F_L captures farm-to-plant milkfat losses beyond L. Under the FMMO system, the milkfat test in standard milk, F_t, is set to 3.5, and the true protein test, P_t, is assumed to be 2.9915. Following the parametrization currently used by FMMO regulations, butterfat recovery in cheese, f_r, is set at 0.90; casein percent of true protein, and $c_{\%}$, is assumed to be 0.822. Casein loss to whey, c_l, is 0.1. Yield factor, y, reflects the amount of salt, retained whey proteins, milk minerals, etc., and is assumed to be 1.09. A moisture level, $m_{\%}$, of 38% is likewise used based on current formulas and USDA's Agricultural Marketing Service (AMS) Dairy Product Mandatory Reporting Program survey definitions. Farm-to-plant milk losses, L, are 0.0025 lb/cwt, and milkfat losses, F_L, are an additional 0.015 lb./cwt.

Rewritten, the Van Slyke Cheese yield formula used by FMMOs is:

$$C_Y = \left[\left((0.90 \times (3.5 - 0.015) + 0.822 \times 2.9915 - 0.1) \times 1.09\right)/(1 - 0.38)\right] \times (1 - 0.0025) \qquad (2)$$

The Van Slyke cheese yield formula and the FMMO assumptions, excluding farm-to-plant losses, result in a theoretical cheese yield of 9.6852 pounds of cheese. Adjusting for farm-to-plant milk and component losses, the theoretical yield is reduced to 9.6373 (USDA 2002). The yield formula can be rewritten as a sum of marginal contributions by butterfat and protein. By setting F_t and F_L to zero, we calculate the protein contribution to cheese yield to be 4.1369. Similarly, by setting P_t and c_l to zero, we calculate the butterfat contribution to cheese yield to be 5.5004. By dividing the butterfat contribution to cheese yield by the standard butterfat test, we obtain the marginal contribution to cheese yield per 1 lb. of butterfat, 5.5004 / 3.5 = 1.572. Likewise, by dividing the protein contribution to cheese yield by the standard protein test, we obtain the marginal contribution to cheese yield per 1 lb. of protein, 4.1369 / 2.9915 = 1.383. Table 1 provides the decomposition of the Van Slyke cheese yield formula into protein and butterfat yield contributions and the derivation of coefficients used in the current FMMO protein price formula.

Table 1: Van Slyke Cheese Yield Formula Factors and Yield Assumptions

Symbol	Description	Van Slyke Factors	Butterfat Portion	Protein Portion
f_r	Butterfat recovery in cheese	0.90	0.90	
F_t	Standard milkfat test	3.50	3.50	
F_L	Farm-to-plant (additional) milkfat losses	0.015	0.015	
$c_{\%}$	Casein percent of true protein	0.822		0.822
c_l	Casein loss to whey	0.1		0.1
y	Theoretical yield formula	1.09	1.09	1.09
P_t	True protein test *	2.9915		2.9915
$m_{\%}$	Moisture level	38%	38%	38%
L	Farm-to-plant milk losses	0.0025	0.0025	0.0025
C_Y	Cheese yield	9.6373	5.5004	4.1369
	Cheese yield per 1 lb. of component		1.572	1.383

* The 2.9915 factor reflects the assumption that standard skim milk tests 3.1 percent true protein.

The Van Slyke formula used for protein pricing in Federal Milk Marketing Orders should be amended to reflect changes in butterfat and protein tests, butterfat recovery in cheese, farm-to-plant milk and milkfat losses, theoretical cheese yield, casein loss to whey, and butterfat-to-protein ratio. Edge is not proposing specific values because Edge is not proposing modifications to make allowances until a proper survey of manufacturing yields and efficiency parameters and costs of processing can be conducted. Partial changes that only account for increased marginal costs, but not manufacturing yields and efficiency parameters are unfair, likely to hurt dairy producers and may substantially increase the exodus of family dairy farms.

(b) What is the purpose of the proposal?

The purpose of the proposal is to address disorderly marketing conditions where make allowances reflect most recent dairy processors costs, but manufacturing yields and efficiency parameters are based on assumptions from 20 plus years ago.

(c) Describe the current Federal order requirements or industry practices relative to the proposal.

Current FMMO protein formula reflects the Van Slyke assumptions listed above.

(d) Describe the expected impact on the industry, including on producers and handlers, and on consumers. Explain/Quantify.

The impact on the protein price would depend on the relative price of cheese and butter. For example, if following the NMPF proposal the standard butterfat test is updated to 4.00 and standard protein test to 3.30, that would increase the butterfat-to-protein ratio from 1.17 to 1.21. If in addition, the butterfat recovery rate is increased from 0.90 to 0.93, then the impact of updating these two parameters would be following:

Impact of Yields and Efficiency Parameters on FMMO Protein Price

Scenario	Current Formulas	NMPF Make Allowances	NMPF Make Allowance with Yields and Efficiency Parameters Updates
June 5, 2023 CME Spot: Block cheese: $1.43 Butter: $2.40	$1.12/lb.	$1.042/lb.	$1.0062/lb.
2022-2023: Block Cheese: $2.05 Butter: $2.74	$2.68/lb.	$2.606/lb.	$2.6239/lb.
2020-2023: Block cheese: $1.96 Butter: $2.11	$3.20/lb.	$3.119/lb.	$3.1817/lb.
2014-2023: Block cheese: $1.81 Butter: $2.16	$2.65/lb.	$2.572/lb.	$2.6098/lb.

This proposal does not impact consumers.

(e) What are the expected effects on small businesses as defined by the Regulatory Flexibility Act (5 U.S.C. 601–612)? Explain/Quantify.

Not updating Yields and Efficiency Parameters would primarily affect dairy producers, likely adversely in the manner described above.

(f) How would adoption of the proposal increase or decrease costs to producers, handlers, others in the marketing chain, consumers, the Market Administrator offices and/or the Secretary? Explain/Quantify.

This rule does not change the price to consumers. Depending on the relative price of cheese to butter, the cost to processors and the revenue to producers would be either higher or lower.

(g) Would a pre-hearing information session be helpful to explain the proposal?

This proposal is submitted in response to the request for additional proposals, and ahead of the already scheduled pre-hearing information session.