The American Farm Bureau Federation (AFBF) has nearly 6 million members in all 50 states and Puerto Rico, including many thousands of cooperative and independent dairy farmers. Most of these dairy farmers are directly affected by the pricing provisions of the Federal Milk Marketing Orders (FMMOs).

These dairy farmers play a crucial role in the development of AFBF dairy policy. Every Farm Bureau position and proposal is based explicitly on that policy, developed through a grassroots process in which farmers make the decisions every step of the way.

AFBF submitted 9 proposals for consideration in this hearing and appreciates the opportunity to address the four that were accepted by USDA, as well as the clear direction on what may be needed to advance the rest.

A fundamental focus of AFBF’s proposals is the reduction or elimination of negative producer price differentials and the de-pooling they cause. We believe that an orderly pool is the key to orderly marketing and ensuring Federal Milk Marketing Orders continue to benefit farmers, cooperatives, processors, and consumers. The key to an orderly pool, in turn, is, above all, the proper alignment of the four Class prices.

AFBF previously testified in favor of our own proposal 21, which would raise the Class II differential from 70 cents to $1.56 per cwt.

In addition to that proposal, AFBF generally supports National Milk Producers Federation (NMPF) Proposal 19, which would increase Class I differentials across the country, and entirely opposes the Milk Innovation Group’s (MIG) proposal 20, to reduce the current base Class I differential from $1.60 to $0.00.

Proposal 21. The American Farm Bureau Federation proposes to update the Class II differential based on current drying costs.

The Class II differential was developed during order reform to reflect the cost of drying and rewetting milk, to reflect the higher value of Class II milk without incenting processors to dry and rewet (Class IV) milk for Class II uses. AFBF accepts this logic and proposes to update the Class II differential to $1.56.

The cost of drying skim milk can be calculated using the existing make allowances and yields as:

\[ \$0.1678 \times 0.99 \times 9.4121 = \$1.56 \]
or

\[
\text{NDM make allowance} \times \text{lbs. NDM/lb. NFS} \times \text{avg. lbs. NFS/cwt. skim milk} = \text{cost of drying}
\]

This should be updated as make allowances and yields are adjusted.

This proposal is fundamentally a matter of fairness. If the costs of processing are to be recognized – and increased in this proceeding – for processors of Class IV milk, so should it be recognized in defining the Class II differential. This is an area where what is good for processors can provide some silver lining for producers. Much of Class II use was only separated from Class I because of the potential for substitution of Class IV nonfat dry milk for Class II skim milk. Setting the Class II differential at the make allowance for Class IV skim milk is the only fair way to apply the existing logic of Class II pricing.

**Note about the impact of the higher Class II price on depooling:** Increasing the Class II prices in connection with eliminating advanced pricing will not cause Class price misalignments. It could increase the likelihood of depooling Class II milk, when the Class II price is above the uniform price. For several reasons, including most specifically the fact that much Class II use is at distributing plants, Class II milk is less subject to depooling based on price relationships than other Classes. Most importantly, denying the full value of Class II price undermines overall producer value and increases the likelihood of the uniform price being lower than Class III or Class IV, which is the larger and more likely problem by far, with respect to price misalignment and depooling.

**Proposal 19:** AFBF supports NMPF’s proposal update Class I differentials to reflect changes since 1998.

AFBF agrees with NMPF that Class I prices need to be updated. Over-order prices are ‘ephemeral’ and regulated Class I prices are more ‘durable’ (Jeff Sims testimony, p.18). In effect, the ebbs and flows of local and regional market conditions can wash away a sound long-term price relationship, which may be hard to re-establish.

Federal milk marketing order, from its earliest days, recognized that short-term events and market conditions could lead to the destruction of long-term supply and demand stability. Farm policy is broadly aimed at providing some certainty and stability for farmers in the face of natural extreme volatility.

The current Class I differentials are largely based on a 1998 analysis of the current supply and demand volumes, and plant locations. Even those differentials updated for Southeastern markets in 2008 were only partially reflective of the conditions at that time, because they had to remain aligned with the rest of the country, where differentials remained unchanged.

NMPF’s proposed increases are quite moderate, perhaps too moderate.

The Class I differential consists of two parts: 1) a minimum element, reflecting the minimum additional Class I value necessary to provide a hundredweight of Grade A milk to the fluid market; and 2) a location-specific value over and above this, reflecting the relative difficulty (at a defined cost) of attracting an additional hundredweight to a particular location, relative to location with the lowest such cost.

The current *minimum Class I differential* is $1.60, based on long-standing economic logic, though based on outdated cost assessments. This was not updated at the time of Order Reform in 1999, so is even
more out of date than the location-specific element. This is discussed in more detail in our comment on Proposal 20.

The current location-specific values are based on that 1998 analysis, and are badly out of date, given general inflation, if nothing else, and shifting milk supply locations. That analysis

It is critical to understand that the relative Class I differentials also define the producer price differentials; so the that setting of a Class I differential in any county not only defines the price of Class I milk in that county relative to the rest of the country, but also defines the price of producer milk relative to the rest of the federal order market. In fact, the setting of the Class I differential for each county with a plant receiving pooled milk on an order will affect the minimum producer price for every other county receiving pooled milk.

The new analysis by Dr. Nicholson is done with a more detailed version of the model used in 1998, and is based on 2021 data. This provides a critical update to the current Class I differentials, based on the same principles applied to the development of those differentials. (See exhibits 301, 302.)

Testimony by Stephen Zalar (Exhibit 308) and Joe Brinker (Exhibit 357) both presented clear evidence of rising milk hauling costs. This is the critical cost element of the Nicholson model, and this rising hauling cost, along with the shifting locations of milk production and dairy product demand, provide the critical foundation for the update and increase in the relative Class I differentials.


The Nicholson model’s milk movement results represent an efficiency-maximizing/lowest-cost distribution of milk, which is what an ideal market solution would produce. The actual market will achieve a slightly less efficient result. The model’s relative milk value results represent the efficiency-maximizing/lowest-cost relative costs of delivering milk from current milk production areas to consumption areas covering every county in the country. The actual market solution will have a slightly higher spread across the country, which means that the model results are a relatively conservative foundation for the Class I price surface. This is the most reasonable and scientific foundation for establishing relative milk values across the country; NMPF witnesses indicated, and examination of the numbers confirm, that the model results are the foundation of the NMPF proposal. However, it is appropriate to make some adjustments based on real-world circumstances, as NMPF has attempted to do. (Exhibit 302; Cryan cross-examination of Hoeger; English cross-examination of Brinker.)

We also question whether the use of the average of May and October model results was an appropriate starting point, rather than the October results alone, which are effectively the ‘higher-of’ the May and October results, as presented. In some markets, such as the Southeast and, to a lesser extent, the Northeast, producers and processors face the greatest balancing and supply challenges in the summer and fall. It is arguable that this should have been the foundation for setting the Class I location differentials.
AFBF proposed the introduction of seasonal Class I differentials. This proposal was rejected, but the greater difficulty of serving some markets in the late summer and fall is well demonstrated by the comparison of May and October results from the analysis by Dr. Stephenson and shared by NMPF. These seasonal challenges, in the absence of seasonal Class I pricing, may be best addressed within the current hearing by using the October results in setting Class I differentials.

Again, we recognize that there should be some adjustments to specific location differentials, based on details that better reflect fairness and efficiency than the abstraction of the model. The model reflects an engineering solution adopted for a centralized management of the whole milk system; it is a reasonable foundation for the overall analysis of efficient milk movement, but this is the sort of linear optimization economics done by central planners in the Soviet Union. It does not account for competition among processors across a natural market, such as a metropolitan area. Rather, it solves by allocating milk in a way that fluid milk from only one plant would be delivered to a particular location, and cheese from only one plant would be delivered to that same location.

This sort of variation from initial proposals were necessary in 1999 to establish the current differentials, and they are appropriate in this proceeding. Some participants appear to believe that NMPF and its committee have attempted to stack the deck in their favor. We don’t believe that has been demonstrated, but we also believe that AMS Dairy Program has the capacity to fairly evaluate these options. AFBF trusts that the resulting decision from USDA will be based on the model results and the rest of the hearing record and will define and implement Class I differentials based on fair and appropriate adjustments to those results, including due consideration of the proposed adjustments by NMPF.

See maps.

**Proposal 20:** **AFBF opposes MIG’s proposal to reduce the minimum Class I differential from $1.60 to $0.00, and suggests that it should be increased instead.**

The current Class I price differential surface lays on the foundation of the minimum Class I differential of $1.60. That minimum should be updated up, not down.

The minimum $1.60 Class I differential was established on sound bases during federal order reform; this is particularly laid out in the proposed rule issued on January 30, 1998. Its underlying logic was sound, though its application was conservative. The proposed rule laid out – very effectively – three cost elements that justified the $1.60. However, there is also a logic for its overall size, which is that the Class I differential must be large enough to allow for a consistent hierarchy of Class prices. Either or both can justify the current $1.60 minimum or more, but not less. (63 FR 4907-4909)

Since Proposal 20 opens the scope of the hearing for considering size of the minimum Class I differential (that is, it technically proposes to reduce it to zero, not to eliminate it), we would propose rather that it be increased, based on the same logic upon which it was originally proposed in 1998. There is justification for substantial increases, based on increases in all the costs that entered into the original USDA estimate of $1.60. Increases in Grade A production costs, increases in marketing and hauling costs, and the greater challenges of getting manufacturers – especially cheese plants – to give up milk for supplemental fluid needs, all argue for a higher minimum Class I differential. etc., per original rule. (63 FR 4907-4909)
This same logic could have supported adding another 60 cents or more to the Wisconsin model results as the starting point, rather than the model results based on a minimum $1.60 Class I differential.

MIG’s proposal to reduce the minimum Class I differential from $1.60 to $0.00 seems like a rhetorical exercise, designed to make the status quo, or Class I differentials nearer the status quo, to appear like a reasonable compromise relative to NMPF’s proposal to update and increase Class I differentials.

Taken on their face, the arguments to eliminate the minimum $1.60 Class I differential, established in the 1998 and 1999 federal order reform decisions, are rooted in a dismissal of the elements of the $1.60 laid out by USDA at that time. Specifically, USDA found costs associated with 1) meeting the Grade A standard, 2) balancing supplies at bottling plants, and 3) providing a basic incentive to supply bottling plants over and above other plants. MIG’s proposal is, fundamentally, a dismissal of the federal milk marketing order system itself, which has been built on these objectives. Each of these three elements is important to the FMMO system, in addition to the fact that Class price alignment depends fundamentally on the maintenance of a substantial minimum Class I differential.

We will consider each of these four issues, the three elements laid out by USDA in 1998 and the overall issue of a sufficient Class I differential to maintain basic price alignment.

**Grade A Incentive**

The FMMO’s have provided, and continue to provide, a sound incentive to producers to maintain Grade A status. Claiming that there is no longer a need for a minimum Class I differential because nearly all milk is Grade A is akin to claiming there is no longer a need for stop signs and traffic signals because there are few accidents at intersections. The minimum Class I differentials should not only be maintained, but increased in line with the increased costs of meeting the Grade A standard, and consistent with NMPF’s proposal, based on the logic presented by NMPF and selectively summarized in our discussion of Proposal 19.

In the Proposed Rule for Order Reform, USDA set the minimum Class I differential at $1.60 per hundredweight, based upon several enumerated costs, beginning with the costs of maintaining Grade A standards.

Per the decision:

> There are several requirements for producers to convert to a Grade A dairy farm and then maintain it. A Grade A farm requires an approved water system (typically one of the greatest conversion expenses), specific facility construction and plumbing requirements, certain specifications on the appearance of the facilities, and required equipment and facilities, and adhere to certain management practices. Often this will require additional labor, resource, and utility expenses. It has been estimated that this value may be worth approximately $0.40 per hundredweight. (63 FR 4908)

Grade A standards have only become more exacting in the meantime, through a state-federal process of review and revision culminating at the bi-annual National Interstate Milk Shippers conference. (See Grade A Pasteurized Milk Ordinance, 2019 Revision, Food and Drug Administration, at [https://www.fda.gov/media/140394/download](https://www.fda.gov/media/140394/download). See also Milk for Manufacturing Processes and its Production and Processing, Recommended Requirements, Effective July 21, 2011, USDA/AMS/Dairy Programs. [https://www.ams.usda.gov/publications/content/milk-manufacturing-purposes-and-its-production-and-processing](https://www.ams.usda.gov/publications/content/milk-manufacturing-purposes-and-its-production-and-processing).)
Of course, the "labor, resource, and utility expenses" of dairy farmers, cited above, rise along with those of milk processors. Non-feed costs in the production of milk, which are closely identified with "labor, resource, and utility expenses" plus the cited infrastructure costs, have risen by 68% between 1998 and 2022, according to USDA estimates. Based on the above, and applying the same 68% increase to the 40 cent per cwt. cost of maintaining Grade A supplies, AFBF conservatively estimates the present costs of maintaining Grade A standards at 67 cents per cwt. an increase of 27 cents from the status quo. (See ERS Milk Cost of Production Estimates, at https://www.ers.usda.gov/data-products/commodity-costs-and-returns/commodity-costs-and-returns/#Historical%20Costs%20and%20Returns:%20Milk and https://www.ers.usda.gov/data-products/milk-cost-of-production-estimates/)

**Balancing Incentive**

Balancing incentives are a critical element of the minimum Class I differential, because supporting balancing is a critical function of the FMMO’s themselves.

USDA’s order reform decision also stated:

> Traditionally, the additional portion of the Class I differential reflects the marketing costs incurred in supplying the Class I market. These marketing costs include such things as seasonal and daily reserve balancing of milk supplies, transportation to more distant processing plants, shrinkage, administrative costs, and opportunity or “give-up’ charges at manufacturing milk plants that service the fluid Class I markets. This value has typically represented approximately $0.60 per hundredweight. (63 FR 4908)

Most of these are the same costs associated with the operation of plants producing such products as cheese, dry whey, butter, and nonfat dry milk powder.

The operators of cooperative supply plants often sacrifice plant profitability of their manufacturing operations in order to provide Class I and II milk supplies. The costs of this supply rise as energy costs and per-pound processing costs rise, and these costs should be offset in the Class I price. Shipping milk from distant sources imposes an even larger cost of balancing Class I markets: transportation costs also rise with higher energy prices as was acknowledged in the 2006 tentative partial decision on transportation credits in the Southeast and Appalachian markets. The manufacturing costs estimated from recent surveys tend to reflect costs of plants running near capacity; processing costs of balancing plants are higher, and should be reflected in the Class I price. In addition, some part of the costs of plant operation are associated with maintaining certification to supply milk to Grade A fluid milk plants, costs that are required of a plant before it may be pooled in the Federal order system. Very conservatively, the same percentage increase in the costs of butter and powder manufacture (the primary” form of market balancing through manufacturing) that is applied to Class III and IV make allowances should also be applied to the 60¢ supply cost. Increases in the make allowance, or manufacturing cost data, since 1998 should be applied to the 60¢ supply cost. The current total make allowance for Class IV milk is $2.17 per cwt. of milk at 3.5% butterfat; this is up more than 31% from the per cwt. make allowance at the time of order reform, $1.65. Applying this increase to the 60¢ handler fluid supply costs would be an increase of 19¢. Similarly, any increase in the Class IV make allowances should be applied to this factor, as well. (63 FR 4909; 71 FR 54118, et seq.)
Manufacturing plants are larger and more dependent on running full for profitability. This means that give-up charges are higher than ever, and that cooperatives and the few other handlers who take on balancing responsibilities are facing ever-higher costs to do so.

In addition, shifts in milk production and manufacturing consolidation have led to longer hauls to Class I plants. Studies by the Minneapolis Market Administrator and its Chicago predecessor concluded that the weighted average hauling charge in the Upper Midwest market in May 1998 was 17.6¢ per cwt. and the weighted average hauling charge in the Chicago Regional market in May 1999 (the first year for which data was compiled for this market) was 11.1¢ per cwt. The first data for the consolidated Upper Midwest market is for May 2001, when the average hauling rate was 17.1¢. By May 2006, the average weighted average for the consolidated Upper Midwest market was 23.5¢, 6½¢ higher than 5 years earlier, and 6¢ and 12¢ higher than the figures for the predecessor markets. In 2022, this average hauling cost had risen to 41.53¢ per cwt, an increase of 143% from 2001, or 24¢ per cwt. Similarly, studies by the Seattle Market Administrator showed average hauling rates rising from 43.39¢ per cwt. in 2000 to 51.7 in 2005, then to 95¢ per cwt. in 2022, an increase of 118%, or 52¢ per cwt. Based upon these studies, and the rest of this hearing record, we would conservatively propose an additional 25¢ per cwt. in average Class I assembly costs, to be applied to the minimum Class I differential, for a total increase of 44¢ in the Class I differential associated with the incentive to serve the Class I market.


Incentive to Serve Class I Customers

The last element of the minimum Class I price, per the proposed rule, was the "additional competitive factor", estimated at 60¢ per hundredweight based upon two price comparisons. The proposed rule reported that Grade A milk received an average premium above Class III in 1995 and 1996 of 86¢ in Minnesota and 89¢ in Wisconsin. By 2022, those premiums were 62¢ and 84¢, respectively. (See Table 1.) This is lower than the numbers on which the original 60¢ was based, but not substantially, and certainly not to zero. These continuing premiums are indication of the necessity of a minimum Class I differential to draw milk to the pool to meet Class I needs, and that they meet the objectives of the Act. There is no call to reduce this element of the minimum Class I differential. (63 FR 4907 et seq.)
Altogether, increases in the foundation for these three elements justify, not a reduction of the Class I differential, but an increase of approximately 60¢.

Class Price Alignment and Pooling Incentive

Finally, and perhaps most fundamentally, reducing the minimum Class I differential to zero would effectively destroy the basic proposition that Class I prices should be consistently higher than other Class prices, which is critical to the operation of federal order milk pools.

In connection with a return to higher-of pricing and the elimination of advanced pricing, the Class I differentials are the key to encouraging pooling and ensuring a pool draw for manufacturing plants who are ready to serve the Class I market.

Milk prices and milk production costs are all up substantially since 1998. The Class I and II differentials are a fixed element in milk price formulas that need regular updating. Basing this on the three traditional elements is a reasonable approach; however, if the traditional analysis did not support an increase, an increase would still be appropriate to sustain the critical alignment of Class prices. (See the above-referenced Milk Cost of Production data, which includes all milk prices.)

Conclusion:

The minimum $1.60 (or more) is a critical practical element in FMMO pricing and pooling. The $1.60 minimum is not only still justified, but could be increased, based on increased costs associated with maintaining Grade A standards, of hauling milk, and of balancing weekly and seasonal supplies.

The argument made by MIG in pre-submitted testimony by Ms. Keefe that too high a Class I differential will lead to ‘overproduction’ is spurious. It is not too high in the current market regime, in which manufactured milk products clear in an open international market, and do not back up into government stocks. The purpose of the Class I differential is to ensure a fluid milk supply and orderly marketing of milk overall; a higher Class I differential will do that. It will not cause ‘overproduction’, per se, which doesn’t really exist as long as processing capacity can keep up. (MIG-15)

In pre-submitted testimony for MIG, Dr. Stephenson claims that because the average shadow cost for manufacturing milk is higher than the average shadow cost for fluid use, that the minimum Class I differential is not justified. This is a misinterpretation of his own model, which assumes all milk can

Table 1. Comparison of Prices Paid for Grade A Milk Used in Manufacturing Products in Minnesota and Wisconsin to the Class III Price

<table>
<thead>
<tr>
<th>Year</th>
<th>Minnesota</th>
<th>Wisconsin</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Class III Price</td>
<td>Grade A Pay Price @ 3.5%</td>
<td>Grade A - Class III Difference</td>
</tr>
<tr>
<td>2021</td>
<td>17.08</td>
<td>17.76</td>
<td>0.68</td>
</tr>
<tr>
<td>2022</td>
<td>21.96</td>
<td>22.58</td>
<td>0.62</td>
</tr>
<tr>
<td>Average</td>
<td>19.52</td>
<td>20.17</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Sources: USDA, National Agricultural Statistics Service; USDA, Agricultural Marketing Service; AFBF calculations.

Updated summary version, as much as possible, of Table 7 on 63 FR 4908-4909.
simply move through hauling and processing without any significant differentiation among uses. In fact, we have higher prices for Class I because there are many challenges to serving Class I use that isn’t captured in the model, including the critical need for steady supplies on daily and seasonal basis, higher quality standards, and the inability to store fluid milk for significant amounts of time. (MIG-16)

I am also curious as to how the fact that Dr. Stephenson’s plant nodes have limited capacity affect these results: fluid plants today are typically running with slack capacity, while many manufacturing plants, especially cheese plants, are running full, and their plant capacity almost certainly puts more constraints on his model for manufacturing milk, which could lead to higher average shadow costs for additional cwt. of milk in many manufacturing locations, depending on how he defines that value.

It is often suggested that fluid milk demand is declining because of the Class I differential. Even in Miami, the Class I differential represents about 50¢ per gallon. The $1.60 minimum Class I differential represents less than 14¢ per gallon. And in every part of the country, the Class I differential is a single consistent element of the milk price. If there was a demand impact, it would be a one-time shift in demand, not a long-term decline. Rather, fluid milk demand has been undermined by a shift away from breakfast cereals and the nutrition community’s inappropriate and unfortunate encouragement of consumption of unappealing skim and low fat milks, rather than whole milk.

Ultimately, MIG’s proposal to cut the Class I differentials by $1.60 across the board is a proposal to overturn Class price alignment, create chaos in FMMO pooling, and effectively destroy the federal milk marketing order system.

The destruction of the FMMO system may lead eventually to a stable market structure, but it would be one that could closely resemble that of the current broiler chicken industry, in which integrated processors seize tight control over farmers’ prices and farmers’ operating methods. Similar results have been seen in the United Kingdom and Australia, where large retailers set the milk price, to the long-term detriment of farmers and consumers.

The FMMO system, as it stands today, provides a framework in which farmers can control their own destiny through cooperative organization or through independent reliance on the terms of trade established by the orders and enforced by the market administrator. The FMMO’s create a fairer world for dairy farmers in the short run and a market in which farmers are better encouraged to serve American and international consumers in the long run. Dr. Stephenson argues that we are “shackled” to the 1937 Act; rather, the Act provides USDA and the industry enormous flexibility to adjust and modernize the FMMO’s, as we are here to do today. And Congress has stepped in more than once, to call for a full overhaul in 1996, and to, notably, ensure the sufficiency of Class I differentials, in 1985 and 1999.

The system undoubtedly needs updating, as we have argued throughout; however, proposals that would tend to overthrow the entire system, such as Proposal 20, need to be considered not on fine detail, but on the overall impact they would have on the system.

Other issues:

Causes of increased de-pooling: In earlier testimony, there was a suggestion that the reason de-pooling is up in the FMMO system is because of the addition of the California market. However, de-pooling data
for FO 30 shows the same pattern as that in the FMMO system overall; California is not causing the increase in de-pooling. Rising de-pooling is the result of declining Class I use and the falling relative value of Class I differential relative to the underlying milk prices.

![De-Pooled Milk](image)

Data: USDA/AMS.

**Exchanges:** There has been a suggestion that eliminating advanced “higher-of” Class I pricing creates an unbearable loss of risk management opportunities if the CMEGroup does not implement a Class I futures/options complex. The CMEGroup witness indicated the exchange would be open to considering any new contract that would serve its customers, which would be the simplest and most obvious solution to milk handlers’ concerns. However, if the CMEGroup declined to offer this product, there are other exchanges that could clear dairy contracts, including ICE and the Minneapolis Grain Exchange, or companies that could facilitate swaps, such as ever.ag (formerly dairy.com).

Regarding the difficulty of Class I and Class II handlers in managing price risk: dairy farmers (and many other farmers) despite operating on a significantly smaller scale than even a ‘small’ dairy processing business (which has up to 1,150 employees, according to the Small Business Administration), manage myriad price risks – for their feed purchases, their energy costs, their milk sales, their crop sales, etc., through the use of an interlocking collection of government risk management programs, contract pricing, swaps, and hedging on futures and options exchanges. If the CMEGroup (or any other exchange) were to establish the long-overdue set of Class I milk futures and options contracts, such risk management for processing operations that are several times as large as a ‘large’ dairy farm are not an unreasonable expectation of doing business. The price risk faced by Class I handlers is much simpler than what many farmers face, and the existence of Class I futures and options would make it simple to solve.

AFBF believes that the **Edge proposal to create a new Class I-H** lies outside the scope of this hearing.